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**CONTRACT TO CHARTER A SCHOOL OF EXCELLENCE
AND RELATED DOCUMENTS**

ISSUED TO

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

BY THE

**CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES**
(AUTHORIZING BODY)

JULY 1, 2016

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REAUTHORIZING RESOLUTION

REAUTHORIZATION OF SCHOOL OF EXCELLENCE**Eagle Crest Charter Academy**

Recitals:

1. At its February 17, 2011, meeting this board reauthorized the issuance of a contract to charter as a School of Excellence to Eagle Crest Charter Academy. On July 14, 2011, the contract was effective.
2. The contract of this academy expires June 30, 2016.
3. The Governor John Engler Center for Charter Schools has completed its evaluation and assessment of the operation and performance of Eagle Crest Charter Academy.
4. The university president or designee has recommended the reissuance of a contract to charter as a School of Excellence to Eagle Crest Charter Academy. The term of the contract is recommended for a term not to exceed ten (10) years.

BE IT RESOLVED, That this board approves and authorizes the execution of a contract to charter as a School of Excellence to Eagle Crest Charter Academy for a term not to exceed ten (10) years and authorizes the chair of the board to execute a contract to charter as a School of Excellence and related documents between Eagle Crest Charter Academy and the Central Michigan University Board of Trustees, provided that, before execution of the contract, the university president or designee affirms that all terms of the contract have been agreed upon and Eagle Crest Charter Academy is able to comply with all terms and conditions of the contract.

CMU BDT APPROVED

Date: 12/17/15

Signature

Mary Jane Flanagan



PROPOSAL FOR BOARD ACTION: CONSENT AGENDA

School of Excellence Board of Directors: Method of Selection, Appointment, and Removal

Project Description:

The purpose of modifying the policy titled *Public School Academy Board of Directors: Method of Selection, Appointment, and Removal* is for the policy to apply to Schools of Excellence in the same manner and extent to which it applies to Public School Academies and Strict Discipline Academies.

Proposed by: Provost Shapiro

PROPOSED RESOLUTION: Consent Agenda

School of Excellence Board of Directors: Method of Selection, Appointment, and Removal

BE IT RESOLVED, That the policy titled *Public School Academy Board of Directors: Method of Selection, Appointment, and Removal* as adopted September 18, 1998, and amended December 7, 2006, and July 12, 2007, shall be further amended to apply to Schools of Excellence in the same manner and extent to which the policy applies to Public School Academies and Strict Discipline Academies; and shall be implemented with new contracts issued to Schools of Excellence.

CMU BDT APPROVED

Date: 7/14/11

Signature: M. J. Hanagan

PROPOSED RESOLUTION: CONSENT AGENDA

Public School Academy Board of Directors: Method of Selection, Appointment, and Removal

BE IT RESOLVED, That the policy titled Public School Academy Board of Directors: Method of Selection, Appointment, and Removal as amended and dated December 7, 2006, is adopted; and Be it further

RESOLVED, That these provisions shall be implemented with new charter contracts and shall be phased in as existing charter contracts are reissued. The charter schools office is authorized to negotiate changes in the terms and conditions of charter contracts to fully implement these provisions.

CMU BDT APPROVED

Date: 06-12-07
Signature: [Handwritten Signature]

Public School Academy Board of Directors: Method of Selection, Appointment, and Removal

The Central Michigan University Board of Trustees declares that the method of selection, length of term, and number of board members shall be as follows.

Method of Selection and Appointment

The Central Michigan University Board of Trustees ("University Board") shall prescribe the method of appointment for members of an academy's board of directors. The director of the charter schools office is authorized to develop and administer an academy board selection and appointment process that includes an *Application for Public School Academy Board Appointment* and is in accord with these policies:

- a. The University Board shall appoint the initial and subsequent academy board of directors by resolution, except as prescribed by subparagraph d. The director of the charter schools office shall recommend qualified individuals to the University Board.
- b. The academy board of directors, by resolution and majority vote, shall nominate its subsequent members, except as provided otherwise. The academy board of directors shall recommend to the director of the charter schools office at least one nominee for each vacancy. Nominees shall submit the *Application for Public School Academy Board Appointment* for review by the charter schools office. The director of the charter schools office may or may not recommend the appointment of a nominee submitted by the academy board. If the director of the charter schools office does not recommend the appointment of a nominee submitted by the academy board, he/she may select and recommend another nominee or may request the academy board submit a new nominee for consideration.
- c. An individual appointed to fill a vacancy created other than by the expiration of a term shall be appointed for the unexpired term of that vacant position.
- d. Under exigent conditions, and with the approval of the University Board's chair and the president, the director of the charter schools office may appoint a qualified individual to an academy's board of directors. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any appointments made under this provision.

Length of Term

The director of an academy board shall serve at the pleasure of the University Board. Terms of the initial positions of the academy board of directors which shall be staggered in accordance with *The Academy Board of Directors Table of Staggered Terms and Appointments* established and administered by the director of the charter schools office. Subsequent appointments shall be for a term of office not to exceed of four (4) years, except as prescribed by *The Academy Board of Directors Table of Staggered Terms and Appointments*.

Removal and Suspension

If the University Board determines that an academy board member's service in office is no longer necessary, then the University Board may remove an academy board member with or without cause and shall specify the date when the academy board member's service ends. An academy board member may also be removed from office by a two-thirds (2/3) vote of the academy's board for cause.

With the approval of the University Board's chair and the president, the director of the charter schools office may suspend an academy board member's service, if in his/her judgment the person's continued presence would constitute a risk to persons or property, or would seriously impair the operation of the academy. Any suspension made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any suspensions made under this provision.

Number of Directors

The number of members of the academy board of directors shall not be less than five (5) nor more than nine (9). If the academy board of directors fails to maintain its full membership by making appropriate and timely nominations, the University Board or its designee may deem that failure an exigent condition.

Qualifications of Academy Board Members

To be qualified to serve on an academy's board of directors, a person shall, among other things: (a) be a citizen of the United States; (b) be a resident of the state of Michigan; (c) submit all materials requested by the charter schools office including, but not limited to, the *Application for Public School Academy Board Appointment* which must include authorization to process a criminal background check; and (d) annually submit a conflict of interest disclosure as prescribed by the charter schools office.

The members of an academy board of directors shall not include: (a) employees of the academy; (b) any director, officer, or employee of a service provider or management company that contracts with the academy; (c) a Central Michigan University official or employee, as a representative of Central Michigan University.

Oath of Public Office

All members of the academy board of directors must take the constitutional oath of office and sign the *Oath of Public Office* before beginning their service. No appointment shall be effective prior to the filing of The *Oath of Public Office* shall be filed with the charter schools office.

Note: These provisions shall be implemented with new charter contracts and shall be phased in as existing charter contracts are reissued or amended. The charter schools office is authorized to negotiate changes in the terms and conditions of charter contracts to fully implement these provisions.

Amended by CMU Board of Trustees: 06-1207.

Adopted by CMU Board of Trustees: 98-0918.

TERMS AND CONDITIONS

**TERMS AND CONDITIONS
OF CONTRACT**

DATED: JULY 1, 2016

ISSUED BY

CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES

**CONFIRMING THE STATUS OF
EAGLE CREST CHARTER ACADEMY**

AS A

SCHOOL OF EXCELLENCE

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WHEREAS, the People of Michigan through their Constitution have provided that schools and the means of education shall forever be encouraged and have authorized the Legislature to maintain and support a system of free public elementary and secondary schools; and

WHEREAS, all public schools are subject to the leadership and general supervision of the State Board of Education; and

WHEREAS, the Legislature has authorized an alternative form of public school designated a "public school academy" to be created to serve the educational needs of pupils and has provided that pupils attending these schools shall be eligible for support from the State School Aid Fund; and

WHEREAS, the Legislature has delegated to the governing boards of state public universities, community college boards, intermediate school district boards and local school district boards, the responsibility for authorizing the establishment of schools of excellence; and

WHEREAS, pursuant to Part 6e of the Revised School Code ("Code"), the Central Michigan University Board of Trustees ("University Board") has considered and has approved the issuance of a contract to Eagle Crest Charter Academy ("the Academy");

NOW, THEREFORE, pursuant to the Code, the University Board issues a contract conferring certain rights, franchises, privileges, and obligations and confirms the Academy's status as a school of excellence. In addition, the parties agree that the issuance of this Contract is subject to the following terms and conditions:

ARTICLE I DEFINITIONS

Section 1.1. Certain Definitions. For purposes of this Contract, and in addition to the terms defined throughout this Contract, each of the following words or expressions, whenever initially capitalized, shall have the meaning set forth in this section:

- (a) "Academy" means the Michigan nonprofit corporation named Eagle Crest Charter Academy which is established as a school of excellence pursuant to this Contract.
- (b) "Academy Board" means the Board of Directors of the Academy.
- (c) "Applicable Law" means all state and federal law applicable to a school of excellence.
- (d) "Application" means the school of excellence application and supporting documentation submitted to the University for the establishment of the Academy.
- (e) "Code" means the Revised School Code, Act No. 451 of the Public Acts of 1976, as amended, being Sections 380.1 to 380.1852 of the Michigan Compiled Laws.
- (f) "Contract" means, in addition to the definition set forth in the Code, these Terms and Conditions, the Conversion Resolution, the Method of Selection, Appointment, and

Removal Resolution, the Schedules, the Educational Service Provider Policies, the Master Calendar and the Application.

- (g) "Director" means a person who is a member of the Academy Board of Directors.
- (h) "Educational Service Provider" or "ESP" means an educational management organization, or employee leasing company, as defined under section 553c of the Code, MCL 380.553c.
- (i) "Educational Service Provider Policies" means the Educational Service Provider Policies, as may be amended, issued by The Governor John Engler Center for Charter Schools at Central Michigan University.
- (j) "Management Agreement or ESP Agreement" means an agreement as defined under section 553c of the Code, MCL 380.553c.
- (k) "Master Calendar" means the Master Calendar of Reporting Requirements annually issued by The Governor John Engler Center for Charter Schools at Central Michigan University setting forth reporting and document submission requirements for the Academy.
- (l) "Method of Selection, Appointment, and Removal Resolution" means the policy adopted by resolution of the University Board on July 14, 2011, establishing the standard method of selection and appointment, length of term, removal and suspension, number of directors and qualifications of academy board members for schools of excellence issued a Contract by the University Board.
- (m) "Reauthorization Resolution" means the resolution adopted by the University Board on December 17, 2015, approving the issuance of a Contract to the Academy.
- (n) "Schedules" means the following Contract documents of the Academy: Schedule 1: Restated Articles of Incorporation, Schedule 2: Amended Bylaws, Schedule 3: Fiscal Agent Agreement, Schedule 4: Oversight, Compliance and Reporting Agreement, Schedule 5: Description of Staff Responsibilities, Schedule 6: Physical Plant Description, Schedule 7: Required Information for a School of Excellence, and Schedule 8: Information Available to the Public and the Center.
- (o) "State Board" means the State Board of Education, established pursuant to Article 8, Section 3 of the 1963 Michigan Constitution and MCL 388.1001 et seq.
- (p) "State School Aid Fund" means the State School Aid Fund established pursuant to Article IX, Section 11 of the Michigan Constitution of 1963, as amended.
- (q) "Terms and Conditions" means this document entitled "Terms and Conditions of Contract, Dated July 1, 2016, Issued by the Central Michigan University Board of Trustees Confirming the Status of Eagle Crest Charter Academy as a School of Excellence."

- (r) "The Governor John Engler Center for Charter Schools" or "The Center" means the office designated by the University Board as the initial point of contact for public school academy and school of excellence applicants and public school academies and schools of excellence authorized by the University Board. The Center is also responsible for administering the University Board's responsibilities with respect to the Contract.
- (s) "The Governor John Engler Center for Charter Schools Director" or "The Center Director" means the person designated at the University to administer the operations of The Center.
- (t) "University" means Central Michigan University, established pursuant to Article 8, sections 4 and 6 of the 1963 Michigan Constitution and MCL 390.551 et seq.
- (u) "University Board" means the Central Michigan University Board of Trustees.
- (v) "University Charter Schools Hearing Panel" or "Hearing Panel" means such persons as designated by the University President.
- (w) "University President" means the President of Central Michigan University or his or her designee. In section 1.1(v) above, "University President" means the President of Central Michigan University.

Section 1.2. Captions. The captions and headings used in this Contract are for convenience only and shall not be used in construing the provisions of this Contract.

Section 1.3. Gender and Number. The use of any gender in this Contract shall be deemed to be or include the other genders, including neuter, and the use of the singular shall be deemed to include the plural (and vice versa) wherever applicable.

Section 1.4. Statutory Definitions. Statutory terms defined in the Code shall have the same meaning in this Contract.

Section 1.5. Schedules. All Schedules to this Contract are incorporated into, and made part of, this Contract.

Section 1.6. Application. The Application submitted to the University Board for the establishment of the Academy is incorporated into, and made part of, this Contract. To the extent there is a difference between the Contract and the Application, the Contract shall control.

Section 1.7. Conflicting Contract Provisions. In the event that there is a conflict between language contained in the provisions of this Contract, the Contract shall be interpreted as follows: (i) the Method of Selection, Appointment, and Removal Resolution shall control over any other conflicting language in the Contract; (ii) the Conversion Resolution shall control over any other conflicting language in the Contract with the exception of language in the Method of Selection, Appointment, and Removal Resolution; (iii) the Terms and Conditions shall control over any other conflicting language in the Contract with the exception of language in the Method of Selection,

Appointment, and Removal Resolution and the Conversion Resolution; and (iv) the Restated Articles of Incorporation shall control over any other conflicting language in the Contract with the exception of language in the Method of Selection, Appointment, and Removal Resolution, Conversion Resolution and these Terms and Conditions.

ARTICLE II

RELATIONSHIP BETWEEN THE ACADEMY AND THE UNIVERSITY BOARD

Section 2.1. Constitutional Status of Central Michigan University. Central Michigan University is a constitutionally established body corporate operating as a state public university. In approving this Contract, the University Board voluntarily exercises additional powers given to the University Board to authorize schools of excellence. Nothing in this Contract shall be deemed to be any waiver of Central Michigan University's autonomy or powers and the Academy shall not be deemed to be a part of Central Michigan University.

Section 2.2. Independent Status of the Academy. The Academy is a body corporate and governmental entity authorized by the Code. It is organized and shall operate as a school of excellence and a nonprofit corporation. It is not a division or part of Central Michigan University. The relationship between the Academy and the University Board is based solely on the applicable provisions of the Code and the terms of this Contract or other agreements between the University Board and the Academy.

Section 2.3. Financial Obligations of the Academy Are Separate From the State of Michigan, University Board and the University. Any contract, mortgage, loan or other instrument of indebtedness entered into by the Academy and a third party shall not in any way constitute an obligation, either general, special, or moral, of the State of Michigan, the University Board, or the University. Neither the full faith and credit nor the taxing power of the State of Michigan or any agency of the State, nor the full faith and credit of the University Board or the University shall ever be pledged for the payment of any Academy contract, mortgage, loan or other instrument of indebtedness.

Section 2.4. Academy Has No Power To Obligate or Bind the State of Michigan, the University Board or the University. The Academy has no authority whatsoever to enter into any contract or other agreement that would financially obligate the State of Michigan, the University Board or the University, nor does the Academy have any authority whatsoever to make any representations to lenders or third parties, that the State of Michigan, the University Board or the University in any way guarantee, are financially obligated, or are in any way responsible for any contract, mortgage, loan or other instrument of indebtedness entered into by the Academy.

ARTICLE III

ROLE OF THE UNIVERSITY BOARD AS AUTHORIZING BODY

Section 3.1. University Board Resolutions. The University Board has adopted a policy by resolution, Method of Selection, Appointment, and Removal Resolution, providing for the method of selection and appointment, length of term, removal and suspension, number of Directors and the qualifications of Directors. The University Board has adopted a Conversion Resolution

which approves the issuance of this Contract. The Conversion Resolution and the Method of Selection, Appointment, and Removal Resolution are hereby incorporated into this Contract. The University Board may, from time to time, amend the Method of Selection, Appointment, and Removal Resolution changing the method of selection, length of term, number of Directors and the qualifications of Directors. Any subsequent resolution of the University Board changing the Method of Selection, Appointment, and Removal Resolution shall automatically be incorporated into this Contract without the need for an amendment under Article IX of the Terms and Conditions.

Section 3.2. University Board as Fiscal Agent for the Academy. The University Board is the fiscal agent for the Academy. As fiscal agent, the University Board assumes no responsibility for the financial condition of the Academy. The University Board is not liable for any debt or liability incurred by or on behalf of the Academy Board, or for any expenditure approved by or on behalf of the Academy Board. Except as provided in the Oversight, Compliance and Reporting Agreement and Article X of these Terms and Conditions, the University Board shall promptly, within ten (10) business days of receipt, forward to the Academy all state school aid funds or other public or private funds received by the University Board for the benefit of the Academy. The responsibilities of the University Board, the State of Michigan, and the Academy are set forth in the Fiscal Agent Agreement incorporated herein as Schedule 3.

Section 3.3. Oversight Responsibilities of the University Board. The University Board has the responsibility to oversee the Academy's compliance with the Contract and all Applicable Law. The responsibilities of the Academy and the University Board are set forth in the Oversight, Compliance and Reporting Agreement and incorporated herein as Schedule 4.

Section 3.4. University Board Administrative Fee. The Academy shall pay the University Board an administrative fee to compensate the University Board for overseeing the Academy's compliance with the Contract and all Applicable Law.

Section 3.5. University Board Approval of Condemnation. In the event that the Academy desires to acquire property pursuant to the Uniform Condemnation Procedures Act or other applicable statutes, it shall obtain express written permission for such acquisition from the University Board. The Academy shall submit a written request to The Center describing the proposed acquisition and the purpose for which the Academy desires to acquire the property. Provided the Academy Board submits the written request to The Center at least sixty (60) days before the University Board's next regular meeting, the University Board may vote on whether to give express written permission for the acquisition at its next regular meeting.

Section 3.6. Authorization to Employ or Contract. The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. The Academy Board shall prohibit any individual from being employed by the Academy or an Educational Service Provider in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the

method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees.

The Academy Board may contract with an Educational Service Provider to provide comprehensive educational, administrative, management, or instructional services or staff to the Academy. Before entering into a Management Agreement with an Educational Service Provider, the Academy Board shall first comply with the Educational Service Provider Policies issued by The Center. Any Management Agreement entered into by the Academy shall also comply with Section 11.2 and 12.10 of these Terms and Conditions. A copy of the Management Agreement between the Academy Board and the Educational Service Provider shall be incorporated into this Contract under Schedule 5 and in accordance with Article IX, as applicable.

Section 3.7. Teacher Certification and Teaching Methods. Except as otherwise provided by law, the Academy shall use certificated teachers according to state board rule. The Academy may use noncertificated individuals to teach as follows:

- (1) The Academy may use, as a classroom teacher in any grade, a faculty member who is employed full-time by the University and who has been granted institutional tenure, or has been designated as being on tenure track by the University.
- (2) In any other situation in which a school district is permitted under the Code to use noncertificated teachers.

The Academy may develop and implement new teaching techniques or methods or significant revisions to known teaching techniques or methods, and shall report those to The Center and state board to be made available to the public. The Academy may use any instructional technique or delivery method that may be used by a school district.

ARTICLE IV

REQUIREMENT THAT THE ACADEMY ACT SOLELY AS GOVERNMENTAL ENTITY

Section 4.1. Limitation on Actions in Performance of Governmental Functions. The Academy shall act exclusively as a governmental entity and shall not undertake any action inconsistent with its status as a body corporate authorized to receive state school aid funds pursuant to Section 11 of Article IX of the State Constitution of 1963.

Section 4.2. Other Permitted Activities.

- (a) Nothing in this Contract shall prohibit the Academy from engaging in other lawful activities that are not in derogation of the Academy's status as a public school or that would not jeopardize the eligibility of the Academy for state school aid funds. Except as provided for the agreements identified below in paragraph (b) of this Section 4.2, the Academy may enter into agreements with other public schools, governmental units, businesses, community and nonprofit organizations where such agreements contribute to the

effectiveness of the Academy or advance education in this state.

(b) The Academy shall submit to The Center for prior review the following agreements:

- (i) In accordance with The Center's Educational Service Provider Policies, as may be amended, a draft copy of any Educational Service Provider Management Agreement and any amendments to such Management Agreements;
- (ii) In accordance with the Master Calendar, a draft copy of any Academy deed or lease, amendments to existing leases or any new leasing agreements for any Academy facility; and
- (iii) In accordance with the Master Calendar, draft long-term or short-term financing closing documents and intercept requests.

Section 4.3. Academy Board Members Serve In Their Individual Capacity. All Directors of the Academy Board shall serve in their individual capacity, and not as a representative or designee of any other person or entity. A person who does not serve in their individual capacity, or who serves as a representative or designee of another person or entity, shall be deemed ineligible to continue to serve as a Director of the Academy Board. A Director who violates this section shall be removed from office, in accordance with the removal provisions found in the Method of Selection, Appointment and Removal Resolution and Contract Schedule 2: Amended Bylaws.

Section 4.4. Incompatible Public Offices and Conflicts of Interest Statutes. The Academy shall comply with the Incompatible Public Offices statute, being MCL 15.181 et seq. of the Michigan Compiled Laws, and the Contracts of Public Servants with Public Entities statute, being MCL 15.321 et seq. of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited conflicts of interest for purposes of this Contract:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an educational service provider or an employee leasing company that has an agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school; and
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University.

Section 4.5. Prohibition of Identified Family Relationships. The Academy Board shall prohibit specifically identified family relationships pursuant to applicable law and the Terms and Conditions of this Contract. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited familial relationships for the purposes of this Contract:

- (a) No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:
 - (i) Is employed by the Academy;
 - (ii) Works at or is assigned to the Academy; or
 - (iii) Has an ownership, officer, policymaking, managerial, administrative non-clerical, or other significant role with the Academy's educational service provider or employee leasing company.

Section 4.6. Oath of Public Office. Before entering upon the duties of a public school board member, each Academy Board member shall take the constitutional oath of office as required by the Code and as set forth in the Method of Selection, Appointment and Removal Resolution.

ARTICLE V CORPORATE STRUCTURE OF THE ACADEMY

Section 5.1. Nonprofit Corporation. The Academy shall be organized and operate as a school of excellence corporation organized under the Michigan Nonprofit Corporation Act, as amended, Act No. 162 of the Public Acts of 1982, being Sections 450.2101 to 450.3192 of the Michigan Compiled Laws. Notwithstanding any provision of the Michigan Nonprofit Corporation Act, as amended, the Academy shall not take any action inconsistent with the provisions of Part 6E of the Code or other Applicable Law.

Section 5.2. Articles of Incorporation. The Restated Articles of Incorporation of the Academy, as set forth in Schedule 1, shall be the Articles of Incorporation of the Academy.

Section 5.3. Bylaws. The Amended Bylaws of the Academy, as set forth in Schedule 2, shall be the Bylaws of the Academy.

ARTICLE VI OPERATING REQUIREMENTS

Section 6.1. Governance Structure. The Academy shall be organized and administered under the direction of the Academy Board and pursuant to the Governance Structure as set forth in Schedule 7a. The Academy shall have four officers: President, Vice-President, Secretary and Treasurer. The officer positions shall be filled by persons who are members of the Academy

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Board. A description of their duties is included in Schedule 2.

Section 6.2. Educational Goal and Related Measures. The Academy shall achieve or demonstrate measurable progress toward the achievement of the educational goal and related measures identified in Schedule 7b and the results of the academic assessments identified in Schedule 7e. Upon request, the Academy shall provide The Center with a written report, along with supporting data, assessing the Academy's progress toward achieving this goal.

Section 6.3. Educational Programs. The Academy shall implement, deliver and support the educational programs identified in Schedule 7c.

Section 6.4. Curriculum. The Academy shall implement, deliver and support the curriculum identified in Schedule 7d.

Section 6.5. Methods of Pupil Assessment. The Academy shall properly administer the academic assessments identified in Schedule 7e and in accordance with the requirements detailed in the Master Calendar annually issued by The Center. The Academy shall provide The Center direct access to the results of these assessments, along with any other measures of academic achievement reasonably requested by The Center.

Section 6.6. Application and Enrollment of Students. The Academy shall comply with the application and enrollment requirements identified in Schedule 7f.

Section 6.7. School Calendar and School Day Schedule. The Academy shall comply with the school calendar and school day schedule requirements as set forth in Schedule 7g.

Section 6.8. Age or Grade Range of Pupils. The Academy shall comply with the age or grade ranges as stated in Schedule 7h.

Section 6.9. Collective Bargaining Agreements. Collective bargaining agreements, if any, with employees of the Academy shall be the responsibility of the Academy.

Section 6.10. Accounting Standards. The Academy shall at all times comply with generally accepted public sector accounting principles, and accounting system requirements that comply with the State School Aid Act of 1979, as amended, the Uniform Budgeting and Accounting Act, MCL 141.421, *et seq.*, and applicable State Board and Michigan Department of Education rules.

Section 6.11. Annual Financial Statement Audit. The Academy shall conduct an annual financial statement audit prepared and reviewed by an independent certified public accountant. The Academy shall submit the annual financial statement audit and auditor's management letter to The Center in accordance with the Master Calendar. The Academy Board shall provide to The Center a copy of any responses to the auditor's management letter in accordance with the Master Calendar.

Section 6.12. Address and Description of Physical Plant. The address and description of the physical plant for the Academy is set forth in Schedule 6. With the approval of the University Board, the Academy Board may operate the same configuration of age or grade levels at more than one (1) site if each configuration of age or grade levels and each site identified in Schedule 6 are under the direction and control of the Academy Board. University Board consideration regarding requests to add additional site(s) shall include, but not be limited to, the Academy Board's demonstration that it meets all statutory requirements under the Code.

Section 6.13. Contributions and Fund Raising. The Academy may solicit and receive contributions and donations as permitted by law. No solicitation shall indicate that a contribution to the Academy is for the benefit of Central Michigan University.

Section 6.14. Disqualified Organizational or Contractual Affiliations. The Academy shall comply with all state and federal law applicable to public schools concerning church-state issues. To the extent disqualified under the state or federal constitutions, the Academy shall not be organized by a church or other religious organization and shall not have any organizational or contractual affiliation with or constitute a church or other religious organization. Nothing in this Section shall be deemed to diminish or enlarge the civil and political rights, privileges and capacities of any person on account of his or her religious belief.

Section 6.15. Method for Monitoring Academy's Compliance with Applicable Law and its Targeted Educational Outcomes. The Academy shall perform the compliance certification duties required by the University Board as outlined in the Oversight, Compliance and Reporting Agreement set forth as Schedule 4. In addition to the University Board's oversight responsibilities and other Academy compliance and reporting requirements set forth in this Contract, the Academy's compliance with the annual Master Calendar shall serve as one means by which the University will monitor the Academy's compliance with Applicable Law.

Section 6.16. Matriculation Agreements. Before the Academy Board approves a matriculation agreement with another public school, the Academy shall provide a draft copy of the agreement to The Center for review. Any matriculation agreement entered into by the Academy shall be added to the Schedules through a contract amendment approved in accordance with the Contract. Until the matriculation agreement is incorporated into the Contract, the Academy is prohibited from granting an enrollment priority to any student pursuant to that matriculation agreement.

ARTICLE VII TUITION PROHIBITED

Section 7.1. Tuition Prohibited; Fees and Expenses. The Academy shall not charge tuition. The Academy may impose fees and require payment of expenses for activities of the Academy where such fees and payments are not prohibited by law.

ARTICLE VIII COMPLIANCE WITH STATE AND FEDERAL LAWS

Section 8.1. State Laws. The Academy shall comply with applicable state laws. Nothing in this Contract shall be deemed to apply any other state law to the Academy.

Section 8.2. Federal Laws. The Academy shall comply with applicable federal laws. Nothing in this Contract shall be deemed to apply any other federal law to the Academy.

ARTICLE IX AMENDMENT

Section 9.1. Amendments. The University Board and the Academy acknowledge that the operation and administration of a school of excellence and the improvement of educational outcomes over time will require appropriate amendment of this Contract. In order to assure a proper balance between the need for independent development of the Academy and the statutory responsibilities of the University Board as an authorizing body, the parties have established a flexible process for amending this Contract.

Section 9.2. Process for Amendment Initiated by the Academy. The Academy, by a majority vote of its Board of Directors, may, at any time, propose specific changes in this Contract or may propose a meeting to discuss potential revision of this Contract. The proposal will be made to the University Board through its designee. The University Board delegates to The Center Director the review and approval of changes or amendments to this Contract. In the event that a proposed change is not accepted by The Center Director, the University Board may consider and vote upon a change proposed by the Academy following an opportunity for a presentation to the University Board by the Academy.

Section 9.3. Process for Amendment Initiated by the University Board. The University Board, or an authorized designee, may, at any time, propose specific changes in this Contract or may propose a meeting to discuss potential revision of this Contract. The University Board delegates to The Center Director the review and approval of changes or amendments to this Contract. The Academy Board may delegate to a Director of the Academy the review and negotiation of changes or amendments to this Contract. The Contract shall be amended as requested by the University Board upon a majority vote of the Academy Board.

Section 9.4. Final Approval of Amendments. Amendments to this Contract take effect only after they have been approved by the Academy Board and by the University Board or The Center Director. If the proposed amendment conflicts with any of the University Board's general policies on public school academies, the proposed amendment shall take effect only after approval by the Academy Board and the University Board.

Section 9.5. Change in Existing Law. If, after the effective date of this Contract, there is a change in Applicable Law which alters or amends the responsibilities and obligations of either the Academy or the University Board, this Contract shall be altered or amended to reflect the change in existing law as of the effective date of such change. To the extent possible, the

responsibilities and obligations of the Academy and the University Board shall conform to and be carried out in accordance with the change in Applicable Law.

ARTICLE X CONTRACT REVOCATION, TERMINATION, AND SUSPENSION

Section 10.1. Statutory Grounds for Revocation. In addition to the other grounds for revocation in Section 10.2 and the automatic revocation in Section 10.3 of these Terms and Conditions, the University Board may revoke this Contract, pursuant to the procedures set forth in Section 10.7, upon a determination that one or more of the following has occurred:

- (a) Failure of the Academy to demonstrate improved pupil academic achievement for all groups of pupils or abide by and meet the educational goals and related measures set forth in this Contract;
- (b) Failure of the Academy to comply with all Applicable Law;
- (c) Failure of the Academy to meet generally accepted public sector accounting principles and to demonstrate sound fiscal stewardship; or
- (d) The existence of one or more other grounds for revocation as specified in this Contract.

Section 10.2. Other Grounds for Revocation. In addition to the statutory grounds for revocation set forth in Section 10.1 and the grounds for an automatic revocation set forth in Section 10.3, the University Board may revoke this Contract, pursuant to the procedures set forth in Section 10.7, upon a determination that one or more of the following has occurred:

- (a) The Academy fails to achieve or demonstrate measurable progress toward achieving the educational goals and related measures identified in this Contract;
- (b) The Academy fails to properly implement, consistently deliver, and support the educational programs or curriculum identified in this Contract;
- (c) The Academy is insolvent, has been adjudged bankrupt, or has operated for two or more school fiscal years with a fund balance deficit;
- (d) The Academy has insufficient enrollment to successfully operate a school of excellence, or the Academy has lost more than fifty percent (50%) of its student enrollment from the previous school year;
- (e) The Academy fails to fulfill the compliance and reporting requirements or defaults in any of the terms, conditions, promises or representations contained in or incorporated into this Contract;
- (f) The Academy files amendments to its Articles of Incorporation with the Michigan Department of Licensing and Regulatory Affairs, Bureau of Commercial Services without first obtaining The Center's approval;

- (g) The Center Director discovers grossly negligent, fraudulent or criminal conduct by the Academy's applicant(s), directors, officers, employees or agents in relation to their performance under this Contract; or
- (h) The Academy's applicant(s), directors, officers, employees or agents have provided false or misleading information or documentation to The Center in connection with the University Board's approval of the Application, the issuance of this Contract, or the Academy's reporting requirements under this Contract or Applicable Law.

Section 10.3. Automatic Amendment or Revocation and Procedures Initiated by State of Michigan. If the University is notified by the Superintendent of Public Instruction that the Academy is subject to closure under the Code ("State's Automatic Closure Notice"), and the Academy is currently not undergoing a reconstitution as part of a Plan of Correction developed under Section 10.7(c), then this Contract shall automatically be amended to eliminate the Academy's authority to operate certain age and grade levels at the site or sites identified in the State's Automatic Closure Notice at the end of the current fiscal year. If the State's Automatic Closure Notice includes all of the Academy's existing sites, then this Contract shall automatically be revoked at the end of the current fiscal year in which the notice is received without any further action of the University Board or the Academy. The University Board's revocation procedures set forth in Section 10.7(c) do not apply to an automatic revocation initiated by the State.

Following the receipt of the State's Automatic Closure Notice, The Center Director shall forward a copy of the State's Automatic Closure Notice to the Academy Board and may request a meeting with the Academy to discuss plans and procedures for the elimination of certain age or grade levels at the identified site or sites, or if all of the Academy's existing sites are included in the State's Automatic Closure Notice, then wind-up and dissolution of the Academy corporation at the end of the fiscal year in which the notice was received. All Academy inquiries and requests for reconsideration of the State's Automatic Revocation Notice shall be directed to the Superintendent of Public Instruction, in a form and manner determined by that office or the Michigan Department of Education.

Section 10.4. Material Breach of Contract and Automatic Termination Caused by Placement of Academy in State School Reform/Redesign School District. The issuance of an order by the Superintendent of Public Instruction, pursuant to the Code, placing the Academy under the supervision of the State School Reform/Redesign Officer, shall constitute a material breach of this Contract. Following the issuance of the order, The Center Director shall send notice to the Academy Board of the material breach of this Contract. The Academy shall develop a corrective action plan that is acceptable to The Center Director, which may remedy the material breach. In addition to other matters, the corrective action plan shall include the Academy's redesign plan pursuant to the Code. The development of a corrective action plan under this Section 10.4 shall not in any way limit the rights of the University Board to revoke, suspend, or terminate this Contract. Placement in the State School Reform/Redesign School District pursuant to the Code may result in the University Board terminating this Contract at the end of the current fiscal year in which the Academy was placed in the State School Reform/Redesign School District. If this Contract is terminated pursuant to this Section 10.4, the revocation procedures in Section 10.7 shall not apply.

Section 10.5. Grounds and Procedures for Academy Termination of Contract. The Academy Board, by majority vote of its Directors, may, at any time and for any reason, request termination of this Contract. The Academy Board's request for termination shall be made to The Center Director not less than ten (10) calendar months in advance of the Academy's proposed effective date of termination. Upon receipt of an Academy request for termination, The Center Director shall present the Academy Board's request for termination to the University Board. A copy of the Academy Board's resolution approving of the Contract termination, including a summary of the reasons for terminating the Contract, shall be included with the Academy Board's request for termination. Upon receipt of the Academy Board's request for termination, the University Board shall consider and vote on the proposed termination request. The University Board may, in its sole discretion, waive the ten (10) month advance notice requirement for terminating this Contract.

Section 10.6. Grounds and Procedures for University Termination of Contract. The University Board, in its sole discretion, reserves the right to terminate the Contract for any reason or for no reason provided that such termination shall not take place less than ten (10) months from the date of the University Board's action. The Center Director shall provide notice of the termination to the Academy. If during the period between the University Board action to terminate and the effective date of termination, the Academy has violated the Contract or Applicable Law, the Contract may be revoked or suspended sooner pursuant to this Article X. Following issuance of this Contract, if there is a change in Applicable Law that the University Board, in its sole discretion, determines impairs its rights and obligations under the Contract or requires the University Board to make changes in the Contract that are not in the best interest of the University Board or the University, then the University Board may terminate the Contract at the end of the Academy's fiscal year in which the University Board's decision to terminate is adopted. If this Contract is terminated pursuant to this Section 10.6, the revocation procedures in Section 10.7 shall not apply.

Section 10.7. University Board Procedures for Revoking Contract. Except for the automatic revocation and procedures initiated by the State of Michigan set forth in Section 10.3, the University Board's process for revoking the Contract is as follows:

- (a) Notice of Intent to Revoke. The Center Director, upon reasonable belief that grounds for revocation of the Contract exist, shall notify the Academy Board of such grounds by issuing the Academy Board a Notice of Intent to Revoke for non-compliance with the Contract or Applicable Law. The Notice of Intent to Revoke shall be in writing and shall set forth in sufficient detail the alleged grounds for revocation.
- (b) Academy Board's Response. Within thirty (30) days of receipt of the Notice of Intent to Revoke, the Academy Board shall respond in writing to the alleged grounds for revocation. The Academy Board's response shall be addressed to The Center Director, and shall either admit or deny the allegations of non-compliance. If the Academy's response includes admissions of non-compliance with the Contract or Applicable Law, the Academy Board's response must also contain a description of the Academy Board's plan and time line for correcting the non-compliance with the Contract or Applicable Law. If the Academy's response includes a denial of non-compliance with the Contract or Applicable Law, the Academy's response shall include sufficient documentation or other evidence to support a denial of non-compliance with the

Contract or Applicable Law. A response not in compliance with this Section shall be deemed to be non-responsive. As part of its response, the Academy Board may request that a meeting be scheduled with The Center Director prior to a review of the Academy Board's response.

- (c) Plan of Correction. Within fifteen (15) days of receipt of the Academy Board's response or after a meeting with Academy Board representatives, The Center Director shall review the Academy Board's response and determine whether a reasonable plan for correcting the deficiencies can be formulated. If The Center Director determines that a reasonable plan for correcting the deficiencies set forth in the Notice of Intent to Revoke can be formulated, The Center Director shall develop a plan for correcting the non-compliance ("Plan of Correction") which may include Reconstitution per 10.7(d) of these Terms and Conditions. In developing a Plan of Correction, The Center Director is permitted to adopt, modify or reject some or all of the Academy Board's response for correcting the deficiencies outlined in the Notice of Intent to Revoke. The Notice of Intent to Revoke shall be closed if The Center Director determines any of the following: (i) the Academy Board's denial of non-compliance is persuasive; (ii) the non-compliance set forth in the Notice of Intent to Revoke has been corrected by the Academy Board; or (iii) the Academy Board has successfully completed the Plan of Correction.
- (d) University Board's Contract Reconstitution Provision. The Center Director may reconstitute the Academy in an effort to improve student educational performance or to avoid interruption of the educational process. Reconstitution may include, but is not limited to, one of the following actions: (i) removal of 1 or more members of the Academy Board; (ii) termination of at-will board appointments of 1 or more Academy Board members in accordance with the *Method of Selection, Appointment and Removal Resolution*; (iii) withdrawing approval of a contract under Section 506 of the Code; or (iv) the appointment of a new Academy Board of Directors or a trustee to take over operations of the Academy. If the Academy is at risk for closure under Part 6a of the Code, then the Center shall notify the Superintendent of Public Instruction of any Plan of Correction that includes a reconstitution of the Academy to ensure that the Academy is not included on the list of school buildings subject to automatic closure under the Code.
- (e) Request for Revocation Hearing. The Center Director may initiate a revocation hearing before the University Charter Schools Hearing Panel if The Center Director determines that any of the following has occurred:
 - (i) the Academy Board has failed to respond to the Notice of Intent to Revoke as set forth in Section 10.7(b);
 - (ii) the Academy Board's response to the Notice of Intent to Revoke is non-responsive;
 - (iii) the Academy Board's response admits violations of the Contract or Applicable Law which The Center Director deems cannot be remedied or

cannot be remedied in an appropriate period of time, or for which The Center Director determines that a Plan of Correction cannot be formulated;

- (iv) the Academy Board's response contains denials that are not supported by sufficient documentation or other evidence showing compliance with the Contract or Applicable Law;
- (v) the Academy Board has not complied with part or all of a Plan of Correction established in Section 10.7(c);
- (vi) the Academy Board has engaged in actions that jeopardize the financial or educational integrity of the Academy; or
- (vii) the Academy Board has been issued multiple or repeated Notices of Intent to Revoke.

The Center Director shall send a copy of the request for revocation hearing to the Academy Board at the same time the request is sent to the Hearing Panel. The request for revocation shall identify the reasons for revoking the Contract.

- (f) Hearing before the University Charter Schools Hearing Panel. Within thirty (30) days of receipt of a request for revocation hearing, the Hearing Panel shall convene a revocation hearing. The Hearing Panel shall provide a copy of the notice of hearing to The Center and the Academy Board at least ten (10) days before the hearing. The purpose of the Hearing Panel is to gather facts surrounding The Center Director's request for Contract revocation, and to make a recommendation to the University Board on whether the Contract should be revoked. The revocation hearing shall be held at a location, date and time as determined by The Center Director and shall not last more than three hours. The hearing shall be transcribed and the cost shall be divided equally between the University and the Academy. The Center Director or his or her designee, and the Academy Board or its designee, shall each have equal time to make their presentation to the Hearing Panel. Although each party is permitted to submit affidavits and exhibits in support of their positions, the Hearing Panel will not hear testimony from any witnesses for either side. The Hearing Panel may, however, question The Center Director and the Academy Board. Within thirty (30) days of the revocation hearing, the Hearing Panel shall make a recommendation to the University Board concerning the revocation of the Contract. For good cause, the Hearing Panel may extend any time deadline set forth in this subsection. A copy of the Hearing Panel's recommendation shall be provided to The Center and the Academy Board at the same time that the recommendation is sent to the University Board.
- (g) University Board Decision. If the Hearing Panel's recommendation is submitted to the University Board at least fourteen (14) days before the University Board's next regular meeting, the University Board shall consider the Hearing Panel's recommendation at its next regular meeting and vote on whether to revoke the Contract. The University Board reserves the right to modify, reject or approve all or any part of the Hearing Panel's recommendation. The University Board shall have available to it copies of the Hearing Panel's recommendation and the transcript from the hearing. The University Board may waive the fourteen (14) day submission requirement or hold a special board meeting to

consider the Hearing Panel's recommendation. A copy of the University Board's decision shall be provided to The Center, the Academy Board and the Michigan Department of Education.

- (h) Effective Date of Revocation. If the University Board votes to revoke the Contract, the revocation shall be effective on the date of the University Board's act of revocation, or at a later date as determined by the University Board.
- (i) Disposition of State School Aid Funds. Notwithstanding any other provision of the Contract, any state school aid funds received by the University Board after a recommendation is made by the Hearing Panel to revoke the Contract, or a decision by the University Board to revoke the Contract, may be withheld by the University Board or returned to the Michigan Department of Treasury upon request.

Section 10.8. Contract Suspension. The University Board's process for suspending the Contract is as follows:

- (a) The Center Director Action. If The Center Director determines, in his or her sole discretion, that certain conditions or circumstances exist such that the Academy Board
 - (i) has placed staff or students at risk;
 - (ii) is not properly exercising its fiduciary obligations to protect and preserve the Academy's public funds and property;
 - (iii) has lost its right to occupancy of the physical facilities described in Schedule 6, and cannot find another suitable physical facility for the Academy prior to the expiration or termination of its right to occupy its existing physical facilities;
 - (iv) has failed to secure or has lost the necessary fire, health, and safety approvals as required by Schedule 6;
 - (v) has willfully or intentionally violated this Contract or Applicable Law; or
 - (vi) has violated Section 10.2(h) or (i), then The Center Director may immediately suspend the Contract, pending completion of the procedures set forth in Section 10.7. A copy of the suspension notice, setting forth the grounds for suspension, shall be sent to the Academy Board and to the Hearing Panel. If this subsection is implemented, the notice and hearing procedures set forth in Section 10.7 shall be expedited as much as possible.
- (b) Disposition of State School Aid Funds. Notwithstanding any other provision of the Contract, any state school aid funds received by the University Board after a decision by The Center Director to suspend the Contract, shall be retained by the University Board for the Academy until the Contract is reinstated, or shall be returned to the Michigan Department of Treasury upon the State's request.

- (c) Immediate Revocation Proceeding. If the Academy Board, after receiving a notice of Contract suspension from The Center Director, continues to engage in conduct or activities that are covered by the suspension notice, the Hearing Panel may immediately convene a revocation hearing in accordance with the procedures set forth in section 10.7(e) of this Contract. The Hearing Panel has the authority to accelerate the time line for revoking the Contract, provided that notice of the revocation hearing shall be provided to The Center and the Academy Board at least five (5) days before the hearing. If the Hearing Panel determines that the Academy Board has continued to engage in conduct or activities that are covered by the suspension notice, the Hearing Panel may recommend revocation of the Contract. The University Board shall proceed to consider the Hearing Panel's recommendation in accordance with sections 10.7(f) through (h).

ARTICLE XI

PROVISIONS RELATING TO SCHOOLS OF EXCELLENCE

Section 11.1. The Academy Budget. The Academy Board is responsible for establishing, approving, and amending an annual budget in accordance with the Uniform Budgeting and Accounting Act, MCL 141.421, *et seq.* The Academy Board shall submit to The Center a copy of its annual budget for the upcoming fiscal year in accordance with the Master Calendar. The budget must detail budgeted expenditures at the object level as described in the Michigan Department of Education's Michigan School Accounting Manual. In addition, the Academy Board is responsible for approving all revisions and amendments to the annual budget. In accordance with the Master Calendar, revisions or amendments to the Academy's budget shall be submitted to The Center following Academy Board approval.

Section 11.2. Insurance. The Academy Board shall secure and maintain in its own name, as the "first named insured," insurance coverage as required by the University's insurance carrier.

The insurance must be obtained from a licensed mutual, stock, or other responsible company licensed to do business in the State of Michigan. The Academy may join with other schools of excellence to obtain insurance if the Academy Board finds that such an association provides economic advantages to the Academy, provided that each Academy maintains its identity as first named insured. The Academy shall list the University on the insurance policies as an additional insured as required by the University's insurance carrier. The coverage provided to the University as an additional covered person or organization will be primary and non-contributory with the University's insurance carrier. The Academy shall have a provision included in all policies requiring notice to the University, at least thirty (30) days in advance, upon termination or non-renewal of the policy for any reason other than nonpayment which would require a ten (10) day advance notice to the University. In addition, the Academy shall provide The Center copies of all insurance policies required by this Contract.

When changing insurance programs or carriers, the Academy must provide copies of the proposed policies to The Center at least thirty (30) days prior to the proposed change. The Academy shall not cancel or change its existing carrier without the prior review of The Center.

The University's insurance carrier periodically reviews the types and amounts of insurance

coverage that the Academy must secure in order for the University to maintain insurance coverage for the authorization and oversight of the Academy. In the event that the University's insurance carrier requests additional changes in coverage identified in this Section 11.2, the Academy agrees to comply with any additional changes in the types and amounts of coverage requested by the University's insurance carrier within thirty (30) days after notice of the insurance coverage change.

The Academy may expend funds for payment of the cost of participation in an accident or medical insurance program to insure protection for pupils while attending school or participating in a school program or activity. Other insurance policies and higher minimums may be required depending upon academic offerings and program requirements.

Pursuant to Section 3.6 of these Terms and Conditions, the University requires that any educational service provider or employee leasing company that enters into a contract with the Academy must obtain insurance coverage similar to the insurance coverage that is currently required for the Academy. Accordingly, any agreement between the Academy and an educational service provider or employee leasing company shall contain a provision requiring the educational service provider or employee leasing company to comply with the coverage requirements recommended by the University's insurance carrier. Furthermore, the agreement between the educational service provider or employee leasing company and the Academy shall contain a provision stating that "in the event that the University's insurance carrier recommends any change in coverage by the educational service provider or employee leasing company, the educational service provider or employee leasing company agrees to comply with any changes in the type and amount of coverage as requested by the University or the University's insurance carrier within thirty (30) days after notice of the insurance coverage change."

Section 11.3. Legal Liabilities and Covenant Against Suit. The Academy acknowledges and agrees that it has no authority to extend the faith and credit of the University or to enter into a contract that would bind the University. The Academy also is limited in its authority to contract by the amount of funds obtained from the state school aid fund, as provided hereunder, or from other independent sources. The Academy hereby covenants not to sue the University Board, the University or any of its Trustees, officers, employees, agents or representatives for any matters that arise under this Contract. The University does not assume any obligation with respect to any director, employee, agent, parent, guardian, student, or independent contractor of the Academy, and no such person shall have the right or standing to bring suit against the University Board, the University or any of its Trustees, employees, agents, or independent contractors as a result of the issuance, non-issuance, oversight, revocation, termination or suspension of this Contract.

Section 11.4. Lease or Deed for Proposed Site. The Academy shall provide to The Center copies of its proposed lease or deed for the premises in which the Academy shall operate. Following The Center's review, a copy of the Academy's lease or deed shall be incorporated into this Contract under Schedule 6 and in accordance with Article IX, as applicable.

Section 11.5. Certificate(s) of Use and Occupancy. The Academy Board shall: (i) ensure that the Academy's physical facilities comply with all fire, health and safety standards applicable to schools; and (ii) possess the necessary occupancy certificates for the Academy's physical facilities. The Academy Board shall not occupy or use any facility until approved for occupancy by the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes.

Copies of these Certificate(s) of Use and Occupancy shall be incorporated into this Contract under Schedule 6 and in accordance with Article IX, as applicable.

Section 11.6. Criminal Background and History Checks; Disclosure of Unprofessional Conduct. The Academy shall comply with section 1230 and 1230a of the Code concerning criminal background and criminal history checks for its teachers, school administrator(s), and for any other position requiring State Board approval. In addition, the Academy shall comply with section 1230b of the Code concerning the disclosure of unprofessional conduct by persons applying for Academy employment. This Section 11.6 shall apply to such persons irrespective of whether they are employed by the Academy or employed by another entity contracting with the Academy.

Section 11.7. Special Education. Pursuant to Section 1701a of the Code, the Academy shall comply with Article III, Part 29 of the Code, MCL 380.1701 et seq., concerning the provision of special education programs and services at the Academy as referenced in Contract Schedule 7c.

Section 11.8. Information Available to the Public and The Center.

- (a) Information to be provided by the Academy. In accordance with Applicable Law, the Academy shall make information concerning its operation and management, including without limitation information in Schedule 8, available to the public and The Center.
- (b) Information to be provided by Educational Service Provider. The agreement between the Academy and the Educational Service Provider shall contain a provision requiring the Educational Service Provider to make information concerning the operation and management of the Academy, including the information in Schedule 8, available to the Academy as deemed necessary by the Academy Board in order to enable the Academy to fully satisfy its obligations under paragraph 11.8 (a) above.

ARTICLE XII GENERAL TERMS

Section 12.1. Notices. Any and all notices permitted or required to be given hereunder shall be deemed duly given: (i) upon actual delivery, if delivery is by hand; or (ii) upon receipt by the transmitting party of confirmation or answer back if delivery is by facsimile or electronic mail; or (iii) upon delivery into United States mail if delivery is by postage paid first class mail. Each such notice shall be sent to the respective party at the address indicated below or to any other address or person as the respective party may designate by notice delivered pursuant hereto:

If to the University Board:	<u>The Governor John Engler Center for Charter Schools</u> Attn: Executive Director Central Michigan University EHS 200 Mt. Pleasant, MI 48859
-----------------------------	--

General Counsel: General Counsel
Central Michigan University
1303 West Campus Drive
Mt. Pleasant, MI 48859

Chief Financial Officer: Vice President Finance & Admin. Services
Central Michigan University
104 Warriner Hall
Mt. Pleasant, MI 48859

If to the Academy: Academy Board President
Eagle Crest Charter Academy
11950 Riley Street
Holland, MI 49424

Section 12.2. Severability. If any provision in this Contract is held to be invalid or unenforceable, it shall be ineffective only to the extent of the invalidity, without affecting or impairing the validity and enforceability of the remainder of the provision or the remaining provisions of this Contract. If any provision of this Contract shall be or become in violation of any local, state or federal law, such provision shall be considered null and void, and all other provisions shall remain in full force and effect.

Section 12.3. Successors and Assigns. The terms and provisions of this Contract are binding on and shall inure to the benefit of the parties and their respective successors and permitted assigns.

Section 12.4. Entire Contract. Except as specifically provided in this Contract, this Contract sets forth the entire agreement between the University Board and the Academy with respect to the subject matter of this Contract. All prior contracts, representations, statements, negotiations, understandings, and undertakings are superseded by this Contract.

Section 12.5. Assignment. This Contract is not assignable by the Academy.

Section 12.6. Non-Waiver. Except as provided herein, no term or provision of this Contract shall be deemed waived and no breach or default shall be deemed excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. No consent by any party to, or waiver of, a breach or default by the other, whether expressed or implied, shall constitute consent to, waiver of, or excuse for any different or subsequent breach or default.

Section 12.7. Governing Law. This Contract shall be governed and controlled by the laws of the State of Michigan as to interpretation, enforcement, validity, construction, and effect, and in all other respects.

Section 12.8. Counterparts. This Contract may be executed in any number of counterparts. Each counterpart so executed shall be deemed an original, but all such counterparts shall together constitute one and the same instrument.

Section 12.9. Term of Contract. This Contract is for a fixed term and shall terminate at the end of the Contract term without any further action of either the University Board or the Academy. This Contract shall commence on the date first set forth above and shall remain in full force and effect for a period of ten (10) academic years and shall terminate on June 30, 2026, unless sooner revoked, terminated, or suspended pursuant to Article X of these Terms and Conditions. Prior to the end of the Contract term, the Academy may request to be considered for reauthorization. Pursuant to University Board policy, the standards by which the Academy may be considered for the issuance of a new contract will be guided by the following core questions:

Is the Academy's academic program successful?

Is the Academy's organization viable?

Is the Academy demonstrating good faith in following the terms of its charter and applicable law?

The Center shall establish the process and timeline for considering the Academy's reauthorization request. The standards for the issuance of a new Contract shall include increases in academic achievement for all groups of pupils as measured by assessments and other objective criteria established by the University Board as the most important factor of whether to issue or not issue a new Contract. Consistent with the Code, the University Board in its sole discretion may elect to issue or not issue a new contract to the Academy.

Section 12.10. Indemnification of University. As a condition to receiving a grant of authority from the University Board to operate a public school pursuant to the Terms and Conditions of this Contract, the Academy agrees to indemnify, defend and hold harmless the University Board, the University and its officers, employees, agents or representatives from and against all demands, claims, actions, suits, causes of action, losses, judgments, liabilities, damages, fines, penalties, forfeitures, or any other liabilities or losses of any kind whatsoever, including costs and expenses (not limited to reasonable attorney fees, expert and other professional fees) settlement and prosecution imposed upon or incurred by the University, and not caused by the sole negligence of the University, which arise out of or are in any manner connected with the University Board's approval of the school of excellence application, the University Board's consideration of or issuance of a Contract, the Academy's preparation for or operation of a public school, or which are incurred as a result of the reliance by the University Board, the University and its officers, employees, agents or representatives upon information supplied by the Academy, or which arise out of the Academy's failure to comply with this Contract or Applicable Law. The foregoing provision shall not be deemed a relinquishment or waiver of any kind of Section 7 of the Governmental Liability for Negligence Act, being Act No. 170, Public Acts of Michigan, 1964.

Section 12.11. Construction. This Contract shall be construed fairly as to both parties and not in favor of or against either party, regardless of which party prepared the Contract.

Section 12.12. Force Majeure. If any circumstances occur which are beyond the control of the parties, which delay or render impossible the obligations of one or both of the parties, the parties' obligations to perform such services shall be postponed for an equivalent period of time

or shall be canceled, if such performance has been rendered impossible by such circumstances.

Section 12.13. No Third Party Rights. This Contract is made for the sole benefit of the Academy and the University Board. Except as otherwise expressly provided, nothing in this Contract shall create or be deemed to create a relationship between the parties hereto, or either of them, and any third person, including a relationship in the nature of a third party beneficiary or fiduciary.

Section 12.14. Non-agency. It is understood that the Academy is not the agent of the University.

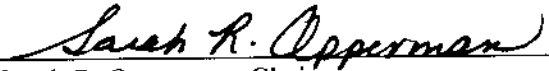
Section 12.15. University Board or The Center's General Policies on Schools of Excellence Shall Apply. Notwithstanding any provision of this Contract to the contrary, and with the exception of existing University Board or The Center policies regarding public school academies which shall apply immediately, University Board or The Center general policies clarifying procedure and requirements applicable to schools of excellence under this Contract, as from time to time adopted or amended, will automatically apply to the Academy, provided they are not inconsistent with provisions of this Contract. Before issuing general policies under this section, the University Board or The Center shall provide a draft of the proposed policies to the Academy Board. The Academy Board shall have at least thirty (30) days to provide comment to The Center on the proposed policies before such policies shall become effective.

Section 12.16. Survival of Provisions. The terms, provisions, and representations contained in Section 11.2, Section 11.3, Section 11.8, Section 12.10, Section 12.13 and any other provisions of this Contract that by their sense and context are intended to survive termination of this Contract shall survive.

Section 12.17. Termination of Responsibilities. Upon termination or revocation of the Contract, the University Board or its designee shall have no further obligations or responsibilities under this Contract to the Academy or any other person or persons in connection with this Contract.

As the designated representative of the Central Michigan University Board of Trustees, I hereby issue this Contract to the Academy on the date set forth above.

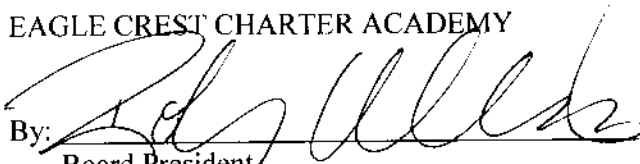
CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES

By: 
Sarah R. Opperman, Chair

Date: June 20, 2014

As the authorized representative of the Academy, I hereby certify that the Academy is able to comply with the Contract and all Applicable Law, and that the Academy, through its governing board, has approved and agreed to comply with and be bound by the terms and conditions of this Contract.

EAGLE CREST CHARTER ACADEMY

By: 
Board President

Date: 6/8/14

CONTRACT SCHEDULES

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CONTRACT SCHEDULE 1

RESTATED ARTICLES OF INCORPORATION

511

**MICHIGAN DEPARTMENT OF LICENSING & REGULATORY AFFAIRS
BUREAU OF COMMERCIAL SERVICES**

FILED

Date Received		(FOR BUREAU USE ONLY)	JUN 18 2011
		ADJUSTED TO AGREE WITH BUREAU RECORDS	Administrator BUREAU OF COMMERCIAL SERVICES
Name Candace L. Sorensen		Tran Info: 1 16944247-1 06/06/11 Chk#: 1044 Amt: \$10.00 ID: 748508	
Address 1700 Tammarron Avenue, SE			
City Grand Rapids	State MI	Zip Code 49546	EFFECTIVE DATE: July 14, 2011

Document will be returned to the name and address you enter above

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**RESTATED
ARTICLES OF INCORPORATION
For Use by Domestic Nonprofit Corporations**

OF

EAGLE CREST CHARTER ACADEMY

Pursuant to the provisions of the Michigan Nonprofit Corporation Act of 1982, as amended (the "Act"), being MCL 450.2101 et seq. and Part 6A of the Revised School Code (the "Code") as amended, being Sections 380.501 to 380.507 of the Michigan Compiled Laws, the undersigned corporation executes the following Articles:

The present name of the corporation is: Eagle Crest Charter Academy.

The identification number assigned by the Bureau is: 748-508.

There are no former names of the corporation.

The date of filing the original Articles of Incorporation was: June 4, 1997.

The following Restated Articles of Incorporation supersede the Articles of Incorporation as amended and shall be the Articles of Incorporation for the corporation:

LS

ARTICLE I

The name of the corporation is: Eagle Crest Charter Academy.

The authorizing body for the corporation is: Central Michigan University Board of Trustees.

ARTICLE II

The purpose or purposes for which the corporation is organized are:

1. The corporation is organized for the purpose of operating as a school of excellence in the state of Michigan pursuant to Part 6E of the Code, being Sections 380.551 to 380.561 of the Michigan Compiled Laws.

2. The corporation, including all activities incident to its purposes, shall at all times be conducted so as to be a governmental entity pursuant to Section 115 of the United States Internal Revenue Code ("IRC") or any successor law. Notwithstanding any other provision of these Articles, the corporation shall not carry on any other activity not permitted to be carried on by a governmental instrumentality exempt from federal income tax under Section 115 of the IRC or by a nonprofit corporation organized under the laws of the State of Michigan and subject to a Contract issued by the Central Michigan University Board of Trustees ("Contract") authorized under the Code.

ARTICLE III

The corporation is organized on a non-stock, directorship basis.

The value of assets which the corporation possesses is:

Real Property: \$0.00

Personal Property: \$11,770.60 (date of valuation of assets is as of 6/1/11)

The corporation is to be financed under the following general plan:

- a. State school aid payments received pursuant to the State School Aid Act of 1979 or any successor law.
- b. Federal funds.
- c. Donations.
- d. Fees and charges permitted to be charged by schools of excellence.
- e. Other funds lawfully received.

ARTICLE IV

The address of the registered office is 1700 Tammarron Avenue, SE, Grand Rapids, Michigan 49546.

The mailing address of the registered office is the same.

The name of the resident agent at the registered office is Candace L. Sorensen.

ARTICLE V

The name and address of the incorporator is as follows:

Candace L. Sorensen
1700 Tammarron Avenue, SE
Grand Rapids, MI 49546

ARTICLE VI

The corporation is a governmental entity.

ARTICLE VII

The corporation and its incorporators, board members, officers, employees, and volunteers have governmental immunity as provided in section 7 of Act No. 170 of the Public Acts of 1964, being section 691.1407 of the Michigan Compiled Laws.

ARTICLE VIII

Before execution of a contract to charter a school of excellence between the corporation and Central Michigan University Board of Trustees (the "University Board"), the method of selection, length of term, and the number of members of the Board of Directors of the corporation shall be approved by a resolution of the University Board as required by the Code.

ARTICLE IX

The Board of Directors shall have all the powers and duties permitted by law to manage the business, property and affairs of the corporation.

ARTICLE X

The officers of the corporation shall be a President, Vice-President, Secretary and a Treasurer, each of whom shall be a member of the Board of Directors and shall be selected by the Board of Directors. The Board of Directors may select one or more assistants to the Secretary or Treasurer, and may also appoint such other agents as it may deem necessary for the transaction of the business of the corporation.

ARTICLE XI

No part of the net earnings of the corporation shall inure to the benefit of or be distributable to its board, directors, officers or other private persons, or organization organized and operated for a profit (except that the corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in the furtherance of the purposes set forth in Article II hereof). Notwithstanding any other provision of these Articles, the corporation shall not carry on any other activities not permitted to be carried on by a governmental entity exempt from federal income tax under section 115 of the IRC, or comparable provisions of any successor law.

To the extent permitted by law, upon the dissolution of the corporation, the board shall after paying or making provision for the payment of all of the liabilities of the corporation, dispose of all of the assets of the corporation to the University Board for forwarding to the state school aid fund established under article IX, section 11 of the Constitution of the State of Michigan of 1963, as amended.

ARTICLE XII

These Articles of Incorporation shall not be amended except by the process provided in Article IX of the Terms and Conditions incorporated as part of the Contract. This process is as follows:

The corporation, by a majority vote of its Board of Directors, may, at any time, propose specific changes to these Articles of Incorporation or may propose a meeting to discuss potential revision to these Articles of Incorporation. The proposal will be made to the University Board through its designee. The University Board delegates to the Director of The Center for Charter Schools ("The Center Director") the review and approval of changes or amendments to these Articles of Incorporation. In the event that a proposed change is not accepted by The Center Director, the University Board may consider and vote upon a change proposed by the corporation following an opportunity for a written and oral presentation to the University Board by the corporation.

Amendments to these Articles of Incorporation take effect only after they have been approved by the corporation's Board of Directors and by the University Board or The Center Director, and the amendments are filed with the Michigan Department of Licensing and Regulatory Affairs Bureau of Commercial Services. In addition, the corporation shall file with the amendment a copy of the University Board's or The Center Director's approval of the amendment.

ARTICLE XIII

The definitions set forth in the Terms and Conditions incorporated as part of the Contract shall have the same meaning in these Restated Articles of Incorporation.

These Restated Articles of Incorporation were duly adopted on the 1st day of June, 2011, in accordance with the provisions of Section 642 of the Act. These Restated Articles of Incorporation restate, integrate, and **do further amend** the provisions of the Articles of Incorporation, and were duly adopted by the directors at an open meeting. The necessary number of votes was cast in favor of these Restated Articles of Incorporation.

Signed this 1st day of June, 2011.

By:



Robert Sorensen
Board President

CONTRACT SCHEDULE 2

AMENDED BYLAWS

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EAGLE CREST CHARTER ACADEMY

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AMENDED BYLAWS
OF
EAGLE CREST CHARTER ACADEMY

ARTICLE I
NAME

This organization shall be called Eagle Crest Charter Academy (the "Academy" or the "corporation").

ARTICLE II
FORM OF ACADEMY

The Academy is organized as a non-profit, non-stock, directorship corporation.

ARTICLE III
OFFICES

Section 1. Principal Office. The principal office of the Academy shall be located in the State of Michigan.

Section 2. Registered Office. The registered office of the Academy may be the same as the principal office of the Academy, but in any event must be located in the State of Michigan, and be the business office of the resident agent, as required by the Michigan Non-Profit Corporation Act. Changes in the resident agent and registered address of the Academy must be reported to the Michigan Department of Licensing and Regulatory Affairs and to The Center for Charter Schools at Central Michigan University.

ARTICLE IV
BOARD OF DIRECTORS

Section 1. General Powers. The business, property and affairs of the Academy shall be managed by the Academy Board of Directors ("Academy Board"). The Academy Board may exercise any and all of the powers granted to it under the Michigan Non-Profit Corporation Act or pursuant to Part 6E of the Revised School Code ("Code"). The Academy Board may delegate such powers to the officers and committees of the Academy Board as it deems necessary, so long as such delegation is consistent with the Articles, these Bylaws, the Contract and Applicable Law.

Section 2. Method of Selection and Appointment. The Central Michigan University Board of Trustees ("University Board") shall prescribe the method of appointment for members of an

academy's board of directors. The Center Director is authorized to develop and administer an academy board selection and appointment process that includes an *Application for Public School Academy Board Appointment* and is in accord with these policies:

- a. The University Board shall appoint the initial and subsequent Academy Board by resolution, except as prescribed by subparagraph d. The Center Director shall recommend qualified individuals to the University Board.
- b. The Academy Board, by resolution and majority vote, shall nominate its subsequent members, except as provided otherwise. The Academy Board shall recommend to The Center Director at least one nominee for each vacancy. Nominees shall submit the *Application for Public School Academy Board Appointment* for review by The Center. The Center Director may or may not recommend the appointment of a nominee submitted by the academy board. If The Center Director does not recommend the appointment of a nominee submitted by the Academy Board, he/she may select and recommend another nominee or may request the Academy Board submit a new nominee for consideration.
- c. An individual appointed to fill a vacancy created other than by the expiration of a term shall be appointed for the unexpired term of that vacant position.
- d. Under exigent conditions, and with the approval of the University Board's chair and the president, The Center Director may appoint a qualified individual to an academy's board of directors. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any appointments made under this provision.

Section 3. Length of Term. The Director of an Academy Board shall serve at the pleasure of the University Board. Terms of the initial positions of the Academy Board shall be staggered in accordance with *The Academy Board of Directors Table of Staggered Terms and Appointments* established and administered by The Center Director. Subsequent appointments shall be for a term of office not to exceed four (4) years, except as prescribed by *The Academy Board of Directors Table of Staggered Terms and Appointments*.

Section 4. Number of Director Positions. The number of director positions on the Academy Board shall not be less than five (5) nor more than nine (9) as determined by the University Board. If the Academy Board fails to maintain its full membership by making appropriate and timely nominations, The Center Director may deem that failure an exigent condition.

Section 5. Qualifications of Academy Board Members. To be qualified to serve on the Academy Board, a person shall, among other things: (a) be a citizen of the United States; (b) be a resident of the State of Michigan; (c) submit all materials requested by The Center including, but not limited to, the *Application for Public School Academy Board Appointment* which must

include authorization to process a criminal background check; and (d) annually submit a conflict of interest disclosure as prescribed by The Center.

The members of the Academy Board shall not include (a) employees of the academy; (b) any director, officer, or employee of a service provider or management company that contracts with the academy; (c) a Central Michigan University official or employee, as a representative of Central Michigan University.

Section 6. Oath of Public Office. All members of the Academy Board must take the constitutional oath of office and sign the *Oath of Public Office* before beginning their service. The *Oath of Public Office* shall be filed with The Center.

Section 7. Tenure. Each Academy Board Director shall hold office until the Director's replacement, death, resignation, removal or until the expiration of the term, whichever occurs first.

Section 8. Removal and Suspension. If the University Board determines that an Academy Board member's service in office is no longer necessary, then the University Board may remove an academy board member with or without cause and shall specify the date when the academy board member's service ends. An academy board member may also be removed from office for cause by a two-thirds (2/3) vote of the Academy's Board.

With the approval of the University Board's chair and the president, The Center Director may suspend an Academy Board member's service, if in his/her judgment the person's continued presence would constitute a risk to persons or property, or would seriously impair the operation of the Academy. Any suspension made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any suspensions made under this provision.

Section 9. Resignation. Any Director may resign at any time by providing written notice to the corporation or by communicating such intention (orally or in writing) to The Center. Notice of resignation will be effective upon receipt or at a subsequent time if designated in a written notice. A successor shall be appointed as provided in Section 2 of this Article.

Section 10. Board Vacancies. A Board of Director vacancy shall occur because of death, resignation, removal, failure to maintain residency in the State of Michigan, disqualification or as otherwise specified in the Code. Any vacancy shall be filled as provided in Section 2 of this Article.

Section 11. Compensation. A Director of the Academy shall serve as a volunteer Director. By resolution of the Academy Board, the Directors may be reimbursed for their reasonable expenses incident to their duties.

ARTICLE V MEETINGS

Section 1. Annual and Regular Meetings. The Academy Board shall hold an annual meeting each year. The Academy Board must provide, by resolution, the time and place, within the State of Michigan, for the holding of regular monthly meetings. The Academy Board shall provide notice of the annual and all regular meetings as required by the Open Meetings Act.

Section 2. Special Meetings. Special meetings of the Academy Board may be called by or at the request of any Director. The person or persons authorized to call special meetings of the Academy Board may fix the place within the State of Michigan for holding any special meeting of the Academy Board called by them, and, if no other place is fixed, the place of meeting shall be the principal business office of the corporation in the state of Michigan. The corporation shall provide notice of all special meetings as required by the Open Meetings Act.

Section 3. Notice; Waiver. The Academy Board must comply with the notice provisions of the Open Meetings Act. In addition, notice of any meeting shall be given to each Director stating the time and place of the meeting, delivered personally, mailed, sent by facsimile or electronic mail to the Director's business address. Any Director may waive notice of any meeting by written statement, facsimile or electronic mail sent by the Director, signed before or after the holding of the meeting. The attendance of a Director at a meeting constitutes a waiver of notice of such meeting, except where a Director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened.

Section 4. Quorum. In order to legally transact business, the Academy Board shall have a quorum physically present at a duly called meeting of the Academy Board. A "quorum" shall be defined as follows:

<u># of Academy Board Positions</u>	<u># Required for Quorum</u>
Five (5)	Three (3)
Seven (7)	Four (4)
Nine (9)	Five (5)

Section 5. Manner of Acting. The act of the majority of the Directors present at a meeting at which a quorum is present shall be the act of the Academy Board. No member of the Board of Directors may vote by proxy, by way of a telephone conference or any other electronic means of communication.

Section 6. Open Meetings Act. All meetings of the Academy Board, shall at all times be in compliance with the Open Meetings Act.

Section 7. Presumption of Assent. A Director of the Academy Board who is present at a meeting of the Academy Board at which action on any corporate matter is taken shall be presumed to have assented to the action taken unless that Director's dissent shall be entered in the minutes of the meeting or unless that Director shall file a written dissent to such action with the person acting as the Secretary of the meeting before the adjournment thereof or shall forward such dissent by registered mail to the Secretary of the corporation immediately after the adjournment of the meeting. This right to dissent shall not apply to a Director who voted in favor of such action.

ARTICLE VI COMMITTEES

Section 1. Committees. The Academy Board, by resolution, may designate one or more committees. Each committee is to consist of one or more Directors selected by the Academy Board. As provided in the resolution as initially adopted, and as thereafter supplemented or amended by further resolution, the committees shall have such powers as delegated by the Academy Board, except (i) filling of vacancies in the officers of the Academy Board or committees created pursuant to this Section; (ii) amending the Articles of Incorporation or Bylaws; or (iii) any action the Academy Board cannot lawfully delegate under the Articles, Bylaws or Applicable Law. All committee meetings shall at all times be in compliance with the Open Meetings Act. Each committee shall fix its own rules governing the conduct of its activities and shall make such reports to the Academy Board of its activities as the Academy Board may request.

ARTICLE VII OFFICERS OF THE BOARD

Section 1. Number. The officers of the Academy shall be a President, Vice-President, Secretary, Treasurer, and such assistant Treasurers and assistant Secretaries as may be selected by the Academy Board.

Section 2. Election and Term of Office. The Academy Board shall elect the initial officers at its first duly noticed meeting. Thereafter, the officers of the Academy shall be elected annually by the Academy Board. If the election of officers is not held at the annual meeting, the election shall be held as soon thereafter as may be convenient. Each officer shall hold office while qualified or until the officer resigns or is removed in the manner provided in Section 3.

Section 3. Removal. Any officer or agent elected or appointed by the Academy Board may be removed by the Academy Board whenever in its judgment the best interests of the corporation would be served thereby.

Section 4. Vacancies. A vacancy in any office shall be filled by appointment by the Academy Board for the unexpired portion of the term.

Section 5. President. The President of the Academy shall be a member of the Academy Board. The President of the corporation shall preside at all meetings of the Academy

Board. If there is not a President, or if the President is absent, then the Vice-President shall preside. If the Vice-President is absent, then a temporary chair, chosen by the members of the Academy Board attending the meeting shall preside. The President shall, in general, perform all duties incident to the office of President of the Board as may be prescribed by the Academy Board from time to time.

Section 6. Vice-President. The Vice-President of the Academy shall be a member of the Academy Board. In the absence of the President or in the event of the President's death, inability or refusal to act, the Vice-President shall perform the duties of President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The Vice-President shall perform such other duties as from time to time may be assigned to the Vice-President by the President or by the Academy Board.

Section 7. Secretary. The Secretary of the Academy shall be a member of the Academy Board. The Secretary shall: (a) keep the minutes of the Academy Board meetings in one or more books provided for that purpose; (b) see that all notices, including those notices required under the Open Meetings Act, are duly given in accordance with the provisions of these Bylaws or as required by law; (c) be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all authorized documents; (d) keep a register of the post office address of each Director; and (e) perform all duties incident to the office of Secretary and other duties assigned by the President or the Academy Board.

Section 8. Treasurer. The Treasurer of the Academy shall be a member of the Academy Board. The Treasurer shall: (a) have charge and custody of and be responsible for all funds and securities of the corporation; (b) keep accurate books and records of corporate receipts and disbursements; (c) deposit all moneys and securities received by the corporation in such banks, trust companies or other depositories as shall be selected by the Board; (d) complete all required corporate filings; (e) assure that the responsibilities of the fiscal agent to the corporation are properly carried out; and (f) in general perform all of the duties incident to the office of Treasurer and such other duties as from time to time may be assigned by the President or by the Academy Board.

Section 9. Assistants and Acting Officers. The Assistants to the officers, if any, selected by the Academy Board, shall perform such duties and have such authority as shall from time to time be delegated or assigned to them by the Secretary or Treasurer or by the Academy Board. The Academy Board shall have the power to appoint any member of the Academy Board to perform the duties of an officer whenever, for any reason, it is impractical for such officer to act personally. Such acting officer so appointed shall have the powers of and be subject to all the restrictions upon the officer to whose office the acting officer is so appointed except as the Academy Board may by resolution otherwise determine.

Section 10. Salaries. Officers of the Board, as Directors of the corporation, may not be compensated for their services. By resolution of the Academy Board, officers may be reimbursed for reasonable expenses incident to their duties.

Section 11. Filling More Than One Office. Subject to the statute concerning the Incompatible Public Offices, Act No. 566 of the Public Acts of 1978, being Sections 15.181 to 15.185 of the Michigan Compiled Laws, any two offices of the corporation except those of President and Vice-President may be held by the same person, but no officer shall execute, acknowledge or verify any instrument in more than one capacity.

ARTICLE VIII

CONTRACTS, LOANS, CHECKS AND DEPOSITS; SPECIAL CORPORATE ACTS

Section 1. Contracts. The Academy Board may authorize any officer or officers, agent or agents, to enter into any contract, to execute and deliver any instrument, or to acknowledge any instrument required by law to be acknowledged in the name of and on behalf of the corporation. Such authority may be general or confined to specific instances, but the appointment of any person other than an officer to acknowledge an instrument required by law to be acknowledged should be made by instrument in writing. When the Academy Board authorizes the execution of a contract or of any other instrument in the name of and on behalf of the corporation, without specifying the executing officers, the President or Vice-President, and the Secretary or Treasurer may execute the same and may affix the corporate seal thereto. No contract entered into, by or on behalf of the Academy Board, shall in any way bind Central Michigan University or impose any liability on Central Michigan University, its trustees, officers, employees or agents.

Section 2. Loans. No loans shall be contracted on behalf of the Academy and no evidences of indebtedness shall be issued in its name unless authorized by a prior resolution of the Academy Board. Such authority shall be confined to specific instances. No loan, advance, overdraft or withdrawal by an officer or Director of the corporation, shall be made or permitted unless approved by the Academy Board. No loan entered into, by or on behalf of the Academy Board, shall in any way be considered a debt or obligation of Central Michigan University or impose any liability on Central Michigan University, its trustees, officers, employees or agents.

Section 3. Checks, Drafts, etc. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Academy, shall be signed by such officer or officers of the corporation and in such manner as shall from time to time be determined by resolution of the Academy Board.

Section 4. Deposits. All funds of the Academy shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the Academy Board may select, provided that such financial institution is eligible to be a depository of surplus funds under Section 1221 of the Revised School Code, being Section 380.1221 of the Michigan Compiled Laws.

Section 5. Voting of Gifted, Bequested or Transferred Securities Owned by this Corporation. Subject always to the specific directions of the Academy Board, any shares or other securities issued by any other corporation and owned or controlled by this corporation may be voted at any meeting of security holders of such other corporation by the President of this corporation or by proxy appointed by the President, or in the absence of the President and the President's proxy, by the Secretary or Treasurer of this corporation or by proxy appointed by the

Secretary or Treasurer. Such proxy or consent in respect to any shares or other securities issued by any other corporation and owned by this corporation shall be executed in the name of this corporation by the President, the Secretary or the Treasurer of this corporation without necessity of any authorization by the Academy Board, affixation of corporate seal or countersignature or attestation by another officer. Any person or persons designated in the manner above stated as the proxy or proxies of this corporation shall have full right, power and authority to vote the shares or other securities issued by such other corporation and owned by this corporation the same as such shares or other securities might be voted by this corporation. This section shall in no way be interpreted to permit the corporation to invest any of its surplus funds in any shares or other securities issued by any other corporation. This section is intended to apply, however, to all gifts, bequests or other transfers of shares or other securities issued by any other corporation which are received by the corporation.

Section 6. Contracts Between Corporation and Related Persons. As required by Applicable Law, any Director, officer or employee of the Academy, who enters into a contract with the Academy, that meets the definition of contract under the statute on Contracts of Public Servants with Public Entities, Act No. 317 of the Public Acts of 1968, being sections 15.321 to 15.330 of the Michigan Compiled Laws, shall comply with the public disclosure requirements set forth in Section 3 of the statute.

The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. However, the Academy Board shall prohibit any individual from being employed by the Academy, an educational service provider or an employee leasing company involved in the operation of the Academy, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees. The Academy Board may contract with an educational service provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy. Before entering into an agreement with an educational service provider or an employee leasing company to perform services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by The Center. A copy of the agreement between the Academy Board and the educational service provider or employee leasing company shall be included as part of Schedule 5.

The Academy shall comply with the Incompatible Public Offices statute, Act No. 566 of the Public Acts of 1978, being MCL 15.181 to 15.185 of the Michigan Compiled Laws, and the Contracts of Public Servants With Public Entities statute, Act No. 371 of the Public Acts of 1968, being MCL 15.321 to 15.330 of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. The following shall be deemed prohibited conflicts of interest:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an educational service provider or an employee leasing company that has an agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school; and
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University.

No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:

- (a) Employed by the Academy;
- (b) Works at or is assigned to the Academy;
- (c) Has an ownership, officer, policymaking, managerial, administrative non-clerical or other significant role with the Academy's educational service provider or employee leasing company.

ARTICLE IX INDEMNIFICATION

To the extent permitted by Applicable Law, each person who is or was a Director, officer or member of a committee of the Academy and each person who serves or has served at the request of the Academy as a trustee, director, officer, partner, employee or agent of any other corporation, partnership, joint venture, trust or other enterprise, may be indemnified by the Academy. The corporation may purchase and maintain insurance on behalf of any such person against any liability asserted against and incurred by such person in any such capacity or arising out of his status as such, whether or not the corporation would have power to indemnify such person against such liability under the preceding sentence. The corporation may, to the extent authorized from time to time by the Board, grant rights to indemnification to any employee or agent of the corporation.

ARTICLE X FISCAL YEAR

The fiscal year of the corporation shall begin on the first day of July in each year.

ARTICLE XI AMENDMENTS

These Amended Bylaws may be altered, amended or repealed and new Amended Bylaws may be adopted by obtaining (a) the affirmative vote of a majority of the Academy Board at any regular or special meeting of the Academy Board, if a notice setting forth the terms of the proposal has been given in accordance with the notice requirements of these Amended Bylaws and applicable law, and (b) the written approval of the changes or amendments by The Center Director. In the event that a proposed change is not accepted by The Center Director, the University Board may consider and vote upon a change proposed by the corporation following an opportunity for a written presentation to the University Board by the Academy Board. These Amended Bylaws and any amendments to them take effect only after they have been approved by both the Academy Board and by the Center Director.

ARTICLE XII TERMS AND CONDITIONS DEFINITIONS

The definitions set forth in the Terms and Conditions incorporated as part of the Contract shall have the same meaning in these Amended Bylaws.

CERTIFICATION

The Board certifies that these Amended Bylaws were adopted as and for the Bylaws of a Michigan corporation in an open and public meeting, by the Academy Board on the 8 day of June, 2016.


Secretary

CONTRACT SCHEDULE 3
FISCAL AGENT AGREEMENT

SCHEDULE 3

FISCAL AGENT AGREEMENT

This Agreement is part of the Contract issued by the Central Michigan University Board of Trustees ("University Board"), an authorizing body as defined by the Revised School Code, as amended (the "Code"), to Eagle Crest Charter Academy ("Academy"), a school of excellence.

Preliminary Recitals

WHEREAS, pursuant to the Code and the Contract, the University Board, as authorizing body, is the fiscal agent for the Academy, and

WHEREAS, the University Board is required by law to forward any State School Aid Payments received from the State of Michigan ("State") on behalf of the Academy to the Academy,

NOW, THEREFORE, in consideration of the premises set forth below, the parties agree to the following:

ARTICLE I

DEFINITIONS AND INTERPRETATIONS

Section 1.01. Definitions. Unless otherwise provided, or unless the context requires otherwise, the following terms shall have the following definitions:

"Academy Account" means an account established by the Academy Board for the receipt of State School Aid Payments at a bank, savings and loan association, or credit union which has not been deemed ineligible to be a depository of surplus funds under Section 6 Act No. 105 of the Public Acts of 1855, being Section 21.146 of the Michigan Compiled Laws.

"Agreement" means this Fiscal Agent Agreement.

"Fiscal Agent" means the University Board or an officer or employee of Central Michigan University as designated by the University Board.

"Other Funds" means any other public or private funds which the Academy receives and for which the University Board voluntarily agrees to receive and transfer to the Academy.

"State School Aid Payment" means any payment of money the Academy receives from the State School Aid Fund established pursuant to Article IX, Section 11 of the Michigan Constitution of 1963 or under the State School Aid Act of 1979, as amended.

"State" means the State of Michigan.

"State Treasurer" means the office responsible for issuing funds to schools of excellence for State School Aid Payments pursuant to the State School Aid Act of 1979, as amended.

ARTICLE II

FISCAL AGENT DUTIES

Section 2.01. Receipt of State School Aid Payments and Other Funds. The University Board is the Fiscal Agent for the Academy for the limited purpose of receiving State School Aid Payments. By separate agreement, the University Board and the Academy may also agree that the University will receive Other Funds for transfer to the Academy. The Fiscal Agent will receive State School Aid Payments from the State, as provided in Section 3.02.

Section 2.02. Transfer to Academy. Except as provided in Article X of the Terms and Conditions and in the Oversight Agreement, the Fiscal Agent shall transfer all State School Aid Payments and all Other Funds received on behalf of the Academy to the Academy within ten (10) business days of receipt or as otherwise required by the provisions of the State School Aid Act of 1979 or applicable State Board rules. The State School Aid Payments and all Other Funds shall be transferred into the Account designated by a resolution of the Board of Directors of the Academy and by a method of transfer acceptable to the Fiscal Agent.

Section 2.03. Limitation of Duties. The Fiscal Agent has no responsibilities or duties to verify the Academy's pupil membership count, as defined in the State School Aid Act of 1979, as amended, or to authorize, to approve or to determine the accuracy of the State Aid School Payments received on behalf of the Academy from the State Treasurer. The duties of the Fiscal Agent are limited to the receipt and transfer to the Academy of State School Aid Payments and Other Funds received by the Academy. The Fiscal Agent shall have no duty to monitor, account for or approve expenditures made by the Academy Board.

Section 2.04. Academy Board Requests for Direct Intercept of State School Aid Payments. If the Academy Board (i) authorizes a direct intercept of a portion of its State School Aid Payments from the State to a third party account for the payment of Academy debts and liabilities; or (ii) assigns or directs that a portion of its State School Aid Payments be forwarded by the Fiscal Agent to a third party account for the payment of Academy debts and liabilities, then Academy shall submit to The Center for Charter Schools at Central Michigan University for review and consideration: (i) a copy of the Academy Board's resolution authorizing the direct intercept or the assignment or direction of State School Aid Payments; (ii) a State School Aid Payment Agreement and Direction document that is in a form and content acceptable to the Fiscal Agent; and (iii) other documents as required. The Center reserves the right to not acknowledge in writing any State School Aid Payment Agreement and Direction that is not in a form and content acceptable to the Fiscal Agent.

ARTICLE III

STATE DUTIES

Section 3.01 Eligibility for State School Aid Payments. The State, through its Department of Education, has sole responsibility for determining the eligibility of the Academy to receive State School Aid Payments. The State, through its Department of Education, has sole responsibility for determining the amount of State School Aid Payments, if any, the Academy shall be entitled to receive.

Section 3.02. Method of Payment. Each State School Aid Payment for the Academy will be made to the Fiscal Agent by the State Treasurer by issuing a warrant and delivering the warrant to the Fiscal Agent by electronic funds transfer into an account specified by the Fiscal Agent, or by such other means deemed acceptable to the Fiscal Agent. The State shall make State School Aid Payments at the times specified in the State School Aid Act of 1979, as amended.

ARTICLE IV

ACADEMY DUTIES

Section 4.01. Compliance with State School Aid Act. In order to assure that funds are available for the education of pupils, an Academy shall comply with all applicable provisions of the State School Aid Act of 1979, as amended.

Section 4.02. Academy Account. The Academy is authorized to establish an Account in the name of the Academy. Signatories to the Account shall be current Academy Board members and properly designated Academy Board employees, if applicable. The Academy Board is authorized to approve withdrawals and transfers from any Account established in the name of the Academy. Any authorization approved by the Academy Board for automatic withdrawals or transfers from an Academy Account may only be terminated or amended by the Academy Board.

Section 4.03. Expenditure of Funds. The Academy may expend funds that it receives from the State School Aid Fund for any purpose permitted by the State School Aid Act of 1979 and may enter into contracts and agreements determined by the Academy as consistent with the purposes for which the funds were appropriated.

Section 4.04. Mid-Year Transfers. Funding for students transferring into or out of the Academy during the school year shall be in accordance with the State School Aid Act of 1979 or applicable State Board rules.

Section 4.05. Repayment of Overpayment. The Academy shall be directly responsible for reimbursing the State for any overpayments of State School Aid Payments. At its option, the State may reduce subsequent State School Aid Payments by the amount of the overpayment or may seek collection of the overpayment from the Academy.

ARTICLE V

RECORDS AND REPORTS

Section 5.01. Records. The Fiscal Agent shall keep books of record and account of all transactions relating to the receipts, disbursements, allocations and application of the State School Aid Payments and Other Funds received, deposited or transferred for the benefit of the Academy, and these books shall be available for inspection at reasonable hours and under reasonable conditions by the Academy and the State.

Section 5.02. Reports. Annually, the Fiscal Agent shall prepare and send to the Academy within thirty (30) days of September 1, a written report dated as of August 31. This report shall summarize all receipts, deposits and transfers made on behalf or for the benefit of the Academy during the period beginning on the latter of the date hereof or the date of the last such written report and ending on the date of the report, including without limitation, State School Aid Payments received on behalf of the Academy from the State Treasurer and any Other Funds which the University Board receives under this Agreement.

ARTICLE VI

CONCERNING THE FISCAL AGENT

Section 6.01. Representations. The Fiscal Agent represents that it has all necessary power and authority to enter into this Agreement and undertake the obligations and responsibilities imposed upon it in this Agreement and that it will carry out all of its obligations under this Agreement.

Section 6.02. Limitation on Liability. The liability of the Fiscal Agent to transfer funds to the Academy shall be limited to the amount of State School Aid Payments as are from time to time delivered by the State and the amount of Other Funds as delivered by the source of those funds.

The Fiscal Agent shall not be liable for any action taken or neglected to be taken by it in good faith in any exercise of reasonable care and believed by it to be within the discretion or power conferred upon it by this Agreement, nor shall the Fiscal Agent be responsible for the consequences of any error of judgment; and the Fiscal Agent shall not be answerable except for its own action, neglect or default, nor for any loss unless the same shall have been through its gross negligence or willful default.

The Fiscal Agent shall not be liable for any deficiency in the State School Aid Payments received from the State Treasurer to which the Academy was properly entitled. The Fiscal Agent shall not be liable for any State School Aid overpayments made by the State Treasurer to the Academy for which the State subsequently seeks reimbursement.

Acknowledgment of Receipt

The undersigned, on behalf of the State of Michigan, Department of Treasury, acknowledges receipt of the foregoing Fiscal Agent Agreement that is part of the Contract issued by the Central Michigan University Board of Trustees to Eagle Crest Charter Academy.

BY: Mary G. Martin
Mary G. Martin, Director
Bureau of State and Authority Finance
Michigan Department of Treasury

Date: 2-17, 2016

CONTRACT SCHEDULE 4

OVERSIGHT, COMPLIANCE
AND REPORTING AGREEMENT

SCHEDULE 4

OVERSIGHT, COMPLIANCE AND REPORTING AGREEMENT

This Agreement is part of the Contract issued by the Central Michigan University Board of Trustees ("University Board"), an authorizing body as defined by the Revised School Code, as amended (the "Code"), to Eagle Crest Charter Academy ("Academy"), a school of excellence.

Preliminary Recitals

WHEREAS, the University Board, subject to the leadership and general supervision of the State Board of Education over all public education, is responsible for overseeing the Academy's compliance with the Contract and all Applicable Law.

NOW, THEREFORE, in consideration of the premises set forth below, the parties agree to the following:

ARTICLE I

DEFINITIONS AND INTERPRETATIONS

Section 1.1. Definitions. Unless otherwise provided, or unless the context requires otherwise, the following terms shall have the following definitions:

"Agreement" means this Oversight, Compliance and Reporting Agreement.

"Oversight Responsibilities" means the University Board's oversight responsibilities set forth in Section 2.01 of this Agreement.

"Compliance and Reporting Duties" means the Academy's duties set forth in Section 2.02 of this Agreement.

"State School Aid Payment" means any payment of money the Academy receives from the state school aid fund established pursuant to Article IX, Section 11 of the Michigan Constitution of 1963 or under the State School Aid Act of 1979, as amended.

ARTICLE II

OVERSIGHT, COMPLIANCE AND REPORTING RESPONSIBILITIES

Section 2.1. Oversight Responsibilities. The Center for Charter Schools ("The Center") at Central Michigan University, as it deems necessary to fulfill the University Board's Oversight Responsibilities, may undertake the following:

- a. Monitor and evaluate if the Academy Board is properly governing the Academy and following the Amended Bylaws set forth in the Contract.

- b. Monitor and evaluate the Academy's academic performance and progress toward achieving the educational goal and related measures set forth in Contract Schedule 7b.
- c. Monitor and evaluate the Academy's implementation, delivery, and support of the educational program and curriculum as set forth in Contract Schedules 7c and 7d, respectively.
- d. Monitor and evaluate the Academy's application and enrollment procedures as set forth in Contract Schedule 7f.
- e. Monitor and evaluate the Academy's organizational and financial viability.
- f. Monitor and evaluate the Academy's fiscal stewardship and use of public resources.
- g. Monitor and evaluate the records, internal controls or operations of the Academy.
- h. Monitor and evaluate if the Academy is staffed with qualified personnel and that appropriate background checks have been conducted.
- i. Monitor and evaluate if the Academy is providing a safe learning environment.
- j. Request evidence that the Academy has obtained the necessary permits and certificates to operate as a public school from the applicable governmental agencies, including, without limitation, the Michigan Department of Licensing and Regulatory Affairs' Bureau of Construction Codes and local health departments.
- k. Conduct comprehensive on-site reviews to assess and/or evaluate the Academy's performance.
- l. Monitor and evaluate if the Academy is demonstrating good faith in complying with the Contract, the Revised School Code, and all other Applicable Law.
- m. Request periodic reports from the Academy regarding any aspect of its operation, including, but not limited to, information identified in Schedule 8 of the Contract.
- n. Initiate action to amend, revoke, terminate or suspend the Contract.
- o. Provide information and support to the Academy.

Section 2.2. Compliance and Reporting Duties. The Academy agrees to fulfill the following Compliance and Reporting Duties:

- a. Adopt and properly maintain governing board policies in accordance with Applicable Law.
- b. Comply with the reporting and document submission requirements set forth in the Master Calendar of Reporting Requirements issued annually by The Center.
- c. Comply with any Academy specific reporting and document submission requirements established by The Center.
- d. Comply with the insurance requirements set forth in Article XI, Section 11.2 of the Terms and Conditions of the Contract.
- e. Comply with The Center's Educational Service Provider Policies dated July 15, 1999, as may be amended.
- f. Report any litigation or formal proceedings to The Center, including, but not limited to, litigation initiated by or against the Academy alleging violation of any Applicable Law. If the University is a named party, notify the general counsel for the University Board as set forth in Article XII, Section 12.1 of the Terms and Conditions.
- g. The Academy shall not occupy or use any school facility set forth in Schedule 6 of the Contract until such facility has received all fire, health and safety approvals required by Applicable Law and has been approved for occupancy by the Michigan Department of Licensing and Regulatory Affairs' Bureau of Construction Codes.
- h. Permit The Center to inspect the records, internal controls, operations or premises of the Academy at any reasonable time.
- i. Authorize The Center to perform audit and evaluation studies using Academy data including, but not limited to, personally identifiable information about the Academy's students and staff submitted by the Academy to agencies including, but not limited to, Center for Educational Performance and Information ("CEPI"), Office of Educational Assessment and Accountability ("OEAA") and the Michigan Department of Education ("MDE"). Pursuant to this authorization, The Center shall abide by the regulations that govern the use of student data within the Family Educational Rights and Privacy Act (FERPA - 34 CFR Part 99), the Michigan Identity Theft Protection Act of 2004, and the Privacy Act of 1974.
- j. Upon request, the Academy Board shall provide The Center with a written report, along with supporting data, assessing the Academy's progress toward achieving the educational goal and related measures outlined in Contract Schedule 7b.
- k. Upon request, provide The Center with copies or view access to data, documents or information submitted to the Michigan Department of Education, the

Superintendent of Public Instruction, the State Board of Education, the Center for Educational Performance and Information, or any other state or federal agency.

1. If the Academy operates an online or other distance learning program, it shall submit a monthly report to the Michigan Department of Education, in the form and manner prescribed by the Michigan Department of Education, that reports the number of pupils enrolled in the online or other distance learning program, during the immediately preceding month.

Section 2.3. Waiver of Compliance and Reporting Duties. The University Board, or The Center Director as its authorized designee, may modify or waive any of the Academy's Compliance and Reporting Duties.

ARTICLE III

RECORDS AND REPORTS

Section 3.1. Records. The Academy will keep complete and accurate records and reports of its governance and operations. These records and reports shall be available for inspection by The Center at reasonable hours and under reasonable conditions.

ARTICLE IV

MISCELLANEOUS

Section 4.1. Administrative Fee. The Academy agrees to pay to the University Board an administrative fee of 3% of the Academy's State School Aid Payments. This fee shall be retained by the University Board from each State School Aid Payment received for forwarding to the Academy. This fee shall compensate the University Board for overseeing the Academy's compliance with the Contract and all Applicable Law and other related activities for which compensation is permissible. By agreement between The Center and the Academy, the University may charge additional fees beyond the administrative fees for services rendered.

Section 4.2. Time of the Essence. Time shall be of the essence in the performance of obligations from time to time imposed upon the Academy and the University Board by this Agreement.

CONTRACT SCHEDULE 5

DESCRIPTION OF STAFF RESPONSIBILITIES

DESCRIPTION OF STAFF RESPONSIBILITIES

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article III, Section 3.6., the Academy is authorized to employ or contract for personnel according to the position information outlined in this schedule. Before entering into an agreement with an educational service provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies adopted by The Governor John Engler Center for Charter Schools.

Principal	5-1
Dean	5-3
Teacher.....	5-5
Library Technology Specialist.....	5-7
Special Education Teacher.....	5-9
Academic Specialist.....	5-11
Substitute Teacher.....	5-14
Instructional Coach	5-16
School Social Worker	5-19
Special Education Building Coordinator	5-21
Occupational Therapist	5-22
Speech and Language Therapist	5-24
Paraprofessional.....	5-26
Library Technology Aide.....	5-29
Office Administrator.....	5-31
Registrar	5-34
Student Recruitment Specialist.....	5-36
Recess Aide.....	5-38
Educational Service Provider Agreement.....	5-40

Job Title: Principal
Department: School Administration
Reports To: Director of School Quality
Employed By: National Heritage Academies, Inc. ("NHA")

SUMMARY

The Principal is dedicated to achieving the Academy's mission. He or she will hold the unwavering belief that all children can and will learn given the right opportunities. Qualified individuals will have a proven track record of achieving significant rates of student growth. Strong leadership and management skills are also required as is the ability to provide instructional support to teachers. To these ends, the Principal must be committed to and capable of developing Academy culture, promoting student achievement and implementing seamless Academy operations.

ESSENTIAL DUTIES

The duties include working with students, families and staff to create a thriving Academy community focused on achieving results. The Principal must be able to effectively direct and coordinate educational, administrative and counseling activities; formulate policy at the Academy level; make hiring and termination decisions; set salaries; evaluate teacher performance; and plan for his or her own succession.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

A qualified individual has between four and ten years of school leadership experience in working with diverse student populations. The Principal will be able to demonstrate achievements in student proficiency and growth that can be specifically linked to their leadership and interventions. The ability to interpret student performance data and to develop strategies that differentiate learning based on assessment results is key. Dedication to ongoing professional development is important and the Principal should be familiar with education journals, research and current trends in education. As a building leader, the Principal should also be comfortable working with financial reports and legal documents.

Both oral and written communication skills are key to success as the Principal. The Principal will be able to respond aptly to common inquiries from parents, the community and the authorizer and to present information to the Academy Board. He or she will have the ability to problem solve and to draft correspondence appropriate to the circumstances. The Principal will support and always seek to fulfill the guiding concepts for the Academy embodied in the mission and the Academy's moral focus program.

The employee must have an acceptable criminal background check result. To the extent this position is deemed to be an administrator of instructional programs (including the supervisor of certified teachers) and/or a chief business official, this position is required to meet one of the following: (1) if the individual held a school administrator position before January 4, 2010, then

evidence of maintaining continuing education is required; or (2) if the individual was hired as school administrator after January 4, 2010, then either: (a) an Administrator Certificate is required; OR (b) enrollment in a Michigan Department of Education (“MDE”)-approved Principal Preparation Program within 6 months of employment (and completion within 3 years) is required. [Public Act 205 section 380.1246].

SUPERVISORY RESPONSIBILITIES

A Principal will directly supervise a group of employees, not to exceed 15. This group includes Deans and front office staff and may in some circumstances include paraprofessional staff, special education and/or specials teachers. The Principal will carry out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring and training employees; planning, assigning and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Dean
Department: School Administration
Reports To: Principal
Employed By: NHA

SUMMARY

Deans hold leadership positions within the Academy and must share their colleagues' commitment to achieving the mission of the Academy. They must possess an unrelenting drive to change lives, make a difference, transfer knowledge and create opportunity. Deans will effectively manage people, develop teachers, demonstrate the ability to build culture and aspire to model the virtues adopted in the moral focus program.

ESSENTIAL DUTIES

Deans are responsible for management oversight and will hold specifically defined roles within the leadership structure. As such, they will manage a subset of the Academy staff and provide primary responsibility for various areas of leadership across the building. Like the Principal, these responsibilities require individuals who can respond to common inquiries from parents and the community and who are able to problem solve and communicate effectively.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Qualified individuals possess a bachelor's degree or higher and a minimum of three to five years of experience in teaching. As instructional leaders, Deans will demonstrate success in leading, motivating and coaching a team of teachers who have mastered instructional best practices and who are continuously seeking new and better approaches to teaching and learning.

The employee must have an acceptable criminal background check result. To the extent this position is deemed to be an administrator of instructional programs (including the supervisor of certified teachers) and/or a chief business official, this position is required to meet one of the following: (1) if the individual held a school administrator position before January 4, 2010, then evidence of maintaining continuing education is required; or (2) if the individual was hired as school administrator after January 4, 2010, then either: (a) an Administrator Certificate is required; OR (b) enrollment in an MDE-approved Principal Preparation Program within 6 months of employment (and completion within 3 years) is required. [Public Act 205 section 380.1246].

SUPERVISORY RESPONSIBILITIES

Directly supervises a subset of instructional employees in the Academy, to include teachers and special education and paraprofessional staff. He/she will carry out supervisory responsibilities in accordance with the organization's policies and applicable laws. Deans, with the assistance of the Principal, are involved in the interviewing, hiring and training of employees. Responsibilities include planning, assigning and directing of work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Teacher
Department: Teaching Staff
Reports To: Dean
Employed By: NHA

SUMMARY

Teachers at the Academy are committed to the mission and possess an unwavering dedication to promoting high expectations and academic growth. Teachers do not work independently in their classrooms but collaborate with their grade-level teams in planning lessons, honing instructional techniques and achieving learning objectives. Teachers are able to participate collaboratively and professionally with other staff, as well as with parents, volunteers and the community. Teachers will promote and always seek to fulfill the guiding concepts for the Academy, including its mission, moral focus program and vision.

ESSENTIAL DUTIES

Teachers will be responsible for creating, managing and participating in a variety of learning environments and activities that provide opportunities for students to develop to their fullest potential and achieve their learning objectives. Teachers will have the ability to apply knowledge of current research and theory to the instructional program and to plan and implement lessons based on Academy objectives and the needs and abilities of students.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Bachelor's degree is required along with appropriate licensure/certification. Teaching experience, preferably at the elementary school level, is desired.

LANGUAGE SKILLS

Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures and governmental regulations. Ability to write reports, business correspondence and procedure manuals. Ability to establish and maintain effective working relationships with students, peers, parents and community; ability to speak clearly and concisely in written and oral communication.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions and decimals. Ability to compute rate, ratio and percent and to draw and interpret graphs. Ability to work with mathematical concepts such as probability and statistical inference and fundamentals of plane and solid geometry and trigonometry. Ability to apply mathematical concepts to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions. Ability to deal with a variety of abstract and concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

Shall possess a valid State of Michigan Teaching Certificate with the appropriate endorsement(s) for all subject area(s) being taught. Must have evidence of meeting highly qualified requirements, as defined by No Child Left Behind.

OTHER SKILLS AND ABILITIES

Ability to apply knowledge of current research and theory to instructional program; ability to plan and implement lessons based on Academy objectives and the needs and abilities of students. Ability to establish and maintain effective relationships with students, peers and parents; skill in oral and written communication. Ability to perform duties with awareness of all NHA requirements and Academy Board policies. Ability to use technology for instructional purposes and to teach current technology skills and the use of technology tools for grade level. Ability to apply knowledge about legal issues to the work setting.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Library Technology Specialist
Department: School Staff
Reports To: Principal
Employed By: NHA

SUMMARY

The Library Technology Specialist at the Academy will ascribe to the Academy's mission and share his or her colleagues' commitment to providing an unparalleled educational opportunity to its students. The Library Technology Specialist will be passionate about introducing students to classic and contemporary literature, instilling them with a life-long love of reading and instructing them in information literacy. He or she will support and aspire to model the mission of the Academy and the virtues emphasized in the moral focus program.

ESSENTIAL DUTIES

The Library Technology Specialist will work with classroom teachers to help plan and integrate lessons and provide resources. Students will use technology to research, compose and present information related to topics studied in other content area classes. He or she must possess the leadership capacity and expertise necessary to ensure that the library and educational technology programs are an integral part of the instructional program of the Academy.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The Academy will seek an individual with a bachelor's degree and a valid State of Michigan Teaching Certificate with the appropriate endorsement(s) for all subject area(s) being taught. The individual must have evidence of meeting highly qualified requirements, as defined by No Child Left Behind. Preference is given to individuals with prior experience teaching in a library/media center and a master's level endorsement in educational technology or library science. As a staff member who is likely to interact regularly with every student, teacher and administrator, the Library Technology Specialist must possess excellent communication skills, be able to establish and manage effective working relationships and readily assume the responsibilities of leader, trainer, manager, teacher and information specialist.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or

move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Special Education Teacher
Department: Teaching Staff
Reports To: Dean
Employed By: NHA

SUMMARY

Special Education Teachers at the Academy are committed to the Academy's mission and aspire to model the virtues of the moral focus program. He or she will possess unwavering dedication to changing lives, creating educational opportunity for students and instilling a life-long love of learning. In a position that requires working with students of various academic, physical and emotional needs, the Special Education Teacher must be able to adapt, prioritize and work collaboratively with other teachers at the Academy.

ESSENTIAL DUTIES

The Special Education Teacher is responsible to work with students in the K-8 program that experience emotional, learning and physical disabilities and are eligible for special education programs and services as determined by an Individualized Educational Program ("IEP") committee. While working with these special education students, the Special Education Teacher may also work with At-Risk students within the general education population and in the general education classroom in conjunction with the support they are providing to students with special needs.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The Academy will seek an individual with a bachelor's degree with certification in at least one disability area, experience working with special education students and a high level of verbal communication and interpersonal skills. The Special Education Teacher shall possess a valid State of Michigan Teaching Certificate with the appropriate endorsement(s) for all subject area(s) being taught. Must have evidence of meeting highly qualified requirements, as defined by No Child Left Behind. He or she will possess discretion, integrity and flexibility and have a clear understanding of issues of confidentiality.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or

move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Academic Specialist
Department: Teaching Staff
Reports To: Dean
Employed By: NHA

SUMMARY

Create, manage and participate in a variety of learning environments and activities in the four core content areas that provide opportunities for students to achieve learning objectives as stated in student educational plans. Participate collaboratively and professionally with parents and other faculty to promote the general well-being of the company and the Academy. Support and seek always to fulfill the guiding concepts for the school embodied in the mission, moral focus and vision adopted by NHA.

Note: Positions funded by entitlement grants must work within published federal and state guidelines to ensure compliance. Contact your school's Grants Administrator to determine entitlement grant status and acceptable job duties and responsibilities.

ESSENTIAL DUTIES

-
- Ensure effective two-way communication at all levels of responsibility. Provide out-of-class communication opportunities with parents and students. Participate in grade level, Academy and company meetings as appropriate. Represent the Academy to external constituencies as appropriate. Seek always to promote a spirit of collegiality in dealings with staff.
- Participate in on-going professional development.
- Participate in all other aspects of class and Academy planning and in the establishment of goals and objectives.
- Establish and maintain high standards of student behavior.
- Participate in Academy processes designed to recruit and retain students.
- Model the characteristics of behavior as outlined in NHA's Moral Focus Curriculum.
- Instruct effectively with technology and teach tools of technology within coursework.
- Modify instruction to accommodate the unique learning styles of students.
- Confer with students, parents and Academy staff/administrator to resolve student concerns.
- Other duties may be assigned.

If government funding allows, the following duties may be performed:

- Lead professional development activities in the four core content areas as requested by the Principal.
- Serve as a resource in the four core content areas for Paraprofessionals, teachers and administrators.
- Provide direction and demonstrate lessons as needed.
- Assist teachers, Paraprofessionals and administrators in using assessment to plan instruction for all students.
- Communicate assessment information to a variety of audiences including, but not limited to, Academy Board members, social workers, clinical specialists, teachers, administrators and parents for accountability and instructional purposes.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential job function satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Bachelor's degree required along with appropriate licensure/certification; master's degree preferred. Considerable teaching experience, preferably at the elementary school level, is desired.

LANGUAGE SKILLS

Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures and governmental regulations. Ability to write reports, business correspondence and procedure manuals. Ability to establish and maintain effective working relationships with students, peers, parents and community. Ability to speak clearly and concisely in written and oral communication.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions and decimals. Ability to compute rate, ratio and percent and to draw and interpret graphs. Ability to apply mathematical concepts to practical situations.

REASONING ABILITY

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

Shall possess a valid State of Michigan Teaching Certificate. Additionally, if providing direct instruction, must have the appropriate endorsement(s) for the subject area(s) being taught and must provide evidence of meeting highly qualified requirements, as defined by No Child Left Behind.

OTHER SKILLS AND ABILITIES

Ability to apply knowledge of current research and theory to instructional program; ability to plan and implement lessons based on Academy objectives and the needs and abilities of students. Ability to establish and maintain effective relationships with students, peers and parents; skilled in oral and written communication. Ability to perform duties with awareness of all NHA requirements and Academy Board policies. Ability to use technology for instructional purposes and to teach current technology skills and the use of technology tools for grade level. Ability to apply knowledge about legal issues to the work setting.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Substitute Teacher
Department: Administration
Reports To: Dean
Employed By: NHA

SUMMARY

Responsible for carrying out the lesson plans of the teacher for whom he/she is substituting.

ESSENTIAL DUTIES include the following. Other duties may be assigned.

- Follow the lesson plan provided by the teacher for whom he/she is substituting in accordance with the Academy's philosophy, goals and objectives.
- Maintain appropriate records such as attendance and grades, as directed by the teacher or by school administration.
- Establish and maintain order in the classroom.
- Maintain a classroom environment conducive to effective learning.
- Take all necessary and reasonable precautions to protect the safety and security of students, materials, equipment and facilities.
- Assist in upholding and enforcing school rules and administrative regulations.

QUALIFICATIONS

To perform this job successfully an individual must be able to perform each essential duty satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Educational credentials as required by the state in which the Academy is located; bachelor's degree preferred.

LANGUAGE SKILLS

Ability to communicate and work effectively with staff and students.

MATHEMATICAL SKILLS

Ability to apply concepts such as fractions, percentages, ratios and proportions to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions.

CERTIFICATES, LICENSES, REGISTRATIONS

Shall possess a valid State of Michigan Teaching Certificate with the appropriate endorsement(s) for all subject area(s) being taught (preferred) or a valid Substitute Permit. Must have evidence of meeting highly qualified requirements, as defined by No Child Left

Behind. If not licensed/certified, must meet the requirements to be eligible for a temporary/substitute credential according to state requirements.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Instructional Coach
Department: Teaching Staff
Reports To: Principal
Employed By: NHA

SUMMARY

The Instructional Coach will provide professional learning opportunities and guidance to all staff members in the areas of effective instructional practices, curriculum implementation and data application in order to build capacity for improved instruction and increased student achievement.

ESSENTIAL DUTIES

Provide consistent instructional support and guidance to Academy staff.

- Conduct individual bi-weekly meetings with each classroom teacher.
- Participate in bi-weekly team meetings at each grade level.
- Execute classroom visits and supply feedback concerning curriculum, instruction and assessment.
- Monitor and guide curriculum implementation and model lesson execution.
- Promote and support the use of assessment data to increase student achievement.
- Guide teachers in the collection and analysis of formative and summative assessment data.
- Guide teachers in the use of assessment data to direct instructional decisions.
- Assist teachers in establishing professional and individual student goals which correspond with the School Improvement Plan and assessment data.
- Facilitate professional learning opportunities.
- Plan and promote professional learning opportunities for the Academy staff based on needs defined in the School Improvement Plan.
- Serve as a resource in the areas of curriculum delivery, instructional practice, assessment and data interpretation.
- Other duties may be assigned.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are the education, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Preference will be given to candidates with five years of teaching experience and a valid Michigan administrator license with a proven record of leadership and high student performance.

- Bachelor's degree required; valid Michigan teaching certificate preferred.
- Exhibit excellent interpersonal skills: openness, approachability, receptivity and tactfulness.
- Possess excellent oral and written communication skills.
- Demonstrate the ability to motivate others.
- Highly organized and detail oriented.
- Demonstrate both adaptability and follow through with regard to scheduling of intervention services.

- Exhibit the ability to function as part of a team.
- Possess a thorough understanding of research-based instructional practices, the NHA curricular resources and the application of data to enhance student learning.

The employee must have an acceptable criminal background check result.

IDENTIFICATION AND RECRUITING

The Instructional Coach is identified by the Principal. Efforts will be made to select an Instructional Coach from current Academy staff; however, if a qualified internal candidate cannot be identified, one may be recruited from another NHA school.

APPOINTMENTS

Recommendations for appointment to the Instructional Coach position are made by the Principal. The Principal, in conjunction with the Director of School Quality, determines to whom the offer of employment shall be extended.

TRAINING AND SUPPORT

During the academic calendar year, the Instructional Coach participates in a series of professional learning opportunities focusing on coaching and observation, data analysis, adult learning theory and research-based instructional strategies.

The Instructional Coach receives guidance and support in the establishment and maintenance of an effective coaching schedule. Regular communication with a member of the Instructional Support Services (“ISS”) team and other Instructional Coaches via conference calls and e-mail provides additional support. When necessary, a member of the ISS team visits a school to assist with program implementation.

TOOLS

To assist the Instructional Coach in efficiently and effectively completing essential duties and responsibilities, the following tools will be available:

- Rank/Growth Target Report
- Common external assessment – to track student progress
- Template of Customized Academic Plan (“CAP”)
- Sample of Student Growth Summary Report
- Monthly Progress-on-Goals Report

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions of this position.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or

move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position. The noise level in the work environment is usually moderate.

Job Title: School Social Worker
Department: Intervention Services
Reports To: Principal
Employed By: NHA

SUMMARY

The School Social Worker is responsible for working with students who experience difficulty in the Academy and community setting as a result of social-emotional or family issues that result in educational time loss or other challenges to academic achievement.

ESSENTIAL DUTIES

Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential job functions.

- Provide direct social work services to students based on early identification to determine problems or situations that may interfere with a child's ability to achieve.
- Commit to and implement regular communication between the Academy, home, community and local agencies.
- Serve as a resource/consultant to Academy staff on effective techniques for modifying student behavior through the development of Functional Behavior Assessments and Behavior Intervention Plans.
- Provide general education in-service and training to promote classroom interventions that address normal student concerns.
- Identify and coordinate accommodations and modifications of the Academy environment for a student to obtain access to general education curriculum and instruction.
- Provide support to facilitate successful transitions in areas that affect student learning opportunities.
- Provide crisis prevention, planning and intervention services, including assessments of the impact of trauma on development, learning and Academy performance.
- Provide comprehensive written reports of assessments and evaluations of students that specifically address the reasons for referral.
- Utilize multiple methods of collecting data and provide appropriate measurable goals for intervention and anticipated outcomes from service.
- Other duties may be assigned from time to time.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential job function satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

The School Social Worker will have completed a master's degree in school social work/school psychology and will have proven time management and organizational skills.

LANGUAGE SKILLS

Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures and governmental regulations. Ability to write reports, business correspondence and procedure manuals. Ability to establish and maintain effective working relationships with students, peers, parents and community; ability to speak clearly and concisely in written and oral communication.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions and decimals. Ability to compute rate, ratio and percent and to draw and interpret graphs. Ability to work with mathematical concepts such as probability and statistical inference and fundamentals of plane and solid geometry and trigonometry. Ability to apply mathematical concepts to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions. Ability to deal with a variety of abstract and concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

Social Work licensure LLMSW or LMSW with school social work approval or an SSW310 letter. Approval issued through the Office of Special Education.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Special Education Building Coordinator
Reports To: Principal
Employed By: National Heritage Academies, Inc. (“NHA”)

SUMMARY:

The Special Education Building Coordinator may be any member of the special education building team, the Principal or Dean or other member of the administrative staff. If the position is filled by a Special Education Teacher, a stipend is to be paid as determined by their administrator and the Special Education Supervisor of the building.

ESSENTIAL DUTIES include the following. Other duties may be assigned.

- Schedule and lead meetings of the building Special Education team at least once a month.
- Meet with the Special Education assigned administrator at least bi-weekly.
- Ensure all special education providers maintain accurate and comprehensive student files.
- Be fully aware of the names, roles, schedules and employment FTE of all special education staff.
- Assist the Special Education Data Coordinator in maintaining current personnel lists.
- Facilitate data corrections in At-School in relation to the monthly Exception Report provided by the Special Education Data Coordinator.
- Ensure that itinerant staff is effectively included in the Academy-based special education team and support the building administration in the administration’s monitoring of special education services as relates to this itinerant staff.
- Assist the administration with effectively utilizing Paraprofessionals.
- Act as a resource to classroom teachers in the development, implementation and monitoring of accommodations and modifications to classroom programs.
- Meet bi-weekly, via Live Meeting, with Special Education Supervisor to discuss Academy-based Special Education matters as well as upcoming problematic IEPs and Paraprofessional/School Social Worker use in upcoming IEPs.
- Respond within the time designated to all service center requests for data.
- Complete/submit special education forms or Academy-specific information as requested by local and state agencies, not otherwise submitted by the NHA Service Center.
- Receive and distribute information received from outside agencies or contractors.
- Attend Special Education Building Coordinator regional meetings.

QUALIFICATIONS:

- Existing Academy employee.
- Meet all qualification requirements for the employee’s primary position at the Academy.
- The employee must have an acceptable criminal background check result.

Job Title: Occupational Therapist
Department: Special Education
Reports To: Principal
Employed By: NHA

SUMMARY

The Occupational Therapist is responsible to work with students who have fine and gross motor impairments as the result of neurological or physiological delays or trauma and has been determined by an IEP team to require special education support. While working with these occupational therapy students, the Occupational Therapist may also work with at-risk students within the general education population. The Occupational Therapist should work in collaboration with the Special Education Supervisor in the formation of daily schedules, testing schedules and annual meetings and should supply the Special Education Supervisor with current occupational therapy student lists so he/she can maintain a master special education list.

ESSENTIAL DUTIES include the following. Other duties may be assigned.

- Evaluate new students enrolling in the program within 30 days after entering program if occupational therapy needs exist.
- Use standardized tests, customized measures and/or observation to evaluate the student in the areas of cognitive perceptual motor skills, motor coordination, psychosocial development, self-care, muscle strength and range of motion, postural reflexes and needs for adaptive devices and prostheses.
- Evaluate treatment effectiveness by observation, testing and communication with family.
- Utilize treatment procedures involving physical, sensory, manual, creative and recreational activities.
- Participate in Multi-disciplinary Evaluation Team and IEP processes.
- Utilize a team approach to planning and treatment with Academy personnel, families, physicians and agencies.
- Consult with teachers regarding occupational therapy goals for the classroom setting and support classroom goals in the therapy treatment program.
- Provide training to appropriate individuals regarding effective methods to aid the student in the mainstream.
- Demonstrate professionalism when dealing with confidential issues and materials.
- Maintain file of caseload and keep the Special Education Supervisor updated on changes.
- Design/construct adaptive equipment and devices for the student and/or classroom.
- Demonstrate willingness to keep updated on issues and research by pursuing professional development.
- Maintain schedule and log progress toward goals for student sessions.
- Promote and participate in specific Academy projects such as screening programs, career days, etc.
- Attend parent/teacher meetings, as necessary.
- Perform other job related duties as assigned by the Principal.

QUALIFICATIONS

The requirements listed below are representative of the knowledge, skill and/or ability required. To perform this job successfully an individual must be able to perform each essential duty satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Bachelor's degree.

LANGUAGE SKILLS

High level of verbal communication and interpersonal skills such as discretion, integrity and flexibility to interact effectively with administrators, peers, constituent districts, parents and the general public.

MATHEMATICAL SKILLS

Ability to interpret test scores as they relate to the Occupational Therapist's area of expertise.

REASONING ABILITY

A clear understanding of confidentiality issues related to the special education program and the ability to prioritize tasks appropriately and interpret a variety of instructions furnished in written, oral, diagram and schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

Occupational Therapy license for state in which the Occupational Therapist operates. American Occupational Therapy Association Certification and Registration.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position. The noise level in the environment is usually moderate.

Job Title: Speech and Language Pathologist
Department: Special Education
Reports To: Principal (Support from Director of Special Education)
Employed By: NHA

SUMMARY

The Speech and Language Pathologist is responsible to work with students in the K–8 program who experience speech and language delays and impairments and have been diagnosed as needing special education support. These students should hold a current IEP. While working with these speech and language students, the Speech and Language Pathologist may also work with at-risk students within the general education population. Works in collaboration with the Special Education Teacher in the formation of daily schedules, testing schedules and annual meetings. Supplies the Special Education Teacher with current speech and language student lists so he/she can maintain a master special education list.

ESSENTIAL DUTIES

- Provide training and consultation for general education staff in speech and language areas.
- Provide pre-referral strategies and interventions to general educators.
- Carry out the screening and evaluating deemed necessary for at-risk students.
- Deliver maximum levels of instruction in the minimal amount of time.
- Plan and implement IEP meetings in a timely manner.
- Maintain complete and ongoing records for all students.
- Maintain log of parent and community contacts.
- Maintain a comfortable learning environment for students whether in pull-out situation or inclusion setting.
- Adapt materials pertaining to the speech and language areas within the K–8 curriculum to meet needs of students served.
- Utilize instructional materials which meet special learning needs of students.
- Demonstrate creativity in reaching, challenging and exciting student learning.
- Utilize technology to promote learning.
- Demonstrate professionalism in dealing with confidentiality issues.
- Promote corporation and Academy mission to community.
- Utilize strategies and techniques to modify unacceptable behavior.
- Evaluate student records for current IEP needs as those records are forwarded from the Special Education Supervisor.
- Serve as a cooperative and contributing member of the NHA Special Education team.
- Demonstrate knowledge of Academy policies and procedures.
- Demonstrate willingness to keep updated on issues and research by pursuing professional development.
- Demonstrate general knowledge of disability areas in special education; specific knowledge in the area of learning disabilities and emotional impairments.
- Hold parent/teacher meetings or attend scheduled meetings with general educators.
- Perform other job related duties as assigned by Director of Special Education and the Principal.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Master's degree in speech and language pathology.

LANGUAGE SKILLS

High level of verbal communication and interpersonal skills such as discretion, integrity and flexibility to interact effectively with students, administrators, peers, constituent districts, parents and the general public.

MATHEMATICAL SKILLS

Ability to interpret test scores as they relate to the Speech and Language Pathologist's area of expertise.

REASONING ABILITY

Clear understanding of confidentiality issues related to the special education program; ability to prioritize tasks appropriately and interpret a variety of instructions furnished in written, oral, diagram and schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

Certificate of Clinical Competence ("CCC") from the American Speech-Language-Hearing Association ("ASHA") and Speech Language Pathology license issued by Department of Licensing and Regulatory Affairs.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Paraprofessional
Department: Instructional Support
Reports To: Dean or Principal
Employed By: NHA

SUMMARY

Under the supervision of a classroom teacher, Paraprofessionals provide instructional assistance to students in need of academic intervention services. The services provided should lead to a significant growth in student test results.

Note: Positions funded by entitlement grants must work within published federal and state guidelines to ensure compliance.

ESSENTIAL DUTIES

Prepare daily lesson plans for students under the direction of immediate supervisor and/or classroom teacher.

- Provide individual and small group instruction.
- Provide instructional assistance for students during workshops as directed by the classroom teacher and designated instructional leader.
- Participate in weekly planning sessions with classroom teachers and immediate supervisor.

Other Job Requirements:

- Complete daily logs.
- Attend articulation meetings with classroom teachers.
- Attend professional development activities as required.
- Ensure availability for afternoon and evening parent-teacher conferences.
- Exemplary attendance and tardiness record.
- Other duties may be assigned from time to time.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential job function satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.

Paraprofessionals will be of good personal character and will have knowledge of and the ability to assist in teaching reading, writing and mathematics; or reading, writing and mathematics readiness. In addition, Paraprofessionals should meet one or more of the following requirements:

EDUCATION and/or EXPERIENCE

- Complete at least two years of study at an institution of higher education (equal to 60 semester hours); or obtain an associate's degree (or higher); or meet a rigorous standard of quality and demonstrate, through a formal state or local academic assessment:
 - Knowledge of and the ability to assist in, instructing reading, writing and mathematics; or

- Knowledge of and the ability to assist in, instructing reading readiness, writing readiness and mathematics readiness, as appropriate.

LANGUAGE SKILLS

Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures and governmental regulations. Ability to write reports, business correspondence and procedure manuals. Ability to establish and maintain effective working relationships with students, peers, parents and community; ability to speak clearly and concisely in written and oral communication.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions and decimals. Ability to compute rate, ratio and percent and to draw and interpret graphs. Ability to work with mathematical concepts such as probability and statistical inference and fundamentals of plane and solid geometry and trigonometry. Ability to apply mathematical concepts to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions. Ability to deal with a variety of abstract and concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

None.

They employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee occasionally is required to sit; use hands to handle; and reach with hands and arms. The employee is frequently required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Library Technology Aide
Reports To: Principal
Employed By: NHA

SUMMARY

The Library Technology Aide shall work cooperatively with and carry out tasks under the direction of the Library Technology Specialist. The Library Technology Aide must exhibit the ability to work with students and a willingness to support the staff.

ESSENTIAL DUTIES include the following. Other duties may be assigned.

- Communicate effectively with children, parents and staff.
- Assist students and staff in using library and technology resources to locate and retrieve information.
- Maintain appropriate technology skills needed to assist students and staff in the use of all technology equipment available in the Academy.
- Assist the Library Technology Specialist, NHA's IT team and other Academy personnel with duties and tasks related to the technology program.
- Troubleshoot difficulties with technology equipment as needed.
- Oversee student use of the Internet and technology according to NHA's Acceptable Use Policy.
- Work within Library Media Center policies and rules of student conduct.
- Gain knowledge of the operational procedures of the library media center.
- Function within the schedule of the Academy.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

- Two years of college (60 semester credit hours); or
- An associate's degree or higher; or
- Successful completion of a state paraprofessional exam.

LANGUAGE SKILLS

Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures and governmental regulations. Ability to write reports, business correspondence and procedure manuals. Ability to establish and maintain effective working relationships with students, peers, parents and community; ability to speak clearly and concisely in written and oral communication.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply and divide all units of measure, using whole numbers, common fractions and decimals. Ability to compute rate, ratio and percent and to draw and interpret graphs. Ability to work with mathematical concepts such as probability and

statistical inference and fundamentals of plane and solid geometry and trigonometry. Ability to apply mathematical concepts to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions. Ability to deal with a variety of abstract and concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS

None.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Office Administrator
Department: Administrative Support Staff
Reports To: Principal
Employed By: NHA

SUMMARY

The Office Administrator is accountable for customer service and efficient front office operation including management of attendance, health and safety compliance and support of the Principal.

ESSENTIAL DUTIES

The Office Administrator will act as the Academy's receptionist, order supplies and accurately process facilities work orders. Other accountabilities include maintenance of required attendance records in AtSchool, supporting the Principal as required and health and safety compliance. Other responsibilities may be assigned. These duties are not inclusive, but represent the essential duties of the Office Administrator. Below are the areas of responsibility:

- Administration:
 - Maintain and update bookkeeping at the Academy and be accountable for the accounting process including purchase orders, check requests, employee expense reports, tuition assistance, budget worksheets and weekly bank deposits.
 - Oversee the receptionist responsibilities of the Academy and support an office environment that is professional, customer service-oriented and supportive to visitors, parents and students. Answer phones, direct questions and inquiries, distribute mail and provide any and all enrollment information necessary to parents interested in the Academy. Ensure that sign-in and security procedures are strictly followed by all visitors.
 - Accurate use of facilities work order system.
- Reporting/Compliance:
 - Health and safety compliance including maintenance of the following documents:
 - Pest Management Plan and Annual Notification Letters
 - AHERA Plan and Annual notification/inspection documentations
 - Health and Safety Manual and annual training sign-in sheet
 - BowMac Crisis Management Plan with current information
 - Material Safety Data Sheets in binder for all products in the Academy
 - Monthly playground inspections
- Student Services:
 - Distribute medication/attend to incidental needs of students.
- Staff Support:
 - Order and maintain supplies as needed for office and Academy staff. Complete purchase requisitions for supplies, books and materials.
 - Complete correspondence, memoranda and reports for the Academy Principal as well as maintain calendar and appointments for Academy leadership.

QUALIFICATIONS

To perform this job successfully, an individual must have a working knowledge of how to perform each essential duty satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The individual must be proficient on PC and basic MS Office programs. This team member must be able to multi-task, have the ability to organize and be detailed-oriented. This team member must also create and maintain a customer-focused atmosphere within the administrative functions. The requirements listed below are representative of the knowledge, skill and/or ability required.

EDUCATION and/or EXPERIENCE

Possess an associate's degree and two to four years of experience in an office or school-related administrative position or a combination of education and experience that would produce the skills necessary to perform the job functions. Experience with Microsoft Office products.

LANGUAGE SKILLS

Ability to respond to common inquiries or complaints from parents. Ability to communicate and work effectively with students, parents, the Principal and teachers. Ability to write using proper grammar, spelling and sentence structure.

MATHEMATICAL SKILLS

Ability to apply concepts such as fractions, percentages, ratios and proportions to practical situations.

REASONING ABILITY

Ability to define problems, collect data, establish facts and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

CERTIFICATES, LICENSES, REGISTRATIONS

None.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

Job Title: Registrar
Department: Office Staff
Reports To: Principal
Employed By: NHA

SUMMARY

The Registrar at the Academy must be committed to the mission of the Academy, seek to fulfill the virtues of the moral focus program and be a dedicated team player. The Academy will seek an individual who can communicate effectively with parents, students, Academy staff and the community and is able to supervise Academy volunteers. The Registrar will often be the first representative of the Academy with whom parents and others interact and thus must be able to create a customer-centered, professional environment.

ESSENTIAL DUTIES

The Registrar is accountable for the organization and daily functioning of student enrollment management; maintaining student information in the AtSchool database, including course schedules; and ensuring compliance with People Services policies.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The Registrar will possess an associate's degree and two to four years of experience in an office or school administrative position or a combination of education and experience that would produce the skills necessary to perform the job functions. Must be proficient with PCs and basic Microsoft Office software.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential physical functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

Job Title: Student Recruitment Specialist
Department: Admissions
Reports To: Admissions Manager
Employed By: NHA

SUMMARY

The role of the Student Recruitment Specialist (“SRS”) is to sell families on the value of the Academy, take an application and ensure the student enrolls in the Academy. Through their sales effort, the SRS will also oversell the Academy and create a robust waiting list of students interested in enrolling at the Academy. The SRS will also engage applied student families to secure their interest in the Academy through count day. The SRS will accomplish these goals through their own self-directed effort, guidance from their admissions manager and by working closely with Academy teams to collectively recruit and enroll new students.

ESSENTIAL DUTIES

- Develop, manage and execute an overall strategy, ensuring enrollment goal success at the Academy.
- Build and cultivate relationships with community leaders, faith-based community leaders and other key stakeholders in the community served by the Academy; access their network of parents to gain applications to the Academy.
- Represent the Academy at key community events, recruitment fairs and other community outreach events to sell parents on applying for enrollment at the Academy.
- Distribute marketing materials to community partners and schedule information meetings at their site to gain applications from interested parents.
- Research, plan and attend local events to reach prospective families and sell them on applying for a seat for their child at the Academy.
- Work with Academy leaders in planning Academy-based open houses, enrollment information meetings and other Academy-based recruitment events to create the opportunity for applications to be made by interested parents.
- Train, collaborate with and ensure accountability for Academy-based staff for recruitment activities to gain applications from interested families.
- Communicate with existing families to recruit siblings; access their local networks to support recruitment goals.
- Develop new initiatives for student recruitment to gain applications.
- Plan and facilitate opportunities for new families to get involved with the Academy to help secure their decision to join the Academy family and close the deal on their new enrollment.
- Routinely reach-out to prospective and newly accepted families to keep them engaged, excited and informed about the Academy to minimize buyer’s remorse.
- Follow up on digital marketing, qualified leads and applications and sell the interested families on coming to the Academy.
- Identify Academy activities that show the Academy in positive light to the community and submit to the NHA public relations team; help build parent interest in applying to the Academy.

QUALIFICATIONS

- Strong closer.
- Driven by the thrill of the hunt.

- Exceptional relationship building skills and the ability to communicate effectively with diverse audiences.
- Excellent strategic planning skills and a goal-oriented mindset.
- Knowledgeable of the latest marketing tools and strategies.
- Strong organization and time management skills.
- Entrepreneurial and solution oriented.
- Flexible and able to excel in ambiguous situations.
- Highly motivated self-starter.
- Excellent interpersonal skills.
- High sense of urgency.

Additional Qualifications

- Computer proficiency.
- Associate's degree in sales, marketing or business.
- Prefer experience with recruitment-related work within a school or similar field.
- Strong written and verbal communication skills.
- Spanish fluency a plus.
- The employee must have an acceptable criminal background check result.

Job Title: Recess Aide
Department: Support Staff
Reports To: Principal
Employed By: NHA

SUMMARY

The Recess Aide will provide supervision to students in the lunchroom and on the playground during the noon hour and appointed recess hours; monitor and advise students as to safe practices in both situations; assist children in organizing games and other activities; monitor student behavior; provide encouragement and discipline as appropriate; support the conduct policies of the Academy; report to the Principal or designee as assigned.

ESSENTIAL DUTIES

Will be able to demonstrate the following knowledge, skills and abilities:

- Understand child development, both socially and physically.
- Work and communicate effectively with 5-14 year old children.
- Work outdoors during all seasons.
- Maintain a respectful posture at all times.
- Work with administrators and staff to ensure a safe and positive recess period.
- Maintain confidentiality of information as appropriate.
- Work as a team member, as well as function individually in making decisions about safety and discipline.
- Receive appropriate training, including basic first aid.
- Support the policies and goals of the Academy.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are the education, licensing, knowledge, skill and/or ability required to be qualified for this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Qualified applicants will have prior experience supervising children ages 5 to 14 and organizing recreation activities for children.

The employee must have an acceptable criminal background check result.

PHYSICAL DEMANDS

The physical demands described here are those that must be met by an employee to successfully perform this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential physical functions.

While performing the duties of this job the employee is regularly required to talk and hear. The employee frequently is required to sit; use hands to handle; and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to wet, cold and/or humid conditions and outside weather conditions. The noise level in the work environment is usually moderate.

AMENDED AND RESTATED SERVICES AGREEMENT

THIS SERVICES AGREEMENT ("**Agreement**") by and between National Heritage Academies, Inc., a Michigan corporation ("**NHA**"), and Eagle Crest Charter Academy, a body corporate and school of excellence (the "**School**") is effective the 1st day of July, 2016 (the "**Effective Date**"). This Agreement amends and restates the prior Services Agreement between NHA and the School dated as of July 1, 2012 (the "**Prior Agreement**"). For purposes of this Agreement, NHA and the School shall be referred to collectively as the "**Parties**."

RECITALS

WHEREAS, the School was issued a Charter Contract by the Central Michigan University Board of Trustees (the "**Authorizer**") to operate a school of excellence pursuant to the Michigan Revised School Code (the "**Authorizing Law**"); and

WHEREAS, the Parties desire to work together to promote educational excellence and innovation based on NHA's school design, comprehensive educational program and management principles; and

WHEREAS, pursuant to Article XII, Section F of the Prior Agreement, the Parties desire to set forth the terms and conditions of such a relationship in this Agreement; and

NOW, THEREFORE, for good and valuable consideration, including the mutual promises and benefits contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE I

CONTRACTING RELATIONSHIP

A. Services. Subject to the terms and conditions of this Agreement, and as permitted by applicable law, the School hereby contracts with NHA for the provision of certain educational, business administration, facility, and management services, including without limitation, all labor, equipment, and materials necessary for the provision of the same, as set forth herein (collectively, the "**Services**").

B. Charter. This Agreement shall: (i) be subject to and comply with the terms and conditions of the Charter Contract and the School's Charter Application (collectively, the "**Charter**"); and (ii) not be construed to interfere with the constitutional, statutory, or fiduciary duties of the School's Board of Directors (the "**Board**"). NHA agrees to perform its duties and responsibilities under this Agreement in a manner that is consistent with the School's obligations under the Charter issued by the Authorizer. The provisions of the School's Charter shall supersede any competing or conflicting provisions contained in this Agreement.

C. Independent Contractor. NHA shall provide the Services as an independent contractor, and not as an employee, partner, agent, or associate of the School. This independent

contractor relationship shall extend to the officers, directors, employees, and representatives of NHA. Consistent with the status of an independent contractor, NHA reserves to itself the right to designate the means and methods of accomplishing the objectives and purposes of this Agreement consistent with Board policy, applicable law and the Charter. NHA shall be solely responsible for its acts and the acts of its agents, employees and subcontractors. The relationship between the Parties is based solely on the terms and conditions of this Agreement, and the terms and conditions of any other written agreement between the Parties.

D. Designations and Appointments.

1. The Board shall by Board resolution appoint the Board Treasurer, or such other officer as determined by the Board, to serve as the chief administrative officer of the School (the “**CAO**”) under the Uniform Budgeting and Accounting Act, MCL 141.421 *et seq.* (the “**Budgeting and Accounting Act**”) Notwithstanding any other provision of the Agreement to the contrary, the Board resolution shall designate NHA’s chief financial officer, or such other NHA officer or employee as is mutually agreed upon by NHA and the School, as the designated agent of the CAO to assist the CAO with the performance of the CAO’s duties under the Budgeting and Accounting Act.

2. NHA, including its directors, officers, and employees are hereby designated as “School Officials” for purposes of the Family Educational Right and Privacy Act, and its implementing regulations, 20 U.S.C. §1232g *et seq.* (FERPA); 34 CFR § 99.31(a)(1)(i)(B). Additionally:

(a) NHA agrees that it shall observe Board policies and applicable law regarding the confidentiality of Covered Data and Information. Covered Data and Information (“**CDI**”) includes paper and electronic student education record information and includes, without limitation, “education records” as defined under FERPA, 34 CFR § 99.1. CDI also includes any new records created and maintained by NHA under this Agreement using CDI.

(b) NHA shall not use or disclose CDI received from or on behalf of the School except as permitted or required by this Agreement and/or applicable law.

(c) Upon termination or other conclusion of this Agreement, NHA shall return all CDI to the School.

(d) NHA shall develop, implement, maintain and use appropriate administrative, technical and physical security measures to preserve the confidentiality, integrity and availability of all CDI received from, or on behalf of, the School or its students. These measures will be extended by contract to include subcontractors used by the NHA.

(e) NHA, within two business days of discovery, shall report to the Board any use or disclosure of CDI not authorized by this Agreement. NHA’s report shall identify: (i) the nature of the unauthorized use or disclosure, (ii) the CDI used or disclosed, (iii) who made the unauthorized use or received the unauthorized disclosure, (iv) what NHA has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure, and (v) what corrective action NHA has taken or shall take to prevent future similar unauthorized use or

disclosure. NHA shall provide such other information, including a written report, as reasonably requested by the Board.

3. NHA, its directors, officers, and employees may be designated by the School for other purposes by a written resolution of the Board.

ARTICLE II

TERM & TERMINATION

A. Term. This Agreement shall commence on the Effective Date, and unless terminated as set forth herein, shall continue until the revocation, termination or expiration of the Charter currently in effect expiring June 30, 2026 (the “**Term**”). The parties acknowledge that the Authorizer, as part of any reauthorization or renewal, may require that the School and NHA submit an amended or restated Agreement for review by the Authorizer. The first school year of this Agreement shall commence July 1, 2012 to June 30, 2013, and each school year thereafter shall commence on July 1 and end on June 30 of the following year.

B. Termination.

1. By NHA. NHA may terminate this Agreement prior to the end of the Term if the Board fails to remedy a material breach of this Agreement within thirty (30) days after receiving a notice from NHA of such breach. For purposes of this Subsection, a material breach (which for the sake of clarity is a default hereunder) includes, but is not limited to: (i) NHA’s failure to timely receive any compensation or reimbursement required by this Agreement; or (ii) a suspension, termination, revocation, or non-renewal of the Charter.

2. By the School. The School may terminate this Agreement prior to the end of the Term if NHA fails to remedy a material breach of this Agreement within (30) days after receiving notice from the School of such breach. For purposes of this Subsection, a material breach includes, but is not limited to: (i) NHA’s failure to account for expenditures or pay operating costs pursuant to the Budget (as defined below); (ii) NHA’s failure to follow policies, procedures, rules, regulations or curriculum adopted by the Board, provided they do not violate the Charter, applicable law, or this Agreement; (iii) a receipt by the Board of an unsatisfactory report from NHA or an independent education consultant retained by the Board regarding the Services or the School’s performance, provided the unsatisfactory performance cannot be adequately corrected or explained; (iv) a determination that this Agreement or its implementation would serve as grounds for suspension, termination, revocation, or non-renewal of the Charter; (v) a determination that this Agreement or its implementation would jeopardize material tax exemptions of the School or its non-profit status; or (vi) any action or inaction by NHA that places the Charter in jeopardy of termination, suspension or revocation.

3. By Either Party. Either party may terminate this Agreement prior to the end of the Term, with or without cause, by providing the other party with at least ninety (90) days’ prior written notice.

4. Revocation or Termination of Charter. If the School's Charter issued by the Authorizer is revoked, terminated or a new Charter is not issued to the School after expiration of the School's Charter, this Agreement shall automatically terminate on the same date as the School's Charter is revoked, terminated or expires without further action of the parties.

5. If this Agreement is terminated prior to the end of the Term other than as provided for in Article II(B)(4) of this Agreement, and unless otherwise agreed by the Parties, such termination will not become effective until the end of the then-current school year.

C. Effect of Termination. Upon the effective date of termination or expiration of this Agreement:

1. Subject to any provisions contained in a lease between the Parties, the Parties shall have the right to remove from the School any equipment or other assets owned or leased by the respective Party;

2. The School shall pay or reimburse NHA through the Fee (as defined below) for the prepaid portion of any expenses or liabilities incurred by NHA pursuant to the Budget as of the date of such termination or expiration, provided NHA supplies the School with documentation of all such expenses and liabilities;

3. NHA may agree, in its sole discretion, to assist the School for a reasonable amount of time, not to exceed ninety (90) days, and for a reasonable fee, with the School's transition to another administrative, managerial, or services arrangement;

4. NHA shall, if applicable, reasonably assist the School in the execution of a closure and dissolution plan and cooperate in the closure and dissolution process, including without limitation, in any audits and court or other proceedings related thereto; and

5. The party to whom Confidential Information (as defined below) has been disclosed shall, upon request and at the direction of the disclosing party: (i) return such Confidential Information within thirty (30) days, including any copies thereof, and cease its use; or (ii) destroy such Confidential Information and certify such destruction to the disclosing party, except for a single copy thereof which may be retained for the sole purpose of determining the scope of any obligations incurred under this Agreement, and except where disclosure or retention is required by applicable law.

ARTICLE III

OBLIGATIONS OF NHA

A. Manager at Risk. NHA shall be responsible and accountable to the Board for providing the Services. During the Term, NHA shall provide the Services regardless of whether actual revenue meets the level projected in the Budget, and NHA hereby assumes the risk of funding shortfalls during the Term. Notwithstanding the foregoing, NHA shall not be required to expend funds on Services in excess of the amount set forth in the Budget.

B. Comprehensive Educational Program. The School has determined to adopt NHA's proprietary educational and academic programs and goals, as set forth in the Charter (the "**Educational Program**"). Subject to the oversight of the Board, NHA shall implement and administer the Educational Program. In the event that NHA reasonably determines that it is necessary or advisable to make material changes to the Educational Program, NHA shall inform the Board of the proposed changes and obtain the Board's approval before making such changes, as well as the Authorizer's approval if required by the Charter or applicable law. The Parties acknowledge and agree that an essential principle of the Educational Program is its flexibility, adaptability and capacity to change in the interest of continuous improvement and efficiency. Not less than annually or as reasonably requested by the Board, NHA shall provide the Board with a report detailing progress made on each of the educational goals set forth in the Educational Program. The school year calendar and the school day schedule shall be approved by the Board as required under the Charter.

C. All Children Welcome. NHA places a high value on diversity, and the School shall welcome students of all races, ethnicity, religion, gender and economic backgrounds.

D. Services to Students with Disabilities. NHA welcomes students with disabilities at the School. NHA shall provide special education and related services, in conformity with the requirements of applicable law, to students who attend the School.

E. Educational and Administrative Services. Subject to the oversight of the Board, NHA shall implement operational practices and procedures that are consistent with Board policy, the Charter and applicable law. Such practices and procedures shall include, but are not limited to:

1. Student recruitment and student admissions.
2. Student assessments, including testing, promotion, and retention.
3. The acquisition of instructional materials, equipment and supplies, and the administration of any and all extra-curricular and co-curricular activities and programs approved by the Board and NHA.
4. Employment of personnel working at the School and management of all personnel functions, as set forth herein.
5. All aspects of the School's business administration.
6. All aspects of the School's accounting operation, including general ledger management, financial reporting, payroll, employee benefits and payroll tax compliance.
7. Food service and transportation approved by the Board and NHA.
8. All aspects of facilities administration and maintenance.
9. Student behavior management and discipline.

F. Location of Services. Other than instruction, and unless prohibited by the Charter or applicable law, NHA may provide the Services, including but not limited to, purchasing, professional development and administrative services, off-site.

G. Subcontracts. NHA reserves the right to subcontract any and all aspects of the Services. NHA shall not subcontract the oversight of the Educational Program, except as specifically permitted in this Agreement or with prior written approval of the Board. Notwithstanding the foregoing, the Board specifically acknowledges and agrees that from time to time NHA may use third parties or independent contractors to assist in the creation and development of Educational Materials (as defined below) that may be used as a part of the Educational Program.

H. Pupil Performance Standards and Evaluation. NHA shall implement pupil performance evaluations that permit evaluation of the academic progress of each School student. NHA shall be responsible and accountable to the Board for the academic performance of students who are enrolled at the School. NHA shall utilize assessment strategies required by the Charter and applicable law. The Board and NHA shall cooperate in good faith to identify academic goals and methods to assess such academic performance. NHA shall provide the Board with timely reports regarding student performance.

I. Unusual Events. NHA shall timely notify the Board and the Administrator (as defined below) of any anticipated or known material: (i) health or safety issues, including all mandatory reporting required by applicable law; (ii) labor, employee or funding issues; or (iii) other issues that may reasonably and adversely impact the School's ability to comply with the Charter, applicable law or this Agreement.

J. School Records. The financial and education records pertaining to the School (collectively, the "**School Records**"), are property of the School. Except as may be prohibited or limited by the Charter or applicable law, the School Records shall be available to the Board and the Authorizer for their review, and are subject to inspection and copying to the same extent that records of public schools are subject to inspection and copying pursuant to applicable law. All School Records shall be physically or electronically available at the School's physical facility upon request made by the Board or the Authorizer. NHA shall provide the Board on a timely basis all information that is required to be disclosed under section 22f of the State School Aid Act of 1979, MCL 388.1622f.

On an annual basis, NHA agrees to provide the Board the same information that a school district is required to disclose under section 18(2) of the State School Aid Act of 1979, MCL 388.1618, for the most recent school fiscal year for which the information is available. Within thirty (30) days of receipt of this information, the Board shall make the information available on the School's website homepage, in a form and manner prescribed by the Michigan Department of Education. The defined terms in section 503c and 553c of the Code, MCL 380.503c and MCL 380.553c, whichever is applicable, shall have the same meaning in this Agreement.

NHA shall make information concerning the operation and management of the School, including without limitation the information described in the Charter, available to the School as

deemed necessary by the Board in order to enable the School to fully satisfy its obligations under the Charter.

K. Facility. NHA shall use reasonable efforts to secure a facility to be leased or otherwise provided to the School on terms mutually agreeable to NHA and the Board. Obligations of the Board created under the terms of such lease are to be fulfilled by NHA unless otherwise agreed to in writing by NHA and the Board. The facility shall comply with the requirements of the Charter and applicable law. NHA shall also use reasonable efforts to cause the facility to be furnished with equipment and technology as is reasonably necessary to implement the Educational Program.

L. Legal Compliance. NHA will implement and enforce rules, regulations and procedures applicable to the School that are consistent with adopted Board policy, if any, and the Educational Program in accordance with the Charter and applicable law, including without limitation, rules, regulations, and policies regarding non-discrimination, discipline, special education, confidentiality and access to records.

M. Rules and Procedures. NHA will recommend to the Board reasonable rules, regulations, policies and/or procedures applicable to the School. The Board hereby authorizes and directs NHA to enforce such rules, regulations and procedures consistent with Board policy, and make such rules, regulations and procedures available to the Board upon request.

N. Assistance to the Board. NHA shall cooperate with the Board and, to the extent consistent with the Charter and applicable law, timely furnish the Board with all documents and information necessary for the Board to properly perform its responsibilities under this Agreement.

ARTICLE IV

OBLIGATIONS OF THE BOARD

A. Board Policies. The Board shall be responsible for the fiscal and academic policies of the School. The Board shall exercise good faith in considering the recommendations of NHA, including but not limited to, NHA's recommendations regarding policies, rules, regulations and the Budget (as defined below).

B. Academy Budget. The Board is responsible for establishing, approving and amending the Budget in accordance with the Budgeting and Accounting Act.

C. Governance Oversight. The Board shall provide governance level oversight of the School in accordance with the Charter and applicable law. The Board shall cooperate with NHA and, to the extent consistent with applicable law, timely furnish NHA all documents and information necessary for NHA to properly perform its responsibilities under this Agreement.

D. Unusual Events. The Board shall timely notify NHA of any anticipated or known material: (i) health or safety issues; (ii) labor, employee or funding issues; or (iii) other issues that

may reasonably and adversely impact NHA's ability to comply with the Charter, applicable law, or this Agreement.

E. Office Space. The Board shall provide NHA with suitable office space at the School, provided the requested space is: (i) available and can be provided without materially prejudicing the Educational Program; and (ii) used only for activities related to the School. The space shall be provided at no cost to NHA.

F. Retained Authority. The Board shall retain the authority to adopt reasonable policies in accordance with applicable law relative to anything necessary for the proper establishment, maintenance, management, and operation of the School.

ARTICLE V

INTELLECTUAL PROPERTY

A. Definitions.

1. **"Educational Materials"** means all curriculum, print and electronic textbooks, instructional materials, lesson plans, teacher guides, workbooks, tests, and other curriculum-related materials licensed, developed or otherwise owned by the School or NHA.

2. **"Confidential Information"** means any confidential and non-public trade, technical or business knowledge, information and materials regarding the School or NHA (or their respective affiliates), which is given by one party to the other, or any of their respective representatives, in any form, whether printed, written, oral, visual, electronic or in any other media or manner. Confidential Information includes, but is not limited to, research, operations and procedures, financial projections, pricing, sales, expansion plans and strategies, services data, trade secrets and other intellectual property, or the results of any mediation or private adjudication, as well as information with respect to each party's or its affiliates' plans for market expansion, except for information which a party can show by contemporaneous written records was developed or formulated independently of work or services performed for, or in connection with performance of, this Agreement. Notwithstanding the foregoing, the disclosure of the other party's Confidential Information as required to be disclosed by law, rule or regulation or by reason of subpoena, court order or government action shall not constitute a breach of this Agreement; however, in such event the party required to disclose such information will reasonably cooperate with the party whose information is required to be disclosed in order to obtain a protective order applicable to such disclosure. All Confidential Information will remain the sole property of the party disclosing such information or data.

B. School Materials. The School shall own all right, title and interest in and to Educational Materials that are: (i) licensed or owned by the School as of the Effective Date; or (ii) licensed, developed, characterized, conceived, derived, generated, identified, or otherwise made by the School during the Term, provided such materials do not reference the NHA Materials (as defined below), or incorporate any Confidential Information of NHA (collectively, the **"School**

Materials”). The School Materials shall include all intellectual property rights associated therewith.

C. NHA Materials. NHA shall own all right, title and interest in and to Educational Materials that are: (i) licensed or owned by NHA as of the Effective Date; (ii) licensed, developed, characterized, conceived, derived, generated, identified, or otherwise made by NHA during the Term, provided such materials do not reference School Materials or incorporate any Confidential Information of the School; and (iii) any and all Educational Materials and non-curriculum materials provided to the School by NHA relating to the Educational Program, including all changes and derivatives thereof (collectively, the “**NHA Materials**”).

D. Derivative Works. The Parties acknowledge that to the extent any Educational Materials created by the School are derivative of the NHA Materials, use of such derivative materials during the Term is subject to the license granted herein, and the license to use such derivative materials shall cease as of the date of expiration or termination of this Agreement.

E. No Transfer or Sale. The School acknowledges and agrees that NHA is not transferring or selling, and the School is not receiving, purchasing or acquiring, any intellectual property or proprietary rights in or to the NHA Materials.

F. Licenses. NHA hereby grants the School a non-exclusive, non-transferable license (without the right to sublicense) to use the NHA Materials, and any Educational Materials created by the School which are derivative of the NHA Materials, solely in furtherance of the Educational Program during the Term, including without limitation, the right to reproduce, publicly display, distribute and create derivative works of the same, in hard copy format or electronically, within the United States. The School represents and warrants that during the Term, and following the expiration or termination of this Agreement, the School will not exploit or assist any third party to exploit any of the NHA Materials for commercial purposes. Subject to applicable law, the School grants NHA a non-exclusive, non-transferable license (without the right to sublicense) to use the School Materials, solely in furtherance of the Educational Program during the Term, including without limitation, the right to reproduce, publicly display, distribute and create derivative works of the same, in hard copy format or electronically, within the United States.

G. NHA Marks. During the Term, NHA grants the School a non-exclusive, revocable, non-transferable license (without the right to sublicense) to use NHA’s trade name(s) and NHA’s trademark(s) (the “**NHA Marks**”) solely for the purposes of promoting and advertising the School. NHA shall have the opportunity to review and approve all artwork, copy or other materials utilizing the NHA Marks prior to any production or distribution thereof. All uses of the NHA Marks require NHA’s prior written permission. The School shall acquire no rights in or to the NHA Marks, and all goodwill associated with the NHA Marks shall inure to the benefit of and remain with NHA. Upon expiration or termination of this Agreement, the School shall immediately discontinue use of the NHA Marks and shall remove the NHA Marks from its locations, vehicles, websites, telephone directory listings and all other written or electronic promotional materials.

H. Assignment. Each party shall, and hereby does assign to the other, with full title guarantee and without additional compensation, such right, title and interest in and to any

intellectual property as is necessary to fully affect the ownership provisions set out herein, and any accrued rights of action in respect thereof. Each party shall, if so requested by the other, execute all such documents and do all such other acts and things as may be reasonably required to comply with this Agreement to vest in the appropriate party all rights in the relevant intellectual property and shall procure execution by any named inventor of all such documents as may reasonably be required by the other party in connection with any related patent application.

ARTICLE VI

SOLICITATION AND USE OF PRIVATE FUNDS

NHA shall seek the Board's approval prior to soliciting any non-governmental grants, donations or contributions on behalf of the School. Any such funds received shall be used solely in accordance with the purpose for which they were solicited, applicable donor restrictions, or as otherwise approved by the Board. Subject to applicable donor restrictions, the Board shall determine the allocation of any such funds subject to this Article that remain unexpended following completion of the project or purpose for which they were originally designated.

ARTICLE VII

FINANCIAL ARRANGEMENTS

A. Revenues. Except as provided herein, all monies received by the School shall be deposited in the School's depository account within three (3) business days with a financial institution acceptable to the Board; provided, however, that upon receipt of a notice from NHA, the School shall pay all such funds owing under this Agreement directly to the account or party specified in such notice. The signatories on the School Board's accounts shall solely be Board members or properly designated Board employees (if any). Interest income earned on the School's accounts shall accrue to the School. Except as specifically excluded by this Agreement, the term "**Revenues**" shall include all funds received by or on behalf of the School, including but not limited to:

1. Funding for public school students enrolled at the School.
2. Special education funding provided by the federal and/or state government that is directly allocable to special education students enrolled at the School.
3. Gifted and talented funding provided by the federal and/or state government that is directly allocable to gifted and talented students enrolled at the School.
4. At-risk funding provided by the federal and/or state government that is directly allocable to at-risk students enrolled at the School.

5. Funding provided by the federal and/or state government that is directly allocable to students enrolled at the School with limited English proficiency.

6. All other federal and/or state grant sources, including, but not limited to, Title I and any start-up funding allocable to the School.

7. Grants and donations received by the School to support or carry out programs at the School (except to the extent NHA is not required or involved in soliciting, administering or managing the contribution and/or donation, in which case such funds shall be deposited in the Board Spending Account (as defined below)).

8. Fees charged to students as permitted by law for extra services provided by NHA as approved by the Board.

The expenditure of any Revenues received from governmental entities shall be consistent with all applicable regulations and policies. The expenditure of any Revenues received from non-governmental grants, contributions and donations shall be made consistent with the provisions of Article VI.

B. Budget. NHA shall provide the Board with an annual proposed Budget prepared and maintained in accordance with the Charter, the Michigan Budgeting and Accounting Act, and applicable law (the “**Budget**”). The Budget shall include all of the School’s projected revenues and expenses at the object level as described in the Michigan Department of Education’s Michigan School Accounting Manual. For the School’s first school year, the Budget shall be submitted prior to the beginning of the school year. Thereafter, the Budget shall be submitted to the Board prior to June 1 for the next school year.

C. Review and Approval of Budget. The Board shall be responsible for reviewing and approving the Budget in accordance with the Charter and applicable law. At the direction of either NHA or the Board, with the approval of the Board, the Budget shall be amended from time to time as necessary.

D. Board Spending Account. Notwithstanding any other provision of this Agreement to the contrary, each school year during the Term, NHA shall allocate to an account controlled by the Board an amount equal to the lesser of: (i) 2% of state per pupil aid reflected in the Budget for that respective school year, or (ii) \$35,000 (the “**Board Spending Account**”). The aforesaid amount shall be deposited by NHA into the Board Spending Account pro-rata during the course of the School’s school year as Revenues are received. All funds in the Board Spending Account are the property of the School and may be used by the School at the discretion of the Board. Funds in the Board Spending Account that are not spent by the School during the school year shall carryover annually. Items purchased by NHA for the School and paid for by the School with funds from the Board Spending Account, such as non-proprietary instructional and/or curriculum materials, books, supplies and equipment, shall be the property of the School. The property of the School excludes items leased, financed or purchased by NHA with the Fee (as defined below). NHA agrees not to add any fees or charges to the cost of equipment, materials or supplies purchased by NHA at the request of or on behalf of the School with funds from the Board Spending

Account. NHA, in making such purchases for the School pursuant to this subsection, shall comply with applicable law, as if the School were making such purchases itself from a third party, and shall provide the Board, upon request, available documentation evidencing the costs associated with such purchases. NHA shall maintain a listing of all assets owned by the School and shall provide the list to the Board annually upon request.

E. Fee. NHA shall receive all Revenues as its services fee (the “**Fee**”), from which it shall pay all operating costs of the School as detailed in the Budget. NHA and the Board acknowledge that operating costs includes an administrative fee payable to the Authorizer as set forth in the Charter. Payment of the Fee shall be made on the same frequency that the School receives its Revenues. NHA shall be entitled to retain as compensation for the Services the difference, if any, between the Fee and the amount actually expended by NHA in operation and/or management of the School during the School’s fiscal year. NHA agrees not to add any fees or charges to the cost of equipment, materials or supplies purchased by NHA at the request of or on behalf of the School.

F. No Loans. NHA shall not make or extend loans to the Board.

G. Other Schools. The School acknowledges that NHA has entered into similar services agreements with other schools. NHA shall maintain separate accounts for expenses incurred in the operation of the School and other schools assisted by NHA, and shall reflect in the School’s financial records only those expenses incurred in the operation of the School. If NHA incurs expenses that are for both the benefit of the School and other schools assisted by NHA, then NHA shall allocate, to the extent permitted by law, such expenses among all such affected schools, including the School, on a prorated basis based upon the number of enrolled students, the number of classrooms, or the number of teachers at the affected schools, or on such other equitable basis as is reasonably determined by NHA. In no event shall marketing and development costs incurred solely for the benefit of NHA (and not the School) be allocated to the School. Costs shall be allocated to, or reimbursed by, the School and reported by NHA in accordance with applicable law.

H. Financial Reporting. NHA shall provide the Board with:

1. At least annually, the Budget as required by this Agreement.
2. Monthly, financial statements no more than forty-five (45) days in arrears and at least one week prior to each Board meeting. These financial statements will include a Balance Sheet, Statement of Revenues, Expenditures and Changes in Fund Balance at object level detail with a comparison of budget to actual revenue and expenditures and explanations of variances and cash flow statement.
3. Quarterly, or as reasonably requested by the Board, a report on School operations and student performance.
4. As reasonably requested, other information to enable the Board to: (i) evaluate the quality of the Services; and (ii) timely provide all reports and information that are required by the Charter and applicable law.

I. Access to Financial Records. NHA shall keep accurate financial records pertaining to its operation of the School, together with all School financial records prepared by or in possession of NHA, and shall retain all of the aforementioned records according to the Charter and applicable law to which such books, accounts, and records relate. NHA and the Board shall maintain the proper confidentiality of personnel, students, and other records as required by law. All records shall be kept in accordance with applicable state and federal requirements.

J. Accounting Standards; Annual Audit.

1. The School shall at all times comply with generally accepted public sector accounting principles, accounting system requirements of the State School Aid Act of 1979, as amended, applicable Michigan Department of Education rules, and applicable law.

2. The Board shall select and retain an independent auditor to conduct an annual audit of the School's financial matters in accordance with the Charter and applicable law.

3. Subject to applicable law, all records in the possession or control of NHA that relate to the School, including but not limited to, financial records, shall be made available to the School and the School's independent auditor. The expense of the annual audit shall be included in the Budget.

K. Start-up Funds; Contributions; Repayment.

1. NHA shall provide start-up funds for: (i) the development of curriculum, a technology system and a school operations plan; (ii) recruiting, selecting and training of staff members; and (iii) to the extent necessary as reasonably determined by NHA, cleaning, renovating and equipping of the School facility (the "**Start-Up Funds**").

2. NHA shall make contributions to the School in the event School expenses for the Services exceed Revenues (the "**Contributions**"). The Contributions, if any, shall be in amounts acceptable to the Parties and, once made, shall be included in the Budget.

3. The School shall not be legally obligated to repay NHA for the Start-Up Funds or the Contributions. NHA's agreement to make such Contributions shall not be deemed to negate or mitigate the need for the School to apply for or solicit state or federal start-up funds, grants or sub-grants which the School, as a public school, may be eligible to receive.

ARTICLE VIII

PERSONNEL & TRAINING

A. Qualified Personnel. NHA shall select and hire qualified personnel to perform the Services. NHA shall have the responsibility and authority, subject to this Article, to select, hire, evaluate, assign, discipline, transfer, and terminate personnel consistent with the Budget, the Charter and applicable law. Personnel working at the School shall be employees of NHA unless

otherwise expressly agreed by NHA and the Board. NHA and the Board each shall be responsible for their respective employees. However, the compensation of all employees working at the School shall be included in the Budget. Upon Board request, NHA shall disclose to the Board the level of compensation and fringe benefits provided by NHA to NHA employees working at the School. A criminal background check and unprofessional conduct search in compliance with applicable law shall be conditions for the hiring of or services provided by any person assigned by NHA under this Agreement to regularly and continuously work in any of the School's facilities or at program sites where the School delivers Services. NHA shall pay all salaries, wages, benefits, payroll and other taxes to or on account of its employees. The Academy shall not be liable for the payment of any such salaries, wages, benefits, payroll or taxes thereon for or on behalf of any NHA employee, contractor or agent. NHA acknowledges and agrees that it is the sole and exclusive responsibility of NHA to make the requisite tax filings, deductions and payments to the appropriate federal, state and local tax authorities for and on behalf of all persons employed or engaged by NHA to provide Services under this Agreement. As applicable, NHA shall conduct employee evaluations consistent with Section 1249 and 1250 of the Code.

B. School Administrator. The School administrator (the "**Administrator**") shall be an employee of NHA and not the Board. The duties and terms of the Administrator's employment shall be determined by NHA. The Administrator shall work with NHA in the operation and management of the School. The Administrator shall attend meetings of the Board and shall provide reports to the Board. The accountability of NHA to the School is an essential foundation of this Agreement. NHA shall have the authority, consistent with this Article, to select, hire, evaluate, assign, discipline, transfer and terminate the Administrator, and to hold the Administrator accountable for the performance of the School. Without limiting the foregoing, NHA shall consult with the Board prior to the placement and/or removal of the Administrator. Absent compelling circumstances, the consultation shall commence at least ninety (90) days prior to NHA placing and/or removing the Administrator. NHA shall give due consideration to the input of the Board or the Board's designated representative prior to making a final decision regarding placement and/or removal of the Administrator. NHA shall remove the Administrator if the Board is reasonably dissatisfied with the Administrator's performance. Absent compelling circumstances, however, the Board shall give NHA and the Administrator six (6) months to correct the basis for the Board's reasonable dissatisfaction. The parties agree that the purpose of the above provisions is not to deny the Administrator the opportunity for growth and/or promotion within NHA. Notwithstanding any of the foregoing, the placement of the initial Administrator for the School in its first year of operation shall be made by NHA.

As the employer, NHA shall be solely responsible for the performance evaluation of the Administrator. NHA shall seek feedback from the Board prior to completing an annual Administrator performance evaluation.

C. Teachers. NHA shall, consistent with this Article, assign to perform Services at the School, teachers qualified to teach their assigned subjects and grade level. The curriculum taught by the teachers shall be consistent with the Educational Program. The teachers may, at the discretion of NHA, be assigned to work at the School on a full or part time basis. If assigned to work at the School on a part time basis, the teacher(s) may also be assigned to work at other schools for which NHA provides services. The cost for such teacher(s) shall be shared proportionately among the schools at which NHA has assigned the teacher(s) to work. Each teacher assigned to

work at the School shall hold a valid teaching certificate issued by the state board of education or applicable state agency to the extent required by the Authorizing Law.

D. Support Staff. NHA shall, consistent with this Article, assign to perform Services at the School, qualified support staff as needed for NHA to operate the School in an efficient manner. The support staff may, at the discretion of NHA, be assigned to work at the School on a full or part time basis. If assigned to work at the School on a part time basis, the support staff may be assigned to work at other schools for which NHA provides services. The cost for such support staff shall be shared proportionately among the schools at which NHA has assigned the support staff to work. An individual assigned to work at the School that is not teaching, but for which a license is required under applicable law, shall have the appropriate license.

E. Training. NHA shall provide or procure training in its methods, curriculum, program, and technology to all teaching personnel on a regular basis. Instructional personnel shall be required to obtain at least the minimum hours of professional development as required by applicable law. Non-instructional personnel shall receive training as NHA determines reasonable and necessary under the circumstances.

F. Background Checks and Qualifications. NHA shall comply with applicable law regarding background checks, unprofessional conduct searches and certification/licensure, as applicable, for all persons working in the School, the costs of which shall be included in the Budget.

G. Terms of Employment. No member of the staff at the School shall be subject to any covenant not to compete or other employment restriction as part of the terms of his or her employment with NHA for the Services.

H. Limitations on Discretion. All decisions made by NHA, and any discretion exercised by NHA, in its selection, hiring, evaluation, assignment, discipline, transfer, and termination of personnel, shall be consistent with the Budget, the Charter, the parameters adopted and included in the Educational Program, and applicable law.

ARTICLE IX

INDEMNIFICATION

A. Indemnification of Parties. To the extent not prohibited by the Charter or applicable law, the Parties hereby agree to indemnify, defend, and hold the other (the “**Indemnified Party**”), harmless from and against any and all third-party claims, actions, damages, expenses, losses or awards which arise out of (i) the negligence or intentional misconduct of the indemnifying party, (ii) any action taken or not taken by the indemnifying party, or (iii) any noncompliance or breach by the indemnifying party of any of the terms, conditions, warranties, representations, or undertakings contained in or made pursuant to this Agreement. As used herein, Indemnified Party shall include the party’s trustees, directors, officers, employees, agents, representatives and attorneys. The Parties may purchase general liability, property, or other insurance policies.

Notwithstanding anything in this Agreement to the contrary, the Board shall not be precluded by the terms of this Agreement from asserting or declining to assert a claim of governmental immunity.

B. Indemnification of Authorizer. The Parties acknowledge and agree that the Authorizer, its Board of Trustees, and its members, officers, employees, agents or representatives (collectively “**University**”) are deemed to be third party beneficiaries for purposes of this Agreement. As third party beneficiaries, NHA hereby promises to indemnify, defend and hold harmless the University from and against all demands, claims, actions, suits causes of action, losses, judgments, liabilities, damages, fines, penalties, demands, forfeitures, or any other liabilities or losses of any kind whatsoever, including costs and expenses (not limited to reasonable attorney fees, expert and other professional fees) settlement and prosecution imposed upon or incurred by the University, and not caused by the sole negligence of the University, which arise out of or are in any manner connected with the University Board’s approval of the School’s Charter Application, the University Board’s consideration of or issuance of a Charter, NHA’s preparation for or operation of the School, or which are incurred as a result of the reliance by the University upon information supplied by NHA, or which arise out of NHA’s failure to comply with the Charter or applicable law. The Parties expressly acknowledge and agree that the University may commence legal action against NHA to enforce its rights as set forth in this section of the Agreement.

ARTICLE X

INSURANCE

A. Insurance Coverage. NHA shall maintain such policies of insurance as required by the Charter, the Michigan Universities Self-Insurance Corporation (“M.U.S.I.C.”), and applicable law. Each party shall, upon request, present evidence to the other that it maintains the requisite insurance in compliance with the provisions of this Article. In the event that the Authorizer or M.U.S.I.C. requests any change in coverage, NHA agrees to comply with any change in the type and amount of coverage as requested within thirty (30) days after notice of the insurance coverage change is provided to NHA. Each party shall comply with any information or reporting requirements required by the other party’s insurer(s), to the extent reasonably practicable.

B. Workers’ Compensation Insurance. Each party shall maintain workers’ compensation insurance as required by law, covering their respective employees.

ARTICLE XI

REPRESENTATIONS & WARRANTIES

A. Board and School. The Board represents and warrants, for itself and on behalf of the School, that: (i) it is legally vested with all power and authority necessary to operate a charter school under the Authorizing Law; (ii) it is legally vested with all power and authority necessary to execute, deliver and perform this Agreement, including without limitation, the power and

authority to contract with a private entity for the provision of educational, business administration and management services; (iii) its actions have been duly and validly authorized, and it has adopted any and all resolutions or expenditure approvals required for the execution of this Agreement; and (iv) there are no pending actions, claims, suits or proceedings, or, to its knowledge, threatened or reasonably anticipated against or affecting either the Board or the School, which if adversely determined, would have a material adverse effect on its ability to perform under this Agreement.

B. NHA. NHA represents and warrants that: (i) it is a corporation in good standing and is authorized to conduct business in the State of Michigan; (ii) it is legally vested with all power and authority necessary to execute, deliver and perform this Agreement; (iii) there are no pending actions, claims, suits or proceedings, or, to its knowledge, threatened or reasonably anticipated against or affecting NHA, which if adversely determined, would have a material adverse effect on its ability to perform its obligations under this Agreement; and (iv) it will comply with all registration and licensing requirements relating to conducting business under this Agreement, which the Board agrees to assist NHA in applying for such licenses and permits and in obtaining such approvals and consents.

ARTICLE XII

MISCELLANEOUS

A. Entire Agreement. This Agreement and any attachments hereto shall constitute the entire agreement of the Parties on the subject matter set forth herein. This Agreement supersedes and replaces any and all prior agreements and understandings regarding the subject matter set forth herein between the School and NHA.

B. Force Majeure. Except for payment obligations, and notwithstanding any other provisions of this Agreement, neither party shall be liable for any delay in performance or inability to perform due to acts of God, war, riot, embargo, fire, explosion, sabotage, flood, accident, labor strike, or other acts beyond its reasonable control; provided either party may terminate this Agreement in accordance with provisions contained herein if sufficient grounds exist as provided in the Article governing termination.

C. State Governing Law; Waiver of Jury Trial. This Agreement shall be construed, interpreted, governed and enforced pursuant to the laws of the State of Michigan, without regard to its conflict-of-laws principles. The Parties hereby waive the right to a jury trial in any action, proceeding or counterclaim brought by either NHA or the School against the other.

D. Notices. All notices and other communications required by this Agreement shall be in writing and sent to the Parties at the facsimile number or address set forth below. Notice may be given by: (i) facsimile with written evidence of confirmed receipt by the receiving party of the entire notice; (ii) certified or registered mail, postage prepaid, return receipt requested; or (iii) personal delivery. Notice shall be deemed to have been given on the date of transmittal if given by facsimile, upon the date of postmark if sent by certified or registered mail, or upon the date of delivery if given by personal delivery. For purposes of the foregoing, “**personal delivery**” shall include delivery by nationally recognized overnight courier (such as FedEx), if signed for by the recipient or a delegate thereof. Notices to the School shall be sent to the current address of the

then current Board President, with a copy to the then current Board attorney. The addresses of the Parties for the purposes aforesaid, including the address of the initial Board President, are as follows:

The School: Eagle Crest Charter Academy
Attn: President, Board of Directors
11950 Riley Street
Holland, Michigan 49424
Telephone: (616) 786-2400
Facsimile: (616) 786-4692

WITH A COPY TO:

CS3Law , PLLC
Attn: Candace Sorensen
125 Ottawa NW, Suite 241
Grand Rapids, Michigan 49503
Telephone: (616) 822-7754

NHA: National Heritage Academies, Inc.
Attn: Chief Financial Officer
3850 Broadmoor, S.E. Ste. 201
Grand Rapids, Michigan 49512
Telephone: (616) 222-1700
Facsimile: (616) 222-1701

WITH A COPY TO:

McShane & Bowie
Attn: John R. Grant
1100 Campau Square Plaza
99 Monroe Ave., NW
Grand Rapids, MI 49501
Telephone: (616) 732-5013
Facsimile: (616) 732-5099

E. Assignment. NHA may assign this Agreement with the prior written approval of the Board and in a manner consistent with the Authorizer's policies; provided, however, this Agreement shall not be assignable without prior written notification to Authorizer.

F. Amendment. This Agreement shall not be altered, amended, modified or supplemented except by memorandum approved by the Board and signed by both an authorized officer of the School and NHA and in manner consistent with the Authorizer's policies.

G. Waiver. No waiver of any provision of this Agreement shall be deemed or shall constitute a waiver of any other provision. Nor shall such waiver constitute a continuing waiver unless otherwise expressly stated.

H. Costs and Expenses. If any Party commences an action against another Party as a result of a breach or alleged breach of this Agreement, the prevailing Party shall be entitled to have and recover from the losing Party reasonable attorneys' fees and costs of suit.

I. Severability. If any term or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms and provisions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the Parties shall use their best efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term or provision.

J. Delegation of Authority. Nothing in this Agreement shall be construed as delegating to NHA powers or authority of the Board which are not subject to delegation by the Board under the Charter or applicable law.

K. Compliance with Law. Each party will comply with the Charter and laws applicable to the performance of such party's obligations hereunder.

L. Time of Essence. The Parties understand and agree that time is of the essence in performing their respective responsibilities under this Agreement.

[Signatures on Following Page]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the Effective Date.

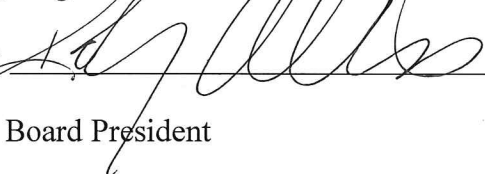
NHA:

National Heritage Academies, Inc.,
a Michigan corporation

By: 
Stephen M. Conley
Its: Chief Financial Officer

SCHOOL:

Eagle Crest Charter Academy,
a Michigan school of excellence

By: 
Its: Board President

Eagle Crest – Amended and Restated Services Agreement (3.3.16)

CONTRACT SCHEDULE 6

PHYSICAL PLANT DESCRIPTION

PHYSICAL PLANT DESCRIPTION

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article XI, Section 11.5, the Academy is authorized to operate at the physical facility or facilities outlined in this schedule. The Academy shall not occupy or use any facility until approved for occupancy by the Michigan Department of Licensing and Regulatory Affairs’ Bureau of Construction Codes.

Physical Plant Description 6-1

Site Plan 6-3

Floor Plan..... 6-4

Amended and Restated Lease 6-5

Office of Fire Safety Approvals..... 6-29

Certificate of Use and Occupancy 6-32

1. Applicable Law requires that a school of excellence application and contract must contain a description of and the address for the proposed physical plant in which the public school academy will be located. See MCL 380.552(7)(i); 380.553(5)(f).

2. The address and a description of the site and physical plant (the "Site") of Eagle Crest Charter Academy (the "Academy") is as follows:

Address: 11950 Riley St.
Holland, MI 49424

Description: The exterior of the facility is brick and vinyl. The facility was expanded during the 1999-2000 academic year and again in 2008. The facility is currently 53,400 square feet and consists of 28 classrooms and 11 restrooms. The facility also contains a gymnasium, computer room, media room, music room, conference room and several offices. The Site contains a large parking area, an outdoor play area and a basketball court.

Configuration of Grade Levels: Kindergarten through Eighth Grade.

Term of Use: Term of Contract.

Name of School District and Intermediate School District:

Local: West Ottawa Public Schools
ISD: Ottawa Area

3. It is acknowledged and agreed that the following information about this Site is provided on the following pages, or must be provided to the satisfaction of the University Board or its designee, before the Academy may operate as a public school in this state.

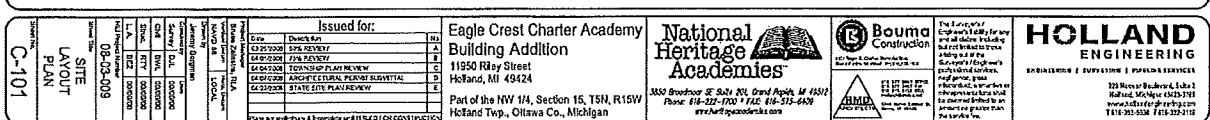
- A. Narrative description of physical facility
- B. Size of building
- C. Scaled floor plan
- D. Copy of executed lease or purchase agreement

4. In addition, the Academy and the University Board hereby acknowledge and agree that this Contract is being issued to the Academy with the understanding that the Academy cannot conduct classes as a public school academy in this state until it has obtained the necessary fire, health and safety approvals for the above-described physical facility. These approvals must be provided and be acceptable to the University Board or its designee prior to the Academy operating as a public school. In cases of disagreement, the Academy may not begin operations without the consent of the University Board or its designee.

5. If the Site described above is not used as the physical facilities for the Academy, then Schedule 6 of this Contract between the Academy and the University Board must be amended pursuant to Article IX of the Terms and Conditions of Contract, to designate, describe, and agree

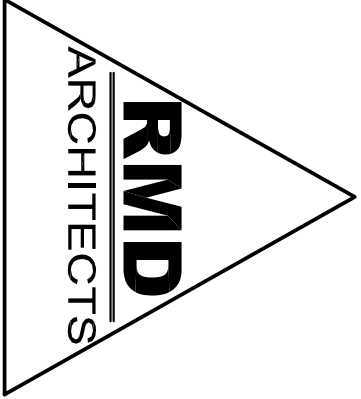
upon the Academy's physical facilities. The Academy must submit to the University Board or its designee complete information about the new site to be actually used. This information includes that described in paragraphs 2, 3 and 4 of this Schedule 6. It is acknowledged and agreed that the public school academy cannot conduct classes as a public school in this state until it has submitted all the information described above, to the satisfaction of the University Board or its designee, and the amendment regarding the new site has been executed.

6. Any change in the configuration of grade levels at the Site requires an amendment to this Schedule 6 pursuant to Article IX of the Terms and Conditions of Contract set forth above.



EAGLECREST ACADEMY
HOLLAND, MICHIGAN 49424

YOUNG 5'S ADDITION



616 677 5997 OFFICE
616 677 3467 FAX
michael@rmda.net
17144 MARINE CRESTS DR.
TALMADGE TOWNSHIP, MI 49435

ISSUED FOR:
REVIEW
REVIEW

DATE:
03/03/08
03/25/08

SEAL

PROJECT NUMBER
NHA22208

SHEET NUMBER
A100

Sheet Index

- A100 OVERALL FLOOR PLAN**
- A101 ENLARGED FLOOR PLAN**
- A301 ELEVATIONS**
- A305 DETAILS**
- A306 WALL SECTIONS**

Code Information

NOTE: PREVIOUS OFS NUMBER 4-00-0448-97 (PHASE 1) .
961688, B#97-615
PROJECT: EAGLECREST CHARTER ACADEMY
11950 RILEY STREET
HOLLAND, MICHIGAN 49424
PROJECT #: NHA22208

JURISDICTION: BUREAU OF CONSTRUCTION CODES
BUREAU OF FIRE SERVICES

APPLICABLE CODES:

MICHIGAN BUILDING CODE 2003
MICHIGAN PLUMBING CODE 2003
MICHIGAN MECHANICAL CODE 2003
MICHIGAN ELECTRICAL CODE 2002
NFPA 10 ED

USE GROUP

E

CONSTRUCTION TYPE

V B (V000)

FIRE PROTECTION COMPLETE APPROVED AUTOMATIC SPRINKLER SYSTEM

BUILDING AREA CHAPTER 5
GENERAL BUILDING HEIGHTS AND AREAS

TABLE 503 TYPE V(B)
1 STORY
9,500 SF
SECTION 506
AREA MODIFICATIONS
 $A_a = A + \left[\frac{A_{11}}{100} \right] + \left[\frac{A_{12}}{100} \right]$ EQUATION 5-1
 $A_a = 9,500 + \left[\frac{9500 * 0}{100} \right] + \left[\frac{9,500 * 300}{100} \right]$
 $A_a = 9,500 + 0 + 28500$
 $A_a = 38,000$ SF ALLOWED
ACTUAL - POD 4 - 10,523 EXISTING + 1870 ADDITION = 12,393 SF

BUILDING HEIGHT ALLOWABLE HEIGHT - 1 STORY
ACTUAL HEIGHT - 1 STORY

EGRESS REQUIREMENTS - POD 4

OCCUPANT LOAD 1ST STUDENT PER 20 SF NET CLASSROOM 887 SF EACH
45 STUDENTS PER ROOM x 10 = 450

EXITS

POD 4 - 67.5" REQUIRED - 144" PROVIDED IN 2 EXITS

EXIT ACCESS TRAVEL

LESS THAN 200 FOOT TRAVEL DISTANCE

ACCESSIBLE EXIT DISCHARGE

ALL REQUIRED EXITS ARE ACCESSIBLE

SPECIFIC OCCUPANCY AREAS

PORTABLE FIRE EXTINGUISHERS

NOT REQUIRED

BUILDING FIRE ALARM

REQUIRED

PLUMBING FIXTURES

REQUIRED FIXTURES
Water Closet - 1/50
Lavatories - 1/50
Drinking Fountain - 1/100
Service Sink - 1/100
Provided Fixtures
MALES (198 STUDENTS)
6-Water Closets, 4 Urinals, 4 Lavatories
FEMALES (198 STUDENTS)
10 WaterClosets, 4 Lavatories
STAFF - MALE 1 WaterClosets, 1 Urinal, 1 Lavatories
STAFF - FEMALE 2 WaterClosets, 1 Lavatory
Water Coolers - 6 provided
Service Sink - 2 provided

ABBREVIATIONS

ACF Acoustically Ceiling Tile
ALUM Aluminum
CONC Concrete
COR Carpet
ELEM Elementary
FRP Fire-Reinforced Plastic
GYP Gypsum Board
INSUL Insulated
K K
LE Kindergarten
M.S. Middle School
MECH Mechanical
MIN Minimum
N.B. Noted
O.C. On Center
OSB Orientated Stone Board
SPEC Specifications
TYP Typical
UE Upper Elementary
VE Veneer
W/ With

WALL TYPES

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD OR VENER BASE APPLIED AT RIGHT ANGLES TO STUDS 16" O.C. WITH 1" TYPE S DRYWALL STUDS 16" O.C. TO TOP AND BOTTOM RUNNERS AND INTERMEDIATE STUDS, STAGGER ALL VERTICAL AND OPPOSITE SIDES.(N/B)

3/4" 5/8" FIRE RATED STUDS 16" O.C. 1" BATT SOUND INSUL

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD OR VENER BASE APPLIED AT RIGHT ANGLES TO STUDS 16" O.C. WITH 1" TYPE S DRYWALL STUDS 16" O.C. TO TOP AND BOTTOM RUNNERS AND INTERMEDIATE STUDS, STAGGER ALL VERTICAL AND OPPOSITE SIDES.(N/B)

3/4" 5/8" FIRE RATED STUDS 16" O.C. 1" BATT SOUND INSUL

6" 3/4" 5/8" O.P. BOARD 1 1/2" FIBERGLASS WOOD POST BY OTHERS 6" BATT INSULATION

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD OR VENER BASE APPLIED AT RIGHT ANGLES TO STUDS 16" O.C. WITH 1" TYPE S DRYWALL STUDS 16" O.C. TO TOP AND BOTTOM RUNNERS AND INTERMEDIATE STUDS, STAGGER ALL VERTICAL AND OPPOSITE SIDES.(N/B)

3/4" 5/8" FIRE RATED STUDS 16" O.C. 1" BATT SOUND INSUL

NON RATED

SYMBOL LEGEND

ROOM NUMBER CLASSROOM ROOM NAME

DOOR NUMBER DOOR NUMBER

WALL TYPE WALL TYPE LETTER

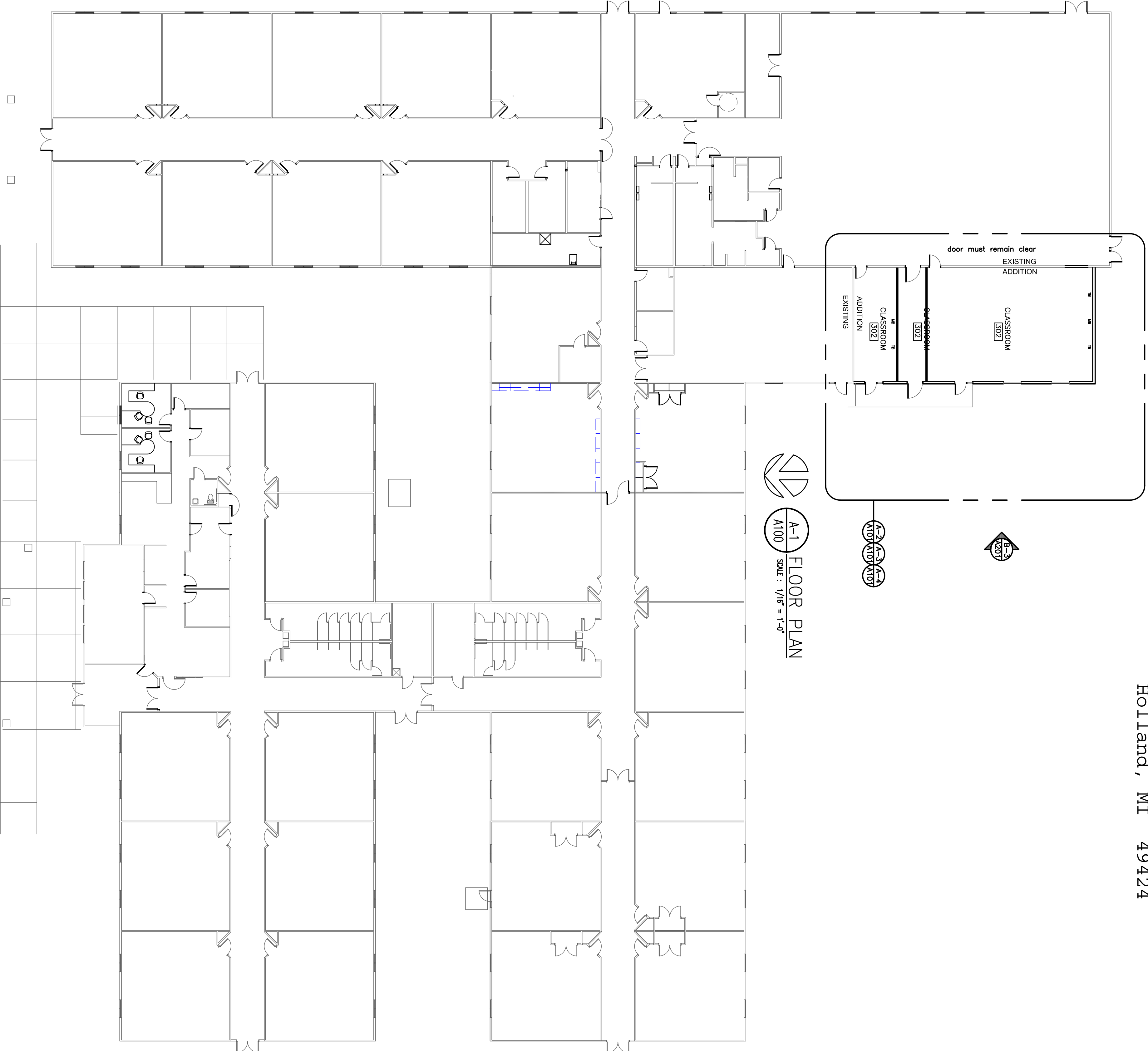
DETAIL / WALL CUT SYMBOL DETAIL NUMBER DETAIL IS SHOWN

ELEVATION SYMBOL ELEVATION NUMBER DETAIL IS SHOWN

MATCH LINE MATCH LINE

DETAIL NUMBER DETAIL NAME
SHEET WHERE DETAIL IS SHOWN
SCALE : 1/8"=1'-0"

OVERALL FLOOR PLAN
SCALE : 1/16"=1'-0"



Eagle Crest Charter Academy
11950 Riley Street
Holland, MI 49424

AMENDED AND RESTATED LEASE

THIS AMENDED AND RESTATED LEASE ("**Lease**") by and between National Heritage Academies, Inc., a Michigan corporation, of 3850 Broadmoor SE, Ste. 201, Grand Rapids, Michigan 49512 ("**Landlord**"), and Eagle Crest Charter Academy, a school of excellence chartered under the laws of the State of Michigan, having an address of 11950 Riley Street, Holland, Michigan 49424 ("**Tenant**") is effective the 1st day of July 2016, (the "**Effective Date**"). For purposes of this Lease, Landlord and Tenant shall be referred to collectively as the "**Parties**."

RECITALS

A. Landlord (defined in Section 22.5), as tenant, and Charter Development, LLC, as landlord (together with its successors, assigns and successors in interest, the "**Master Landlord**") are party to that certain Master Lease Agreement effective January 1, 1999, as amended (the "**Master Lease**").

B. Landlord and Master Landlord amended the Master Lease to subject the Premises thereto and Landlord has the authority under the Master Lease to sublease the Premises to Tenant.

C. Landlord and Tenant entered into a lease of the Premises dated July 1, 2012 (the "Prior Lease").

D. Pursuant to Article 29, Section 29.5 of the Prior Lease, the Parties with to amend and restate the Prior Lease to read as set forth herein.

E. Tenant desires to sublease the Premises from Landlord, and Landlord desires to so sublease the Premises to Tenant, on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants set forth above and herein, Landlord and Tenant agree as follows:

ARTICLE 1

The Premises and Other Agreements.

1.1 Premises. Landlord hereby leases to Tenant, on the terms and conditions hereinafter set forth, the real estate located in the City of Holland, Ottawa County, Michigan with an address of 11950 Riley Street, Holland, Michigan 49424 and more particularly described on Exhibit "A" attached hereto (the "**Land**"), and all improvements located on the Land (the Land and such improvements as they may exist from time to time, hereinafter referred to as the "**Premises**").

1.2 Master Lease. This Lease is subordinate and subject to the Master Lease. Landlord represents and warrants to Tenant that the terms of this Lease are not inconsistent with the terms of the Master Lease, and Tenant's compliance with the terms of this Lease will not constitute a

breach of the terms of the Master Lease. Landlord hereby indemnifies Tenant against all liability, judgments, damages, claims, costs and expenses, including, without limitation, reasonable attorneys' fees arising out of or relating to Landlord's breach of the covenants, representations or warranties under the Master Lease.

ARTICLE 2

Term.

2.1 Initial Term and Renewals. The "**Initial Term**" of this Lease shall commence on July 1, 2016 and shall terminate effective June 30, 2017 (the "**Initial Term Expiration**"), unless sooner terminated as hereinafter set forth. Provided that (a) Tenant is not then in Default under this Lease, the Services Agreement, or the "**Charter**" (as defined in Section 13.1.E. below), and (b) this Lease, the Services Agreement and the Charter are still in full force and effect, then, unless a Notice of Non-Renewal is sent as provided below, on the Initial Term Expiration (and each anniversary thereof, during the Term of this Lease), this Lease shall be automatically renewed for successive one (1) year terms, upon the same terms and conditions as contained herein. The "**Term**" of this Lease shall mean the Initial Term and every renewal term entered into by Landlord and Tenant. The term "**Upcoming Expiration Date**" shall mean the Initial Term Expiration, or if the Initial Term Expiration has occurred, then the upcoming anniversary of the Initial Term Expiration. If either party, in its sole discretion, does not wish for this Lease to automatically renew, then at least one hundred eighty (180) days prior to the Upcoming Expiration Date, such party must notify the other party in writing that it does not wish the Term to be renewed (a "**Notice of Non-Renewal**"). Upon the timely delivery of a Notice of Non-Renewal, this Lease shall terminate on the Upcoming Expiration Date. If either party defaults under Article 13 of the Lease, the Term shall automatically end at the expiration of the then current one year Term and the Notice of Non-Renewal requirement shall be waived. The Parties acknowledge that the Tenant's Authorizer, as part of any reauthorization or renewal, may require the Tenant to submit a new lease for review by the Authorizer.

ARTICLE 3

Rent.

3.1 Annual Rent. Tenant hereby leases said Premises for the Term above stated and agrees to pay Landlord annual rent of Seven Hundred Thirty-Five Thousand One Hundred Fifty and No/100 Dollars (\$735,150.00), ("**Annual Rent**") in twelve (12) equal monthly installments of Sixty-One Thousand Two Hundred Sixty-Two and 50/100 Dollars (\$61,262.50) (each, a "**Monthly Installment**") each payable to Landlord (or to such other "Person" (defined in Section 22.9) or agent as Landlord may specify by written notice to Tenant) in advance on the first day of each calendar month during the Term. The term "**Lease Year**" is defined to mean any twelve month period from July 1 to June 30 of the following year, during the Term. If the Term ends before the end of a Lease Year, Annual Rent shall be prorated on a daily basis and paid in advance

by Tenant on the first day of the last calendar month during the Term. Annual Rent may be adjusted upon determination of final costs for acquisition and construction of the Premises.

3.2 Additional Rent. Any amounts due from Tenant to Landlord hereunder, other than Annual Rent, shall constitute “**Additional Rent.**” Additional Rent shall, unless expressly provided to the contrary in this Lease, be payable from Tenant to Landlord on the same terms that Annual Rent is payable, with the next payment of the Monthly Installment coming due hereunder. Annual Rent and Additional Rent may be referred to collectively herein as “**Rent**”.

3.3 Payments. All Rent shall be paid to Landlord at Landlord’s address as set forth in the introductory paragraph hereof, or at such other address as Landlord may designate in writing. This Lease is a triple net lease and Rent shall be paid without setoff, counterclaim, recoupment, abatement, suspension, or deduction, except as expressly provided for herein. This Lease shall not terminate, nor shall Tenant have any right to terminate this Lease during the Term (except as otherwise expressly provided herein), nor shall Tenant be entitled to any abatement, deduction, deferment or reduction of Annual Rent hereunder (except as otherwise expressly provided herein), nor shall the obligations of Tenant under this Lease be affected by any interference with Tenant’s use of the Premises unless caused by Landlord or Master Landlord. It is the intention of the Parties hereto that the obligation of Tenant to pay Rent hereunder shall be separate and that the Rent shall continue to be payable in all events and that the obligations of Tenant hereunder shall continue unaffected, unless the requirement to pay or perform the same shall have been terminated pursuant to an express provision of this Lease.

3.4 Landlord’s Right to Increase. In the event Landlord makes future economic investments (a) in capital improvements to the Premises for any of the “Approved Purposes” (defined herein), or (b) in capital improvements (other than Approved Purposes) to the Premises, up to an amount of \$250,000.00 during any July 1 to July 30 period during the Term, or (c) in acquiring additional property for the Premises for the Approved Purposes, then in any such case, Annual Rent shall be adjusted by amendment to this Lease as of the immediately following July 1 in the Term to compensate Landlord for such additional economic investment. “**Approved Purposes**” shall mean any of the following purposes: (i) to comply with “Legal Requirements” (defined in Section 22.6); (ii) to comply with Landlord’s safety and security requirements; (iii) repairs or maintenance to, or replacement of essential building components and systems; and (iv) repairs, maintenance, replacement, or improvements necessary for Landlord to comply with its obligations under the Management Agreement and this Lease.

ARTICLE 4

Use, Occupancy and Purpose.

4.1 Permitted Uses.

A. Tenant shall use the Premises solely for operating a publicly chartered school or academy for grades kindergarten through 8th grade, and for ancillary or directly related uses.

B. Any other use of the Premises must be approved by Landlord in advance in writing.

4.2 Prohibited Uses.

A. Tenant shall not use or allow the use of the Premises for any unlawful purpose, nor shall Tenant allow the Premises to be used in violation of the Charter.

B. Tenant shall not allow the Premises to be used in violation of any public law, ordinance, rule or regulation, or in violation of any certificate of occupancy or certificate of compliance covering or affecting the Premises, or any part thereof. Tenant shall not suffer any act to be done or any condition to exist on the Premises or any part thereof which may in law constitute a nuisance, public or private, or which may make void or voidable, or increase premiums for, any insurance with respect thereto. Tenant shall not commit any waste, damage, or injury of or to the Premises or the fixtures or any part thereof and shall take all reasonable precautions and actions to prevent others from committing any of the foregoing.

C. Tenant covenants unto Landlord that during the Term, no part of the Premises shall be used for: the operation of any (i) private or commercial golf course, (ii) country club, (iii) massage parlor, hot tub facility, or suntan facility (iv) race track or other facility used for gambling, or (v) store the principal business of which is the sale of alcoholic beverages for consumption off premises; or the rental to others of residential property (as defined in Section 168(e)(2)(A) of the Internal Revenue Code).

D. Notwithstanding anything contained in this Lease to the contrary, in the event of a breach of any of the covenants contained in this Section 4.2, Landlord may immediately terminate this Lease by written notice to Tenant.

4.4 Educational Program. Tenant shall neither use the Premises nor allow the Premises to be used at any time during the Term in a manner that interferes with the performance of Landlord's obligations under the Services Agreement, including without limitation, the implementation and delivery of the Educational Program at the Premises. Tenant acknowledges that the terms of the preceding sentence are intended to allow Landlord to restrict access to certain portions of the Premises at certain times provided such access restriction is at all times consistent with the implementation and delivery of the Educational Program.

ARTICLE 5

Utilities.

5.1 Utility Connections; Utility Service. Landlord represents and warrants that construction of the Premises pursuant to Section 9.1 shall include provision of connections for all utility services necessary to the operation of a school at the Premises. Utility services, including without limitation gas, electricity, light, heat, water, sewage and telephone or other communication services, shall be contracted for and paid for by Tenant.

5.2 Disclaimers. Unless due to the gross negligence or willful misconduct of Landlord, Landlord shall not be liable for (i) any failure of water supply or electric current or any service by any utility provider or local government, or (ii) injury to persons, including death, or damage to property resulting from steam, gas, electricity, water, rain or snow which may flow or leak from any part of the Premises or from any pipes, appliances or plumbing works from the street or subsurface or from any other place. Any express or implied rights, easements or licenses for view purposes or for the passage of light and air are hereby expressly disclaimed by Tenant. Except as otherwise expressly provided in this Lease or as may be provided in the Services Agreement, Landlord shall have no obligation to provide any services to Tenant or to the Premises.

5.3 Modifications and Replacements. If the existing services are required to be modified or replaced for any reason by any utility company or authorized agency, governmental or otherwise, then Tenant shall make such modifications or replacements at Tenant's expense and shall save Landlord harmless therefrom.

ARTICLE 6

Taxes.

6.1 Payment by Tenant. Tenant shall pay all (a) taxes levied on or assessed against the Premises during the Term, (b) special assessments levied on or assessed against the Premises during the Term that become due and payable during the term of this Lease, and (c) other similar charges levied on or assessed against the Premises during the Term and that become due and payable during the term of this Lease, except income and other taxes assessed against or by reason of Landlord's reversionary interest in or income from the Premises (the "**Taxes**"), (i) prior to the date on which any penalties, interest or late charges would apply, and to save Landlord harmless from the payment thereof, or (ii) to Landlord, in accordance with the terms of Section 6.4, provided Landlord makes the demand on Tenant required in Section 6.4. Taxes for the first and last year of the Term or any extension or renewal thereof shall be prorated on the basis of the fiscal period for which such tax is assessed.

6.2 Landlord's Option to Pay. If at any time after any tax, assessment or similar charge so charged or assessed against said Premises shall become due or payable and Tenant shall neglect or fail to pay the same, Landlord, without being obligated to do so, may pay the same at any time thereafter, and the amount of any and all such payments so made by Landlord shall be and is hereby declared to be payable as Additional Rent with the next Monthly Installment due hereunder.

6.3 Payment at End of Term. At the termination of this Lease by lapse of time or otherwise, all Taxes payable by Tenant under the provisions of this Article 6 shall be paid by Tenant to Landlord.

6.4 Monthly Installments. Upon demand of Landlord, (i) Tenant shall pay as Additional Rent, in addition to each Monthly Installment due hereunder, a sum equivalent to one-twelfth of the amount estimated by Landlord to be sufficient to enable Landlord to pay at least thirty (30) days before they become due, all such taxes, assessments and other charges, and (ii) Tenant will deliver and pay over to Landlord such additional sums as are necessary to make up any deficiency

in the amount necessary to enable Landlord to fully pay such taxes, assessments and other charges. Any such tax payments from Tenant may be commingled with the general funds of Landlord and no interest shall be payable in respect thereof. If Landlord receives tax payments from Tenant in accordance with this Section, then Landlord shall pay the full amount of taxes, assessments and other charges when due to the appropriate taxing authorities. In the event Tenant's tax payments under this Section are in any way insufficient to pay the full amount of taxes, assessments and other charges when due to the appropriate taxing authorities, then Tenant shall pay to Landlord, as Additional Rent, any shortfall within thirty (30) days of receiving a demand therefor from Landlord.

6.5 Non-Real Property Taxes. In the event that the City, County, State, or any other political subdivision that has taxing authority over the Premises shall, during the Term, impose upon Landlord any tax or other governmental charge in lieu of all or any part of the Taxes (a "**Non-Real Property Tax**"), such Non-Real Property Tax shall, for purposes of this Section, be treated as if it were included in the Taxes. Landlord agrees to furnish to Tenant upon request a separate accounting and supporting documentation of each Non-Real Property Tax.

6.6 Receipts. Upon demand of Landlord within ninety (90) days after the date all or any part of the Taxes are payable by Tenant, Tenant shall provide to Landlord official receipts of the appropriate taxing authority or other proof satisfactory to Landlord of the payment of such Taxes.

ARTICLE 7

Insurance.

7.1 Tenant will cause to be maintained policies of fire and extended coverage insurance on all buildings, structures, fixtures and improvements now or hereafter situated on the Premises and all other property leased hereunder in their full replacement cost. Such policies shall have no greater than eighty (80%) percent co-insurance provision and shall contain the standard "agreed amount" clause for evaluating replacement cost. Such policies shall name Tenant, Landlord, other parties designated by Landlord and the "first mortgagee" (defined in Section 22.3) as their interests may appear as insureds and such insurance shall be carried by an insurance company or companies approved by Landlord and the first mortgagee. Tenant shall make available to Landlord on request copies of said policies. Notwithstanding the aforesaid, in no event shall the manner, forms, companies, sums or length of terms be less than that required by the first mortgagee according to the terms and provisions of the "first mortgage" (defined in Section 22.2).

7.2 Each such policy shall include: (i) a standard mortgagee clause in favor of the first mortgagee; (ii) a provision to the effect that the waiver of subrogation rights by the insured does not void the coverage; (iii) a provision that the policy shall not be changed or canceled without at least thirty (30) days' prior written notice to Landlord and the first mortgagee; and (iv) a provision that any forfeiture of the policy due to an act of Tenant shall not affect the validity insofar as Landlord or the first mortgagee are concerned.

7.3 From time to time as required by Landlord or the first mortgagee, Tenant at its expense, shall obtain from an engineer or appraiser, in the regular employ of the insurer, or an appraiser, engineer, architect or contractor designated by Tenant and approved by Landlord and the insurer, such evidence as may be required by such insurer to maintain the “agreed amount” clause eliminating the possibility of any co-insurance penalty.

7.4 If Tenant shall refuse or fail to so insure and keep insured the Premises and keep such policies in Landlord’s and first mortgagee’s possession, Landlord may at its election procure and from time to time renew such insurance, and the amounts expended therefore shall be Additional Rent due from Tenant with the next installment of Rent accruing hereunder and may be collected in the same manner as though Rent due hereunder.

7.5 Upon demand from Landlord, Tenant shall pay in advance as Additional Rent, a sum equivalent to one-twelfth of the amount estimated by Landlord to be sufficient to enable Landlord to pay at least thirty (30) days before they become due all insurance premiums on all policies of insurance required or allowed to be carried by Tenant hereunder. Such Additional Rent may be commingled with the general funds of Landlord and no interest shall be payable in respect thereof. Upon demand by Landlord, Tenant will pay Landlord, as Additional Rent, such additional sums as are necessary to make any deficiency in the amount necessary to enable Landlord to fully pay such premiums.

7.6 Landlord shall have no liability for damage to or loss of personal property located upon the Premises, unless and to the extent caused by Landlord.

ARTICLE 8

Casualty; Restoration.

8.1 If the Premises are damaged by fire or other casualty (a “**Casualty**”), Tenant shall give immediate written notice thereof to Landlord and the first mortgagee (“**Tenant’s Casualty Notice**”). Landlord shall, within 60 days after receipt of Tenant’s Casualty Notice, deliver to Tenant a good faith estimate (the “**Damage Notice**”) of the time needed to repair the damage caused by such Casualty (“**Restoration**”).

If the Premises is damaged by Casualty such that Tenant is prevented from conducting its business in the Premises in a manner reasonably comparable to that conducted immediately before such Casualty and Landlord estimates that the damage caused thereby cannot be repaired within 210 days after the commencement of repairs (the “**Repair Period**”), then Tenant may terminate this Lease by delivering written notice to Landlord of its election to terminate within 30 days after the Damage Notice has been delivered to Tenant.

If a Casualty occurs and (1) Landlord estimates that the damage cannot be repaired within the Repair Period, (2) regardless of the extent of damage, (a) the damage occurs during the last twelve (12) months of the Term or (b) the damage is not fully covered by Tenant’s insurance policies or any insurance Landlord may carry on the Premises or (c) Landlord makes a good faith determination that restoring the damage would be uneconomical, or (3) Landlord is required to

pay any insurance proceeds arising out of the Casualty to a first mortgagee, then, in any such case, Landlord may terminate this Lease by giving written notice of its election to terminate within 30 days after the Damage Notice has been delivered to Tenant.

If neither party elects to terminate this Lease following a Casualty, then Landlord shall, within a reasonable time after such Casualty, begin to repair the Premises and shall proceed with reasonable diligence to restore the Premises to substantially the same condition as they existed immediately before such Casualty; however, Landlord shall not be required to repair or replace any improvements, alterations or betterments made by Tenant within the Premises (which shall be promptly repaired and restored by Tenant at Tenant's sole cost and expense) or any furniture, equipment, trade fixtures or personal property of Tenant or others in the Premises or the Project, and Landlord's and Tenant's obligations to repair or restore the Premises shall be limited to the extent of the insurance proceeds actually received by Landlord and Tenant respectively for the Casualty in question. If this Lease is terminated under the provisions of this Article 8, Landlord shall be entitled to the full proceeds of the insurance policies providing coverage for all alterations, improvements and betterments in the Premises (and, if Tenant has failed to maintain insurance on such items as required by this Lease, Tenant shall pay Landlord an amount equal to the proceeds Landlord would have received had Tenant maintained insurance on such items as required by this Lease).

8.2 Rent insurance proceeds, if payable, shall be applied by Tenant to the payment of, when and as due and payable, the installments of Rent and other payments due under this Lease until Restoration has been completed or until the Lease is terminated pursuant to any of the terms hereof. The balance, if any, of such proceeds shall be paid to Tenant or as Tenant may direct.

8.3. During any period of Restoration, Rent shall abate in proportion to the portion of the Premises that cannot be used for school purposes in Tenant's reasonable determination.

ARTICLE 9

Care of Premises.

9.1 Landlord shall cause the school building on the Premises to be constructed and maintained in a good and workmanlike manner, and in compliance with all Legal Requirements. Tenant will accept the possession of the Premises and keep the Premises in good condition and repair, and will yield and deliver the same to Landlord at the expiration or termination of the Lease in as good a condition as when taken, reasonable use and wear thereof, and damages thereto by Landlord or its agents or invitees, excepted. Tenant shall also maintain all portions of the Premises and adjoining areas in a clean and orderly condition, free of dirt, rubbish, snow, ice and unlawful obstructions, except for those attributable to Landlord's use or action. Tenant may not make any repairs, alterations, additions, changes or improvements to the Premises, except as described above in Section 5.3, without the written consent of Landlord. All repairs, alterations, changes or improvements shall be completed and maintained by Tenant in good workmanlike condition, free and clear of all liens and encumbrances arising out of such work.

9.2 Without limiting the rights granted to Landlord under Article 4 of this Lease, Landlord shall have the right to enter upon the Premises for the purpose of making any repairs thereto and performing any work thereon which may be necessary by reason of Tenant's failure to make any such repairs or perform any such maintenance work as provided herein. Except in case of emergency, the privilege and right of entry shall be exercised at reasonable times and at reasonable hours. Tenant shall pay the cost of any such repairs and maintenance work to Landlord, upon demand therefor and upon submission of satisfactory evidence of Landlord's payment of such costs which sums shall constitute Additional Rent.

ARTICLE 10

Liability.

10.1 To the extent permitted by law, Tenant agrees to save Landlord and the first mortgagee harmless from any and all liabilities, losses, damages, penalties, costs and expenses arising from any injury or death to any person or damage to any property in, on, or about the Premises which arise out of (i) gross negligence or willful misconduct of Tenant, or (ii) any noncompliance or breach by Tenant of any of the terms, conditions, warranties, representations, or undertakings contained in or made pursuant to this Lease. Tenant agrees to procure at its own expense public liability and property damage, single limit liability insurance for the benefit of Landlord, Tenant and the first mortgagee as their interests may appear, in amount not less than One Million Dollars (\$1,000,000) to keep such insurance in force during the Term hereof, and to deliver certificates of such coverage to Landlord at least annually. In the event Tenant defaults as to any such obligations, Landlord may obtain such insurance and charge the cost thereof to Tenant as Additional Rent, payable with the monthly installment next coming due.

10.2 Landlord agrees to save Tenant harmless from any and all liabilities, losses, damages, penalties, costs and expenses arising from any injury or death to any person or damage to any property in, on, or about the Premises to the extent caused by willful misconduct or negligence by Landlord. Landlord agrees to procure at its own expense public liability and property damage, single limit liability insurance for the benefit of Landlord and Tenant as their interests may appear, in amount not less than One Million Dollars (\$1,000,000) to keep such insurance in force during the Term hereof, and to deliver certificates of such coverage to Tenant; Landlord agrees to furnish to Tenant upon request certificates of insurance evidencing such insurance.

10.3 Each party hereto, for itself and its respective successors and assigns (including any person, firm or corporation which may become subrogated to any of its rights), waives any and all rights and claims for recovery against the other party, and its officers, employees, agents, and assigns, or any of them, on account of any loss or damage to any of its property insured under any valid and collectible insurance policy or policies, to the extent of any recovery collectible under such insurance. Notwithstanding the foregoing, this waiver shall not be applicable if it has the effect of invalidating any insurance coverage of Landlord or Tenant.

ARTICLE 11

Compliance.

11.1 During the Term, Tenant shall assure compliance with all Legal Requirements relating to Tenant, the conduct of Tenant's business or pertaining to or otherwise affecting the use of the Premises; and Tenant shall reimburse Landlord for any damages or penalties suffered because of any such noncompliance. Landlord hereby represents that as of the Effective Date, the Premises is in compliance with all Legal Requirements; and Landlord shall reimburse Tenant for any damages or penalties suffered because of any such noncompliance.

ARTICLE 12

Assignment and Subletting.

12.1 Tenant shall not assign, transfer, sublet or otherwise allow the use by another Person of the Premises or any part thereof or any interest hereunder without first obtaining the written consent of Landlord, which may be withheld by Landlord for any reason. Landlord may, in its sole discretion, assign, transfer, pledge and convey its rights, title and interests in the Premises and/or this Lease, without the consent of or notice to Tenant; provided, however, the terms and conditions of this Lease as set forth herein as of the execution date of this Lease shall have not been modified or amended and shall be subject to Section 23.3 hereof.

ARTICLE 13

Default.

13.1 Tenant shall be in default upon occurrence of any of the following events (any of the following, a "**Default**");

A. Failure by Tenant to pay any portion of Rent for a period of more than ten (10) days after Tenant receives written notice of such failure to pay from Landlord (a "**Monetary Default**"); provided in no case shall Landlord be obligated to send notice of failure to pay more than twice in any twelve (12) month period.

B. Failure by Tenant to comply with any term, provision, condition or covenant of this Lease (other than a Monetary Default or as specified in Subsection F. below), if such failure is not cured by Tenant within a period of thirty (30) days after Tenant receives written notice from Landlord specifying such failure.

C. Tenant's becoming insolvent, as that term is defined by any federal or state law or regulation (the "**Insolvency Laws**"); the appointment of a receiver or custodian for all or a substantial portion of Tenant's property or assets; the institution of a foreclosure action upon all or a substantial portion of Tenant's real or personal property; the filing of a voluntary petition

under the provisions of the Bankruptcy Code or Insolvency Laws; the filing of an involuntary petition against Tenant as the subject debtor under the Bankruptcy Code or Insolvency Laws, which is either not dismissed within sixty (60) days of filing, or results in the issuance of an order for relief against the debtor, whichever is later; or Tenant's making or consenting to an assignment for the benefit of creditors or a common law composition of creditors, or if Tenant's leasehold interest herein shall be levied on execution.

D. Expiration or discontinuance for any reason of the Charter granted to Tenant by its authorizer (the "**Charter**"), other than an expiration or discontinuance which results in a new Charter effective as of termination of the existing Charter and with terms which would not, in Landlord's opinion, substantially alter Tenant's ability to comply with the terms of the Lease, Services Agreement, or Charter.

E. Failure by Tenant to deliver the certificate required by Section 23.2 within the time required by such Section.

13.2 Landlord's Remedies. Upon the occurrence of any Default and the lapse of any grace or cure periods without cure thereof, Landlord shall have the option to pursue any one or more of the following remedies upon notice to Tenant:

13.2.1. *Termination.* Terminate this Lease or terminate Tenant's right to possession, and in either event, accelerate all obligations of Tenant owed to Landlord under the Lease and force Tenant to immediately surrender the Premises to Landlord. Tenant agrees to pay to Landlord on demand the costs which Landlord may suffer by reason of such termination. Immediately upon any termination Landlord shall be entitled to recover from Tenant (i) all outstanding and unpaid Rent as of the date of such termination, (ii) the unamortized cost of any initial work performed according to this Lease by Landlord in anticipation of Tenant's occupancy, (iii) the amount of any Rent that was abated pursuant to this Lease, and (iv) all future Rent due for the remaining balance of the Term, which future Rent shall be discounted to present value using a discount rate equal to the U.S. Treasury Bill or Note rate with the closest maturity to the remaining term of the Lease as selected by Landlord.

13.2.2. *Possession.* Enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be present, without terminating the Lease or being liable for prosecution or any claim for damages, and, if Landlord so elects, relet the Premises on such terms as Landlord may determine.

13.2.3. *Entry.* Enter upon the Premises without being liable for prosecution or any claim for damages, and do whatever Tenant is obligated to do under the terms of this Lease. Tenant agrees to reimburse Landlord on demand for any expenses which Landlord may incur in effecting compliance with Tenant's obligations.

13.2.4. *Mitigation.* Landlord shall have a duty to mitigate damages in the event of a Tenant Default, provided, however, that Landlord shall not be obligated (a) to favor the Premises

for re-letting in comparison to other real property owned or leased by Landlord in the vicinity of the Premises, (b) to discount or disregard any of the following factors regarding a potential new tenant for the Premises: term of proposed lease, proposed rent, proposed use and the creditworthiness and reputation of the proposed tenant, or (c) to spend more toward re-letting the Premises than Landlord would spend in leasing real property in the ordinary course of its business.

13.2.5. *Application of Proceeds.* Any proceeds of re-letting the Premises shall be applied to pay (i) first, all costs of Landlord incurred in connection with such re-letting (including without limitation, all costs and expenses of taking possession of the Premises, securing new tenants, including expenses for redecoration, alterations or other upfit costs), (ii) second, any indebtedness of Tenant other than Rent, (iii) third, all then-outstanding Rent due hereunder, and (iv) fourth, any future obligations of Tenant, including without limitation, Rent. Tenant agrees to pay to Landlord on demand any deficiency that may arise by reason of such re-letting within ten (10) days of notice of the same from Landlord, following a re-letting. In the event Tenant pays to Landlord all accelerated sums due, any amounts applicable to Rent following the date of re-letting shall be reimbursed to Tenant as received.

13.3 No termination of this Lease pursuant to this Section or repossession of the Premises or any part thereof or of any other property leased hereunder shall relieve Tenant of its liabilities and obligations under this Lease that accrue during the Term, all of which shall survive any such termination or repossession and, if the Premises or any part thereof shall not have been relet, Tenant shall pay to Landlord as and for liquidated and agreed current damages the then present value of the Rent and other sums and charges to be paid by Tenant until what would have been the end of the Term in the absence of such termination or repossession. Landlord shall make a good faith effort to relet the Premises and alleviate Tenant of additional damages. Exercise of any remedy hereunder by Landlord shall not exclude the right to exercise any other remedy hereunder. Notwithstanding any of the foregoing obligations of Tenant stated herein to the contrary, upon termination of this Lease or Tenant's dispossession of the Premises, Tenant will automatically be relieved from and after the date of such termination or dispossession of all personal liability for the performance of any covenants or obligations on the part of Tenant contained in this Lease thereafter to be performed except for those liabilities expressly stated to have survived such termination or dispossession as stated herein.

13.4 To the extent applicable, Tenant has been made aware that Master Landlord as landlord under the Master Lease, or National Heritage Academies, Inc., as tenant under the Master Lease or an Affiliate (defined in Section 22.1) of either or any other Person that enjoys an interest in the Premises seeks the benefits offered pursuant to the U.S. Department of Treasury New Markets Tax Credit program and may pursue other federal, state or city funds, subsidies (including any city real estate tax exemptions or abatements) or loans (collectively, the "**Benefits**") in connection with the use of the Premises, and as a result of the grant of the Benefits, the Premises may be subject to certain use restrictions. Tenant shall have no responsibility and bear no liability for any claims, fees, expenses, costs or other impositions arising from or in connection with the Benefits due to the termination of this Lease or Tenant's dispossession of the Premises.

ARTICLE 14

Waiver of Breach.

14.1 No waiver by either party hereto of any breach of any of the terms of this Lease shall be deemed to be a waiver of any other or subsequent breach.

ARTICLE 15

Surrender.

15.1 Upon the expiration or earlier termination of this Lease, Tenant shall (i) surrender the Premises in broom clean, in good condition, free and clear of all lettings and occupancies, (except those previously approved by Landlord), free and clear of all liens and encumbrances, except that part of the Premises which have been taken through eminent domain, if any, after the delivery hereof, and otherwise in the same condition as Tenant received the Premises on the first day of the Initial Term, except for the following (which are allowed to remain at the Premises): any alterations that Landlord has not required to be removed, normal wear and tear and loss by fire or other casualty losses for which insurance proceeds have been received by Landlord; (ii) surrender all keys for the Premises to Landlord and (iii) inform Landlord of all combinations on locks in the Premises. All installations, alterations, additions and improvements, including partitions which may have been installed by either Landlord or Tenant, shall remain upon the Premises and shall become Landlord's property, all without compensation, allowance or credit.

15.2 On or before the scheduled expiration of the Term, Tenant may elect to remove its personal property and any fixtures and equipment. Any of Tenant's items listed in the preceding sentence not removed at the end of the Term shall be considered abandoned, and Landlord may appropriate such items for itself, sell such items or otherwise dispose of the same in such commercially reasonable manner as Landlord deems expedient without any liability to Tenant or any parties claiming by, through or under Tenant. In the event the Term terminates for any reason on other than its scheduled expiration date, then Tenant shall have a period of time in which to re-enter the Premises to retrieve its personal property, beginning on the date the Term terminates and ending fifteen (15) days thereafter. Any damage caused to the Premises by such removal shall be repaired by Tenant no later than fifteen (15) days after the end of the Term, but no Rent shall be payable by Tenant for such period of time (and such continued use of the Premises by Tenant shall not be deemed a holdover or a renewal or as creating a periodic or other similar tenancy that might be implied by law). Tenant shall reimburse Landlord for any damage to any portion of the Premises caused by Tenant during the removal of any items contemplated for potential removal in this Section.

ARTICLE 16

Eminent Domain.

16.1 If all or any part of the Premises shall be taken by any Governmental Authority under power of eminent domain, or by private purchase in lieu thereof, all damages awarded for such taking shall belong to and be the property of Landlord, whether such damages shall be awarded as compensation for the taking of or diminution in value to the leasehold or the fee of the Premises and Tenant hereby irrevocably assigns to Landlord any award or payment to which Tenant may become entitled as a result thereof, provided, however, that Tenant shall be entitled to receive from such Governmental Authority compensation for its personal property so taken.

16.2 In the event that only a part of the Premises are so taken, and the part not so taken cannot be completed as an architectural unit for the use described in Section 4.1 hereof, Tenant shall have the option to terminate this Lease by serving written notice of termination on Landlord within sixty (60) days after the taking.

16.3 If only a part of the Premises shall be so taken such that the part not so taken can be completed as an architectural unit for the use described in Section 4.1 hereof, Landlord (or at Landlord's direction, Tenant) shall, as promptly as practicable, make a complete architectural unit of the remainder of the building on the Premises (but only to the extent of the proceeds received for such taking); and there shall be an abatement of the monthly Rent hereinabove provided for in an amount equal to the percentage of the Premises and the building so taken.

ARTICLE 17

Notices.

17.1 All notices and other communications required by this Agreement shall be in writing and sent to the Parties at the facsimile number or address set forth below. Notice may be given by: (i) facsimile with written evidence of confirmed receipt by the receiving party of the entire notice; (ii) certified or registered mail, postage prepaid, return receipt requested; or (iii) personal delivery. Notice shall be deemed to have been given on the date of transmittal if given by facsimile, upon the date of postmark if sent by certified or registered mail, or upon the date of delivery if given by personal delivery. For purposes of the foregoing, "**personal delivery**" shall include delivery by nationally recognized overnight courier (such as FedEx), if signed for by the recipient or a delegate thereof. Notices to the School shall be sent to the current address of the then current Board President, with a copy to the then current Board attorney. The addresses of the Parties for the purposes aforesaid, including the address of the initial Board President, are as follows:

The School:	Eagle Crest Charter Academy
	Attn: President, Board of Directors
	11950 Riley Street
	Holland, Michigan 49424

Telephone: (616) 786-2400
Facsimile: (616) 786-4692

WITH A COPY TO:

CS3 Law, PLLC
Attn: Candace Sorensen
125 Ottawa NW, Suite 241
Grand Rapids, Michigan 49503
Telephone: (616) 822-7754

NHA:

National Heritage Academies, Inc.
Attn: Chief Financial Officer
3850 Broadmoor, S.E. Ste. 201
Grand Rapids, Michigan 49512
Telephone: (616) 222-1700
Facsimile: (616) 222-1701

WITH A COPY TO:

McShane & Bowie
Attn: John R. Grant
1100 Campau Square Plaza
99 Monroe Ave., NW
Grand Rapids, MI 49501
Telephone: (616) 732-5013
Facsimile: (616) 732-5099

ARTICLE 18

Self Help.

18.1 If Tenant shall at any time fail to make any payment or perform any act on its part to be made or performed hereunder, then Landlord without notice to Tenant, except when other notice is expressly provided for in this Lease and without waiving or releasing Tenant from the obligations of Tenant contained in this Lease, may (but shall be under no obligation to) make such payment or perform such act, and may enter upon the Premises for any such purpose, and take all such actions thereon as may be necessary therefore.

18.2 All sums to be paid by Landlord and all costs and expenses incurred by Landlord in connection with the performance of any such act referenced in Section 18.1, together with any consequential damages Landlord may suffer by reason of the failure of Tenant to make such payment or perform such act, and counsel fees incurred by Landlord in connection therewith or in enforcing its rights hereunder, shall be paid by Tenant to Landlord on demand as Additional Rent.

18.3 Tenant agrees to hold Landlord harmless from any inconvenience or interference with Tenant's operation of its business as a result of Landlord's exercising any rights granted under Section 18.1.

ARTICLE 19

Construction Liens.

19.1 Tenant will not create nor permit to be created or to remain, and will promptly discharge, at its sole cost and expense, any lien, encumbrance or charge upon the Premises or any part thereof, or upon Tenant's leasehold interest therein, except such as are created by Landlord or the first mortgagee.

ARTICLE 20

Environmental Matters.

20.1 Tenant shall not use or store any Hazardous Materials (as defined in Section 20.3) on the Premises, except in compliance with Legal Requirements.

20.2 To the extent directly related to the conduct of Tenant, Tenant's use of the Premises, or the operation of its business thereon, Tenant shall defend, indemnify (limited to the maximum indemnification allowed by Legal Requirements) and hold harmless Landlord, its employees, agents, officers and directors, from and against any claims, demands, penalties, fines, liabilities, settlements, damages, costs or expenses of whatever kind or nature, known or unknown, contingent or otherwise, arising out of, or in any way related to, (1) the presence, disposal or release of any Hazardous Materials by Tenant on, over, under, from or affecting the Premises or the soil, water, vegetation, buildings, personal property, persons thereon by reason of Tenant's action or animals on the Premises; (2) any personal injury (including wrongful death) or property damage (real or personal) arising out of or related to such Hazardous Materials existing on the Premises by reason of Tenant's action; (3) any lawsuit brought or threatened, settlement reached or government order relating to such Hazardous Materials existing on the Premises by reason of Tenant's action; and/or (4) any violation of Legal Requirements based upon or in any way related to such Hazardous Materials existing on the Premises by reason of Tenant's action including, without limitation, reasonable attorney's and consultant's fees, investigation and laboratory fees, court costs and litigation expenses.

To the extent directly related to the conduct of Landlord, Landlord's use of the Premises, or the operation of its business thereon, and to the extent permitted by law, Landlord shall defend, indemnify and hold harmless Tenant, its employees, agents, officers and directors, from and against any claims, demands, penalties, fines, liabilities, settlements, damages, costs or expenses of whatever kind or nature, known or unknown, contingent or otherwise, arising out of, or in any way related to, (1) the presence, disposal or release of any Hazardous Materials by Landlord on, over, under, from or affecting the Premises or the soil, water, vegetation, buildings, personal

property, persons thereon by reason of Landlord's action or animals on the Premises; (2) any personal injury (including wrongful death) or property damage (real or personal) arising out of or related to such Hazardous Materials existing on the Premises by reason of Landlord's action; (3) any lawsuit brought or threatened, settlement reached or government order relating to such Hazardous Materials existing on the Premises by reason of Landlord's action; and/or (4) any violation of Legal Requirements based upon or in any way related to such Hazardous Materials existing on the Premises by reason of Landlord's action including, without limitation, reasonable attorney's and consultant's fees, investigation and laboratory fees, court costs and litigation expenses.

As used herein, "**Hazardous Materials**" means and includes petroleum, petroleum products, asbestos, asbestos-containing materials, radioactive materials, waste oils, solvents and chlorinated oils, polychlorinated biphenyls (PCBs), and any other water, material or substance that is defined as hazardous or toxic under or regulated by any federal, state or local agent, law, rule or regulation (whether now existing or hereafter enacted or promulgated, as they may be amended from time to time) pertaining to environmental conditions, the environment, contamination or clean-up, including, without limitation, federal, state or local solid waste disposal rules, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Hazardous Materials Transportation Act, as amended, the Resource Conservation and Recovery Act, as amended, the Toxic Substances Control Act, as amended, the Water Pollution Control Act, as amended, the Clean Air Act, as amended, or any other applicable federal, state or local laws, regulations, publications of Governmental Authorities, or ordinances pertaining to Hazardous Materials (collectively, "**Environmental Laws**").

20.3 Tenant shall promptly notify Landlord as soon as it knows of or suspects that any Hazardous Materials has been released or that there is a threatened release on the Premises and it shall take such action at its sole expense and with due diligence, as is necessary to insure timely compliance with Legal Requirements unless caused by Landlord. Landlord shall promptly notify Tenant as soon as it knows or suspects any Hazardous Materials has been released or that there is a threatened release on or in the Premises and Landlord shall take such action at its sole expense and with due diligence, as is necessary to ensure timely compliance with Legal Requirements unless caused by Tenant.

20.4 The provisions of this Article 20 shall be in addition to any and all obligations and liabilities of Tenant and Landlord may have to each other under Legal Requirements, and shall survive the expiration and termination of the Lease for any reason.

ARTICLE 21

Late Charges.

21.1 In the event of any failure by Tenant to pay Rent when due, Tenant shall also pay to Landlord, as Additional Rent, a late charge of five percent (5%) of such delinquent payment.

ARTICLE 22

Certain Definitions.

22.1 The term “**Affiliate**” means, with respect to any Person, any other Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such first Person or any of its subsidiaries. As used in this definition, the term “**control**” means (a) the power to vote five percent (5%) or more of the securities or other equity interests of a Person having ordinary voting power, or (b) the possession, directly or indirectly, of any other power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise.

22.2 The term “**first mortgage**” means any mortgage now existing or hereafter becoming a first and paramount lien on the Premises, subject to easements and restrictions of record, and all assignments, modifications, extensions and renewals thereof.

22.3 The term “**first mortgagee**” or “**holder of the first mortgage**” means the Person(s) who is(are) the holder(s) or beneficiary(ies) under the first mortgage from time to time.

22.4 The term “**Governmental Authority**” or “**Governmental Authorities**” means the government of the United States of America or any state or other political subdivision of either thereof, or any entity that exercises executive, legislative, regulatory, administrative, judicial, quasi-governmental or quasi-judicial functions of, or pertaining to, any such government, whether now or hereafter in existence having jurisdiction over the matter or matters in question.

22.5 The term “**Landlord**” is limited to mean and include, so far as covenants, agreements, stipulations or obligations on the part of Landlord are concerned, the tenant under the Master Lease to the Premises or its assignee, at the time in question, and in the event of any transfer or transfers of the title to such fee Landlord herein named (and, in case of any subsequent transfers or conveyances, the then grantor) will automatically be relieved from and after the date of such transfer or conveyance of all personal liability for the performance of any covenants or obligations on the part of Landlord contained in this Lease thereafter to be performed.

22.6 The term “**Legal Requirements**” means (i) all present and future applicable laws, statutes, treaties, rules, orders, ordinances, codes (including, without limitation, building and life-safety codes), regulations, requirements, permits, and interpretations by, and applicable judgments, decrees, injunctions, writs and like action even if unforeseen or extraordinary of any Governmental Authority (including, without limitation, Environmental Laws (defined herein), laws and regulations pertaining to health and safety, Insolvency Laws (defined herein), the Fair Housing Amendments Act of 1988, the Americans with Disabilities Act of 1990, and any other applicable Federal, State or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct relating to barrier-free access or access of the handicapped or disabled to the Premises, and laws and regulations pertaining to the construction, restoration, use and operation of schools); and (ii) any reciprocal easement agreement, agreement, contract, instrument, restriction or similar agreement relating to the use,

occupancy, possession, operation, alterations, repairs or maintenance of the Premises or otherwise affecting the Premises.

22.7 The term “**mortgage**” means any mortgage, deed of trust, deed to secure debt or other security instrument now existing as, or hereafter becoming a lien on the Premises.

22.8 The term “**mortgagee**” means the Person(s) who is(are) the holder(s) or beneficiary(ies) under any mortgage from time to time.

22.9 The term “**Person**” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

ARTICLE 23

Subordination; Estoppel Certificates.

23.1 Tenant agrees that Landlord, or any mortgagee or lessor under any applicable ground or other underlying lease, may choose to make this Lease subordinate or paramount to any mortgages or ground or underlying leases now or hereafter affecting the Premises and to any and all advances to be made thereunder or to be secured thereby, and to the interest and charges thereon, and to all renewals, replacements and extensions thereof, and that upon any taking of possession of the Premises and accession to the interest of Landlord under this Lease by such lessor or mortgagee, Tenant shall attorn to and recognize such Person as landlord hereunder; provided the mortgagee, lessor under any such ground or underlying leases, Landlord or any trustee named in any such mortgages or leases shall agree (i) to recognize the Lease of Tenant in the event of foreclosure if Tenant is not in Default and (ii) that Tenant’s possession of the Premises under this Lease shall not be disturbed by such Person unless there is a Default. Tenant will execute promptly any instrument or certificate that Landlord may request to confirm such subordination.

23.2 Tenant, within ten (10) days after request by Landlord, will execute and deliver to Landlord (and any mortgagee or prospective mortgagee, or any current or prospective ground or underlying lessor, to the extent specified by Landlord) an estoppel certificate as to such reasonable facts and circumstances under this Lease as may be requested, but in any case including the following (i) identifying the commencement date and expiration date of this Lease, (ii) stating that this Lease is unmodified and in full force and effect, or is in full force and effect as modified, and then stating such modifications, (iii) stating that Tenant does not claim that Landlord is in default in any way, or listing any such claimed defaults, (iv) the amount of Monthly Installments then payable hereunder and Additional Rent, if any, as of the date of the certificate, (v) the date to which the Rent has been paid in advance, and (vi) the amount of any security deposit or pre-paid Rent. If Tenant fails to deliver the executed certificate to Landlord within the ten (10) day period, Tenant shall be in Default without benefit of any cure period, and the proposed certificate will be conclusively deemed executed by Tenant.

23.3 Upon the receipt of a notice from Landlord, Tenant agrees to pay all such sums owing under this Lease directly to the account or party specified in such notice.

ARTICLE 24

Quiet Enjoyment.

24.1 All times when Tenant is not in Default, Tenant's quiet and peaceable enjoyment of the Premises will not be disturbed or interfered with by Landlord or any Person claiming by, through or under Landlord.

ARTICLE 25

Holding Over.

25.1 Any holdover by Tenant in the Premises beyond the expiration or termination of the Term, shall not be deemed to be a renewal or extension of this Lease or any extension thereof or the exercise of any option to extend or renew this Lease, but said holding over shall be deemed a tenancy from calendar month to calendar month at a monthly Rent equal to two hundred percent (200%) of the Monthly Installment for the last month paid under the Term. A month-to-month tenancy arising by holding over under this Section may be terminated by either Landlord or Tenant giving written notice to the other party hereto on or before the day any Monthly Installment is due with termination becoming effective on the day the next following Monthly Installment would have otherwise become due.

ARTICLE 26

Remedies Not Exclusive; Waiver.

26.1 Each and every of the rights, remedies and benefits provided by this Lease to Landlord are cumulative, and are not exclusive of any other of said rights, remedies and benefits, or of any other rights, remedies and benefits allowed by law.

26.2 One or more waivers of any covenant or condition by Landlord will not be construed as a waiver of a further or subsequent breach of the same covenant or condition, and the consent or approval by Landlord to or of any act by Tenant requiring Landlord's consent or approval will not be deemed to waive or render unnecessary Landlord's consent to or approval of any subsequent similar act by Tenant.

ARTICLE 27

Right To Show Premises.

27.1 Landlord may show the Premises and may display about the Premises signs advertising the availability of the Premises at any time during the Term of this Lease.

ARTICLE 28

Landlord's Liability.

28.1 If Landlord fails to perform any provision of this Lease upon Landlord's part to be performed, and if as a consequence of such default Tenant recovers a money judgment against Landlord, such judgment may be satisfied only out of the proceeds of sale received upon execution of such judgment (subject to any prior mortgages and ground or underlying leases) and levied thereon against the right, title and interest of Landlord in the Premises and out of rents or other income from such property receivable by Landlord, and Landlord shall not be personally liable for any deficiency.

ARTICLE 29

General.

29.1 References in this Lease to Persons have been generalized for ease of reading. Therefore, references to a single Person will also mean more than one Person whenever such usage is appropriate (for example, "**Tenant**" may include, if appropriate, a group of Persons acting as a single entity, or as tenants-in-common). Similarly, pronouns of any gender should be considered inter-changeable with pronouns of other genders. If a party consists of more than one Person, such Persons shall be jointly and severally liable for the obligations of such party under this Lease.

29.2 Any waiver or waivers by either party of any of the provisions of this Lease will not constitute a waiver of any later breach of that provision, and any consent or approval given by either such party with respect to any act, neglect or default by the other party will not waive or make unnecessary the other party's consent or approval with respect to any later similar act, neglect or default by such other party.

29.3 In the event any provision contained herein shall be held to be invalid or unlawful for any reason, such provision shall be deemed to be stricken from this Lease, with the understanding that the remaining provisions hereof shall continue to be binding on the Parties.

29.4 Topical headings appearing in this Lease are for convenience only. They do not define, limit or construe the contents of any sections, paragraphs or clauses.

29.5 This Lease can be modified or amended only by a written agreement signed by Landlord and Tenant. The Parties further acknowledge and agree that any changes to this Lease other than the length of term due to automatic renewal shall be documented by an amendment to this Lease signed by both Parties and subject to prior review by the Authorizer.

29.6 All provisions of this Lease are and will be binding on the heirs, executors, administrators, personal representatives, successors and assigns of each of Landlord and Tenant.

29.7 The laws of the state in which the Premises are located will control in the construction and enforcement of this Lease, without regard to any laws or policies of such state regarding conflicts of law.

29.8 Time is of the essence of all terms and conditions of this Lease.

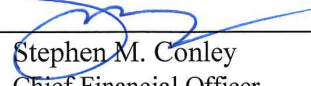
29.9. Landlord and Tenant each represent and warrant to the other that neither of them has contacted a broker, finder or similar Person in connection with this Lease, and to the extent permitted by law, each party shall defend, indemnify and hold the other harmless from and against all liability, cost and expense, including reasonable attorneys' fees, incurred as a consequence of any claim asserted by a Person alleging to have dealt with one of the Parties hereto in connection with this Lease.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Parties hereto have executed this Lease as of the day and year first above written.

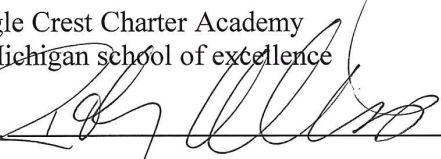
LANDLORD:

National Heritage Academies, Inc.,
a Michigan corporation

By: 
Stephen M. Conley
Its: Chief Financial Officer

TENANT:

Eagle Crest Charter Academy
a Michigan school of excellence

By: 
Its: Board President

Eagle Crest – Amended and Restated Lease (3.3.16)

EXHIBIT "A"

LEGAL DESCRIPTION OF PREMISES

Part of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15, Town 5 North, Range 15 West, Holland Township, Ottawa County, Michigan, described as: Beginning at the Northwest corner of Section 15 and proceeding thence South 89 degrees 28 minutes 51 seconds East 659.98 feet along the North line of Section 15; thence South 00 degrees 39 minutes 53 seconds West 660.02 feet along the East line of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15; thence North 89 degrees 32 minutes 27 seconds West 660.17 feet along the South line of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15; thence North 00 degrees 40 minutes 53 seconds East 602.63 feet along the West line of Section 15; thence South 89 degrees 28 minutes 51 seconds East 1.00 foot; thence along a curve to the left an arc distance of 154.88 feet; radius of 928.25 feet; chord bears North 85 degrees 41 minutes 53 seconds East 154.70 feet; thence along a curve to the right an arc distance of 144.49 feet; radius of 862.25 feet, chord bears North 85 degrees 43 minutes 07 seconds East 144.32 feet; thence North 89 degrees 28 minutes 51 seconds West 298.90 feet; thence North 00 degrees 40 minutes 53 seconds East 33.00 feet along the West line of Section 15 to the point of beginning.

FIRE SAFETY INSPECTION/CERTIFICATION REPORT

FACILITY NAME EAGLES CREST CHARTER ACADEMY			DATE 11-14-97	COUNTY OTTAWA	PROJECT NUMBER 4-00-0448-97
ADDRESS 11950 RILEY STREET			FACILITY TYPE School	RULES/CODES 89 MI Sch	JOB/LIC/FAC. NO.
CITY HOLLAND	STATE MI	ZIP 49422	FACILITY REP. KEN SKINNER, PROG MGR		INSP. TYPE recheck

DESCRIPTION OF NON-COMPLIANCE

RE: NEW SCHOOL BUILDING

A final fire safety inspection of the above captioned project was completed this date. Deficiencies noted in our prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

Full approval for Phase I of the new building.

cc: Educational Development Corporation, 1007 Parchment Dr., SE, Grand Rapids 49546
 Design Plus Inc., 48 Fountain NW, Grand Rapids 49503
 Ken Skinner, The Bouma Corp., 4101 Roger B. Chaffee Memorial Blvd SE, Grand Rapids 49548
 Gary Cass, Dept. of Ed.
 Riverside Fire & Security

NOV 24 1997

FIRE SAFETY CERTIFICATION Full approval for Phase I			PROJECT STATUS Open		REVIEWED BY <i>[Signature]</i>
DISTRIBUTION	INSPECTING OFFICIAL THOMAS G. SPAMAN		ADDRESS 588 Three Mile Road NW		
	SIGNATURE OF OFFICIAL <i>[Signature]</i>	CITY Grand Rapids	ZIPCODE 49544	TELEPHONE 616-784-4996	



State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

Page 1 of 1
OFS-40
Office of Fire Safety
General Office Building
7150 Harris Drive
Lansing, MI 48909-7504

FACILITY NAME EAGLES CREST CHARTER ACADEMY	DATE 2/7/2000	COUNTY OTTAWA	PROJECT 1992-98
ADDRESS 11950 RILEY	FACILITY TYPE SCHOOL	RULES/CODES 89 MI SCH	JOB/LIC/FAC. NO.
CITY, STATE ZIP CODE HOLLAND, MI 49424	FACILITY REPRESENTATIVE	INSPECTION TYPE Final	

AREAS REQUIRING COMPLIANCE:

RE: NEW SCHOOL BUILDING

A final fire safety inspection of the above captioned project was completed this date. Deficiencies noted in our prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

70199298.wpd

CC: Design Plus
Carter Development Company LLC, 989 Spaulding Ave. SE, Grand Rapids, 49546
Joan May
Holland Twp. FD

☐

FIRE SAFETY CERTIFICATION Approved		PROJECT STATUS Closed	REVIEWED BY
DISTRIBUTION Facility File CIS/HQ	INSPECTING OFFICIAL Burton Jones SIGNATURE OF OFFICIAL	ADDRESS 2922 FULLER NE SUITE 114 GRAND RAPIDS, MICHIGAN 49505 TELEPHONE 616-447-2691 FAX 616-447-2668	



State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

Inspection Report

Page 1 of 1

OFS-40

Office of Fire Safety

General Office Building

7150 Harris Drive

Lansing, MI 48909-7504

Web Site www.cis.state.mi.us/fire

FACILITY NAME Eagles Crest Charter Academy	DATE 9/7/2000	COUNTY Ottawa	PROJECT 0041-00
ADDRESS 11950 Riley	FACILITY TYPE School	RULES/CODES School - 89	JOB/LIC/FAC. NO. 98135A
CITY, STATE ZIP CODE Holland, MI 49424	FACILITY REPRESENTATIVE	INSPECTION TYPE Inspection - Final	

RE: ADDITION

A recheck fire safety inspection was completed this date. Deficiencies noted in prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

70004100.wpd

cc: Joan May, Dept Ed.
RMD Architects, FAX 616-453-2349
Holland Twp. FD
National Heritage Academics

FIRE SAFETY CERTIFICATION Approved		PROJECT STATUS Closed	REVIEWED BY
DISTRIBUTION		INSPECTING OFFICIAL Burton Jones	ADDRESS 2922 Fuller NE, Suite 114
Facility File	CIS/HQ Local FD	SIGNATURE OF OFFICIAL	TELEPHONE Grand Rapids,, MI 49505
Education Architect			FAX 616-447-2991
			E-MAIL 616-447-2668

CERTIFICATE OF USE AND OCCUPANCY


PERMANENT

Michigan Department of Labor & Economic Growth
Bureau of Construction Codes/Building Division
P. O. Box 30254
Lansing, MI 48909
(517) 241-9317

Building Permit No. B026815
Eagle Crest Charter Academy
11950 Riley St
Holland, MI
Ottawa County

The above named building of Use Group E and Construction Type 5B is approved for use and occupancy.

THIS APPROVAL IS GRANTED UNDER THE AUTHORITY OF SECTIONS 13 OF ACT 230 OF THE PUBLIC ACTS OF 1972, AS AMENDED, BEING §125.1513 OF THE MICHIGAN COMPILED LAWS, AND, IN ACCORDANCE WITH SECTION 110.0 OF THE STATE BUILDING CODE. THIS SHALL SUPERSEDE AND VOID ANY PREVIOUS APPROVAL OF USE AND OCCUPANCY.


Larry Lehman, Chief
Charles E. Curtis, Assistant Chief
Building Division

August 26, 2008

SCHEDULE 7

REQUIRED INFORMATION FOR
SCHOOL OF EXCELLENCE

SCHEDULE 7

REQUIRED INFORMATION FOR SCHOOL OF EXCELLENCE

Required Information for School of Excellence. This Schedule contains information required by the Code and the Contract. The required information for the Academy is contained in this Schedule 7.

- Section a. Governance Structure. The governance structure of the Academy is set forth in Section a of this Schedule.
- Section b. Educational Goal and Related Measures. The educational goal and related measures of the Academy are set forth in Section b of this Schedule.
- Section c. Educational Programs. The educational programs of the Academy are set forth in Section c of this Schedule.
- Section d. Curriculum. The curriculum of the Academy is set forth in Section d of this Schedule.
- Section e. Methods of Pupil Assessment. The methods of pupil assessment of the Academy are set forth in Section e of this Schedule.
- Section f. Application and Enrollment of Students. The application and enrollment of students criteria of the Academy is set forth in Section f of this Schedule.
- Section g. School Calendar and School Day Schedule. The school calendar and school day schedule procedures are set forth in Section g of this Schedule.
- Section h. Age or Grade Range of Pupils. The age or grade range of pupils to be enrolled by the Academy is set forth in Section h of this Schedule.

SECTION A

GOVERNANCE STRUCTURE

GOVERNANCE STRUCTURE

WHEREAS, the People of Michigan through their Constitution have provided that schools and the means of education shall forever be encouraged and have authorized the Legislature to maintain and support a system of free public elementary and secondary schools; and all public schools are subject to the leadership and general supervision of the State Board of Education; and the Legislature has authorized an alternative form of public school designated a "school of excellence" to be created to serve the educational needs of pupils and has provided that pupils attending these schools shall be eligible for support from the State School Aid Fund; and the Legislature has delegated to the governing boards of state public universities, community college boards, intermediate school district boards and local school district boards, the responsibility for authorizing the establishment of public school academies; and the University Board has approved the issuance of a contract conferring certain rights, franchises, privileges, and obligations of a school of excellence to the Academy Board.

The Academy is incorporated as a Michigan nonprofit corporation, organized on a non-stock, directorship basis for the purpose of operating as a Michigan school of excellence. The Academy shall conduct its affairs as a governmental entity exempt from federal income taxes under Section 115 of the United States Internal Revenue Code or any successor law. The Academy is a body corporate and is not a division or part of Central Michigan University. The relationship between the Academy and the University Board is based solely on the applicable provisions of the Code and the terms of this Contract.

The Academy Board shall have at least five (5), but no more than nine (9) members, as determined by the University Board. Academy Board members shall be appointed according to the terms of the Method of Selection, Appointment and Removal Resolution adopted by the University Board. The Academy Board has all the powers and duties permitted by law to manage the business, property and affairs of the Academy and for adopting policies by which the Academy shall be governed. The Academy Board is responsible for assuring that the Academy operates according to the Terms and Conditions of this Contract and Applicable Law. Contract Schedule 2: Bylaws, set forth a further description of the Academy Board's governance structure.

Academy Board members shall serve in their individual capacity, and not as a representative or designee of any other person or entity. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest and prohibited familial relationships, including Article IV, Sections 4.4 and 4.5 of this Contract.

Pursuant to applicable law and the Terms and Conditions of this Contract, including Article III, Section 3.6, the Academy Board may employ or contract for personnel according to the position information outlined in Schedule 5. Before entering into an agreement with an educational service provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by The Center.

SECTION B

EDUCATIONAL GOAL AND RELATED MEASURES

EDUCATIONAL GOAL AND RELATED MEASURES

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.2, the Academy shall achieve or demonstrate measurable progress for all groups of pupils toward the achievement of the educational goal identified in this schedule. Although an increase in academic achievement for all groups of pupils as measured by assessments and other objective criteria is the most important factor in determining the Academy's progress toward the achievement of the educational goal, the Center also considers other factors. Upon request, the Academy shall provide the Center with a written report, along with supporting data, assessing the Academy's progress toward achieving this goal. In addition, the University expects the Academy will meet the State of Michigan's accreditation standards pursuant to state and federal law.

Educational Goal to Be Achieved

Prepare students academically for success in college, work and life.

Measures to Assist in Determining Measurable Progress Towards Goal Achievement

To assist in determining whether the Academy is achieving measurable progress toward the achievement of this goal, the Center will annually assess the Academy's performance using the following measures.

Measure 1: Student Achievement

The academic achievement of all students in grades 2-8, who have been enrolled for three* or more years at the Academy, will be assessed using the following metrics and achievement targets:

Grade(s)	Metric	Achievement Targets
Grades 2-8	The average college readiness level based on scaled scores from the NWEA [®] MAP [®] reading and math tests administered in the spring.	Students enrolled for three* or more years will on average achieve scaled scores equal to or greater than the grade-level achievement targets for reading and math identified in this schedule.

*If the cohort of students enrolled for three or more years is not sufficient in size to conduct a valid analysis, the cohort of students enrolled for two or more years will be used.

Achievement Targets

NWEA MAP College Readiness Targets

Grade	MAP Reading Spring Target	MAP Math Spring Target
2	190	191
3	201	204
4	208	214
5	215	224
6	218	229
7	222	236
8	227	242

Measure 2: Student Growth

The academic growth of all students in grades 3 through 8 at the Academy will be assessed using the following metrics and growth targets:

Grade(s)	Metric	Growth Targets
Grades 3-8	Growth made by students from fall-to-spring in reading and math as measured by scaled scores on the NWEA MAP.	Students' fall-to-spring academic growth on average will demonstrate progress toward the grade-level achievement targets for reading and math identified in the schedule.

SECTION C

EDUCATIONAL PROGRAMS

EDUCATIONAL PROGRAM

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.3, the Academy shall implement, deliver and support the educational programs identified in this schedule.

Mission Statement

The staff, parents and board members of Eagle Crest Charter Academy accept the responsibility to develop students of high moral character, who attain a mastery level of the basics, are superb communicators, and will have a solid foundation for life-long learning.

Program Alignment to Mission, Vision and Values

Eagle Crest Charter Academy's ("Academy") educational program fulfills the Academy's mission, vision and values because it is grounded in a number of core beliefs that work together to guide the operation of the Academy. These core beliefs are the foundation of the Academy's educational program and, working together, ensure the Academy accomplishes what it has set out to do.

K-8 School Design

If students are to be adequately prepared for rigorous high school programming that leads to college readiness, then the elementary and middle school educational opportunities and experiences are critically important. The Academy's K-8 school design is central to ensuring a significant early investment in the lives of the students served.

Learning during the formative years of students' lives is foundational to future academic success. A student's reading skill at the end of third grade, for example, is a reasonably accurate predictor of whether or not that student will graduate from high school.¹ Early performance is important in all academic areas, and high-quality schooling across core academic content areas in the primary years is absolutely essential for later success in school and life. Studies by ACT note specifically that "the level of academic achievement that students attain by eighth grade has a larger impact on their college and career readiness . . . than anything that happens academically in high school."² The academic preparedness of students upon entry to high school greatly affects subsequent attainment: 82% of students who are placed in a high school's most intense curriculum go on to complete a bachelor's degree, compared to only 9% of those who are placed in a high school's least intense curriculum.³ The Academy's focus on providing exceptional learning opportunities for students in grades K-8 ensures that Academy students receive the high-quality education deserved and are well-prepared for rigorous high school study, leading to college readiness and life success.

¹ National Research Council, Preventing Reading Difficulties in Young Children, eds. Catherine E. Snow, Susan Burns, and Peg Griffin, Committee on the Prevention of Reading Difficulties in Young Children (Washington, DC: National Academy Press, 1998).

² ACT, The Forgotten Middle: Ensuring that All Students Are on Target for College and Career Readiness before High School (Iowa City, IA: ACT, 2008).

³ Clifford Adelman, The Toolbox Revisited: Paths to Degree Completion from High School Through College (Washington, DC: U.S. Department of Education, 2006).

The K-8 school design is not just beneficial to students academically, but prepares students to achieve success socially and emotionally as well⁴ Some suggest that the K-8 model is a more effective approach than the standard elementary, middle and high school models that many schools utilize. The transition to middle school can be highly challenging for many students at a time in life when students may not yet be prepared to cope with the increased responsibility and social pressures of middle school. This can result in regression on academic, emotional and social fronts as students seek to find footing in a new and unknown environment. A consistent K-8 schooling experience, with less transition and greater stability, serves to ensure that students develop appropriately during the middle school years and are better prepared to face the challenges of high school. In short, as a K-8 school, the Academy not only provides students with the foundation necessary to be successful academically, but also provides a greater sense of stability, security and community as students traverse the important adolescent years.

Curriculum

The Academy's curriculum is designed to prepare students for a rigorous high school curriculum to provide the best opportunity for college success. The Academy partners with National Heritage Academies ("NHA") to implement a curriculum built around the Michigan Academic Standards ("MAS"), which aligns with the mission and prepares students for success in high school, college and beyond.

The curriculum is aligned with the MAS for English language arts ("ELA") and mathematics and the Michigan Grade Level Content Expectations ("GLCE") for science, social studies, art and music and the Physical Education Content Standards and Benchmarks. This approach ensures students are learning the appropriate content for each grade level. Character development is an explicit and integrated component of the curriculum.⁵ Individual responsibility, integrity, personal character and effort are important contributors to success in school and life. In addition, the Academy instills character traits which are highly correlated with college success. With high-quality instruction, solid curricular tools to support instruction and rigorous assessment, the curriculum promotes academic success for students and equips students with the knowledge, understanding and skills needed to meet or exceed Michigan's standards and content expectations.

Core Content Areas

ELA

Literacy, which includes reading, writing and speaking, is a critical component of college- and career-readiness. "Low literacy levels often prevent high school students from mastering other subjects," and struggling readers are often excluded from academically challenging courses. More specifically, students who are able to comprehend complex texts are more likely to be successful

⁴ Pricilla Pardini, "Revival of the K-8 School: Criticism of Middle Schools Fuels Renewed Interest in a School Configuration of Yesteryear," *School Administrator*, March 1, 2002; Anne Marie Chaker, "Middle School Goes out of Fashion: Amid Evidence Kids Struggle to Move to Junior High, Districts Shift to K-8 Model," *The Wall Street Journal*, April 6, 2005; Marc S. Tucker and Judy B. Coddling, *Standards for our Schools: How to Set Them, Measure Them, and Reach Them* (San Francisco, CA: Jossey Bass, 1998).

⁵ See Matthew Davidson and Thomas Lickona, *Smart & Good High Schools: Integrating Excellence and Ethics for Success in School, Work, and Beyond* (Cortland, NY: Center for the 4th and 5th Rs, 2005). Respect and Responsibility / Washington D.C.: Character Education Partnership.

after high school.⁶ Developing reading proficiency and strong literacy skills in elementary and middle grades is the cornerstone of the ELA curriculum, which upholds the MAS to ensure college- and career-readiness for all students. The ELA curriculum is designed to produce highly literate students who are proficient readers, evaluative writers and collaborative, analytical members of the classroom and future workplaces.

The MAS focus on five strands of literacy: reading, writing, speaking, listening and language. To best prepare students for school and life in the 21st century, each strand emphasizes the integration, critical analysis and production of a variety of media and technology. The reading standards focus on a gradual increase in text complexity to ensure students' readiness "for the demands of college- and career-level reading."⁷ The writing standards emphasize argument and informational writing "based on substantive claims, sound reasoning, and relevant evidence," as well as research, "both short, focused projects and longer, in-depth research."⁸ By challenging students to speak and listen, the standards require that "students gain, evaluate and present increasingly complex information, ideas, and evidence" through academic discussion, collaboration and formal presentations. The language standards emphasize students' growth and expansion of vocabulary, appreciation of word nuances and use of formal English in writing and speaking.

- In kindergarten through second grades, the curriculum emphasizes the foundations of reading. These include the ability to decode automatically, read with fluency and gain the capacity to comprehend increasingly complex texts across a range of types and disciplines. Student literacy is emphasized through rich, domain-specific content in a variety of fiction and nonfiction texts, including a true balance of informational and literary genres.
- In third through fifth grades, reading instruction is centered on complex, grade-appropriate texts to prepare students for the complexity of college- and career-ready texts. Reading instruction emphasizes a balance of informational and literary texts.
- In sixth through eighth grades, teachers of ELA, social studies and science each provide content-specific textual literary experiences. The middle school curriculum includes a blend of literature and substantial exposure to literary non-fiction, including historical and scientific documents.

For students to access grade-level texts with increasing complexity, the curriculum also focuses on the development of strong academic vocabulary. Students are exposed to extensive academic vocabulary through reading instruction, and practice is extended through listening, discussion and writing. Vocabulary instruction accentuates the nuances of word meanings and variances through a wide range of contexts. Discussion and collaboration are also a focus of the ELA curriculum, as students apply reading skills to develop habits for providing text-based evidence in both conversation and writing. Students' writing emphasizes analysis of complex texts by supporting ideas and arguments with textual evidence and evaluation. Students learn to produce a variety of text types, including argument, informative, narrative and research-based pieces. Collaboration and integration of technology are important aspects of the writing process as students plan, draft,

⁶ ACT, Inc., *Reading Between the Lines: What the ACT Reveals About College Readiness in Reading* (Iowa City, IA, 2006).

⁷ National Governors Association Center for Best Practices, Council of Chief State School Officers, "Key Points in English Language Arts," *Common Core State Standards* (Washington, D.C.: National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010).

⁸ *Ibid.*

revise, edit and publish a wide range of writing pieces. The ELA curriculum also ensures students demonstrate adequate mastery of the essential conventions and grammar of Standard English in writing and speaking.⁹

Mathematics

If students are to be well-equipped for college and beyond, then students must be prepared through the kindergarten through eighth grade educational program to take Algebra II and other advanced mathematics courses in high school.

"A strong grounding in high school mathematics through Algebra II or higher correlates powerfully with access to college, graduation from college, and earning in the top quartile of income from employment."¹⁰ The development of a deep understanding of mathematical concepts makes such success possible. The Academy's mathematics curriculum is based on the MAS for mathematics. Through mastery of these standards, students develop a deep understanding of mathematical concepts. Students are also provided the opportunity to accelerate learning in seventh grade and complete Algebra I by eighth grade graduation, thus placing students on a college- and career-readiness trajectory. Research show that students who successfully complete Algebra I prior to entering high school are much more likely to complete other more advanced mathematics in high school and are "more than twice as likely to graduate from college" than students who do not complete Algebra I by eighth grade.¹¹

The National Council for Teachers of Mathematics has recognized the importance of the study of algebra in developing mathematical fluency and has also noted the importance of the study of other mathematics components such as number sense and operations, measurement, geometry, data analysis and probability and problem-solving. Number sense is developed through a variety of concrete models allowing students to use the area of the brain used for the comprehension of mathematical knowledge. Students are prepared to be fluent in computation using formal algorithms and also learn essential measurement and data analysis skills. In addition, students learn to make connections and apply mathematical knowledge through problem-solving and inquiry.

- In kindergarten through second grades, number sense and computational fluency are the main focus areas of students' learning. Students develop the skills necessary to progress into higher-level mathematics; through open-ended problem-solving, an increase of critical thinking skills and ability to see connections across mathematics as well as other subjects.
- In third through fifth grades, learning will shift from computation to fractional awareness. The ability to compose and decompose numbers, developed in the early grades, leads to a deeper understanding of fractions, percents, decimals and computation. Algebraic skills are developed as students begin working with patterns and equations with missing numbers.
- In sixth through eighth grades, the concentration will shift to the study of algebra and functions. Number sense remains a critical focus area through the study of integers, rational and irrational numbers, exponents and absolute values. Conceptual ideas are integrated

⁹ Coleman, David and Susan Pimentel, "Revised Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy," *Common Core State Standards* (Washington, D.C.: National Governors Association Center for Best Practices, Council of Chief State School Officers, 2012).

¹⁰ National Mathematics Advisory Panel, *Foundations for Success: The Final Report of the National Mathematics Advisory Panel* (Washington, D.C.: U.S. Department of Education, 2008).

¹¹ *Ibid.*

through lab activities that provide exploratory opportunities for students to explicitly connect abstract ideas to concrete examples.

The mathematics curriculum also teaches effective mathematical communication by engaging students in thinking, reading and writing about mathematics. This helps students understand the foundational concepts for success in more complex mathematical coursework.

Science

As the Association for the Advancement of Science and the National Council on Science explains, developing college-ready and scientifically literate students involves teaching a mixture of content knowledge, the practices and skills of scientists and information on the nature of science. The Michigan GLCE were created around the work and philosophy of these organizations and the NHA curriculum aligns to the GLCE. The curriculum, which includes study in life science, physical science and earth and space science, incorporates the use of Full Option Science Systems (“FOSS”), Delta Science Modules (“DSM”) and non-fiction readers to give students hands-on opportunities to develop content knowledge about the results of scientific discoveries regarding the natural world. The curriculum and resources also provide students the chance to participate in the scientific process of inquiry and discovery through conducting investigations, using instruments and applying mathematical skills that model the process used by scientists to learn about the universe. It also incorporates the skills required by the MAS for Literacy in Science for sixth through eighth grades, which require students to do high-level thinking and problem solving, incorporating scientific reading, writing, discussing and presenting.

- In kindergarten through second grades, the content of the science curriculum focuses on scientific learning primarily through the study of events and phenomena in nature as observed through the five senses. Investigations at this level are modeled, simple and structured allowing students to write journals on personal discoveries, create simple pictographs of data and draw conclusions from observations under the direction of the teacher. The incorporation of non-fiction readers on each topic provide students opportunities to develop grade-level appropriate science vocabulary.
- In third through fifth grades, the curriculum builds on these foundational skills and directs students to begin exploring cause and effect connections between events (e.g., the sun rises every day and it gets warmer during the day, therefore, the sun provides heat to earth). Investigations for students in third through fifth grades will still often be modeled, but the investigations are more complex and involve more detailed measurements, use of a variety of tools such as balances and microscopes and require students to control for multiple variables. Students engage in the practices of scientists by charting data, completing lab reports and creating graphs in order to communicate results of investigations orally and in writing.
- In sixth through eighth grades, the curriculum includes further exploration of cause and effect relationships while also connecting knowledge of concepts to real world examples and solidifying congruence between students' understanding of phenomena to that of the scientific community. Investigations are more student-directed, from the guiding question through the scientific procedures, to the organizing, analyzing and reporting of data. Within each unit of instruction, students employ the skills of scientists by making connections with respect to the content of the unit using the methods of science. The scientific method is

consistently integrated into content units throughout the year and students conduct science investigations through closed and open lab investigations in response to posed questions during content studies.

Social Studies

According to the Michigan Department of Education (“MDE”), “the purpose of social studies instruction is to develop social understanding and civic efficacy. The GLCEs balance disciplinary content and processes and skills that contribute to responsible citizenship and form a foundation for high school social studies coursework.” The NHA social studies curriculum, which is aligned to the Michigan GLCE, ensures students are not only prepared for high school and college, but also prepared for life as global citizens. Developing students' understanding in the disciplines of history, geography, civics and government, economics and public discourse ensures readiness for college and responsible citizen involvement. In addition to supporting learning in these areas, the social studies curriculum also incorporates the skills required by the MAS for Literacy in History/Social Studies in sixth through eighth grades, which allow students to develop and utilize critical thinking skills by making connections, inferences and arguments around the content and learned skills. This focus on content, skills and critical thinking produces students who are knowledgeable in social studies and prepared to participate in society as informed citizens.

The curriculum supports the social studies disciplines that best prepare students to be contributing members of society. Students who master the social studies curriculum understand how history, geography, civics and economics interact in a global society. Through exposure to primary and secondary sources, students develop knowledge of shared national and world history and are able to make connections between the past and present as well as between cultures and government systems.

- In kindergarten through second grades, students learn about the social studies disciplines by developing an understanding of culture and community through the lens of “Myself and Others,” “Families and Schools” and “The Local Community.” In these early grades, students begin to learn about history and culture in the surrounding world. Students study personal history, family history and examine local examples of the community and school to become familiar with basic geography, economy and functions of government.
- In third through fifth grades, students explore the social studies disciplines through the context of Michigan and the United States. Students build on prior social studies knowledge and apply new concepts to the study of the state of Michigan, the regions of the United States and the early history of the United States. By fifth grade, students apply the concepts of social studies to the history of pre-European America through the adoption of the Bill of Rights in 1791.
- In sixth through eighth grades, students regularly practice how to make connections between historical events in the United States, the world and current events. Students also develop knowledge of the relationship between geography, history, economics and culture. In sixth and seventh grades, students apply social studies concepts to the study of the Western and Eastern Hemispheres during ancient and modern times. In eighth grade, students continue the study of United States history from the writing of the Constitution through Reconstruction. The middle school curriculum gives students opportunities to extend this basic knowledge to gather more complex information, describe concepts in

more detail and deepen the understanding of the relationship between geography, economics and civics.

Co-curricular Areas

The Academy intends to nurture high-achieving well-rounded students at the school. The Academy offers the following co-curricular areas: art, music, library and educational technology and character development.

Art

The study of art allows students to understand and appreciate the subject while understanding the significant role art plays in the expression of ideas throughout history. Students in lower grades learn to recognize and describe art forms from a variety of historical eras and places, while learning that art takes many forms and has many purposes. Students study and reproduce styles and techniques used by artists and discuss art by examining and critiquing the work of artists. Students in upper elementary and middle school grades focus on comparing and contrasting artwork from different time periods, cultures, artists and mediums. Historical and contemporary art is studied as students create a variety of original works using appropriate styles and mediums to express themes, tone, mood and images.

Music

Students study the basics of music theory, music appreciation and the work of great composers. Students first learn to identify basic music forms and patterns, describe elements of music using appropriate music vocabulary and sing and play basic instruments. By listening to a variety of music, students compare and contrast music from different composers, historical periods, cultures, styles and genres. Students continue to refine musical knowledge and skills by singing, playing, improvising and composing. In addition, students learn to identify and use key signature, meter signature, notation, bass and treble clef, tempo and dynamic markings as well as learn to perform and respond to a conductor's cues and make necessary adjustments.

Physical Education

Physical education includes a sequence of developmental experiences through which children learn by moving. Students first learn and practice basic movement skills and manipulate objects by throwing, catching, striking, pushing, pulling and climbing. Students take part in a variety of individual and group activities, games to increase body awareness, practice new skills and learn to move safely with respect to other people. Students also begin to learn about the physical and mental benefits of a healthy lifestyle characterized by physical activity. Students will then use movement skills in more complex ways by learning the concepts of fairness, positive attitude, teamwork and sportsmanship. Students learn to recognize the correlation between practice and mastery of skill and complete various types of drills to increase abilities. Students ultimately refine all the simple and complex skills necessary for physical activity of various types and focus on healthy lifestyles through nutrition and fitness.

Library and Educational Technology

The Library and Educational Technology Program is designed to expose students to a wide variety of classic and contemporary literature, instill a life-long love of reading and develop information literacy skills. The library collections contain specific materials that support the curriculum and

provide students with a variety of high-quality literature and technological resources. The program has been crafted to reflect expectations of students set forth in several authoritative sources, including:

- The *Big6* model for teaching information skills created by Mike Eisenberg and Bob Berkowitz (1998);
- Information Literacy Standards developed by the American Association of School Librarians (“AASL”); and
- The Association for Educational Communications and Technology (“AECT”).

Technology also plays a supporting role in the core academic curriculum. Classroom teachers plan lessons that leverage technology and provide technology resources for students. Students use technology to research, compose and present information related to topics of study. The Academy has a designated area to serve as the library and computer lab, enabling students to access technology needed to support the technology program. Moreover, students have access to a computer in the classroom to promote the integrated use of technology to support learning.

Character Development

To foster the desired culture, the Academy emphasizes strong personal character and accountability. Many schools offer character development programs, but the Academy melds character education throughout instruction and challenges the Academy community to model the desired traits. In this way, students develop a strong character while learning about virtues and different types of character. This approach to character development creates a culture within the Academy conducive to teaching and learning, and it makes parents and educators true collaborators in the learning process.

The Academy implements the character development curriculum to promote college readiness, create an environment that is conducive to teaching and learning and support the academic goals of the Academy.

During each month of the school year, the Academy focuses on a monthly virtue: wisdom, respect, gratitude, self-control, perseverance, courage, encouragement, compassion and integrity. Students develop and practice the virtues that, in time, become ingrained habits.

Students are encouraged to develop moral character, show performance character and interact well with others through social character. Character is both taught and caught; in other words, students acquire the behaviors that are modeled. The Academy will ensure school staff continually model moral, performance and social character in formal and informal settings. Students also participate in character development assemblies, where staff and other students speak on the monthly virtue and share how the virtue is implemented. Students are encouraged to share experiences and progress is recognized.

Learning is an Adult Responsibility

Student learning is, first and foremost, an adult responsibility. Nothing has a greater impact on student learning than great teaching in every classroom. If a student does not master the material that is taught in a classroom, the student has not failed; rather, the school has failed the student. In cases where students do not learn as expected, instruction must be adjusted in order to ensure

that appropriate learning takes place for all students. Research has shown that the quality of instruction strongly predicts the level of learning in a classroom—more strongly than does a student’s race or income.¹²

A typical student who scores at the 50th percentile in mathematics is likely to continue scoring at the 50th percentile two years later, if the student has an average teacher and attends an average school. However, the same student—with an effective teacher in an effective school—would rise to the 96th percentile within that same two-year period. Conversely, an average student would decline to the 3rd percentile over that time period with an ineffective teacher.¹³ A vast body of research supports the finding that teacher’s content knowledge, pedagogical knowledge and classroom management skills influence students’ learning. As such, the Academy works to manage instruction to ensure that students receive consistent, high-quality instruction.

Having one principal manage nearly every employee in the school would not set the Academy up for success. “One of the common misconceptions about leadership at the school level is that it should reside with a single individual—namely the principal.”¹⁴ In order to create a different kind of school culture, both a principal and other school leaders are needed. A “strong leadership team,” including “the principal and other administrators operating as key players and working with a dedicated group of classroom teachers” is essential to the success of the Academy.¹⁵ In order to effectively manage instruction, the Academy has adopted a distributed leadership model through which the Academy principal is supported by three deans. This model allows teachers to receive frequent classroom observation and feedback from Academy leaders.

Quality instruction is the result of clear expectations for teachers, frequent observation, consistent feedback and coaching, an intentional focus on developing professional practices through ongoing learning and coaching and the collaborative work of a professional learning community. The Academy has implemented a system to hire the most qualified teachers, provide high-quality professional development opportunities, hold teachers accountable for academic results and provide support through weekly classroom observations and feedback. In this way, the Academy effectively ensures appropriate learning for all students.

College Readiness

Students must leave the Academy after 8th grade well-prepared for success in high school, ready to enroll in rigorous college- and career-preparatory high school programming. Students must also understand, however, that success in high school, college and life is not only about academic aptitude; other factors affect success as well. Indeed, both academic and psychosocial factors have a bearing on how students succeed in school and in life.

¹² Linda Darling-Hammond, “Teacher Quality and Student Achievement: A Review of State Policy Evidence,” Center for the Study of Teaching and Policy, University of Washington, 1999, Available from <http://www.politicalscience.uncc.edu/godwink/PPOL8687/WK11March%2029%20Teachers/Darling-Hammond%20Review%20essay%20on%20teacher%20quality%20and%20outcomes.pdf>.

¹³ Kirsten Miller, “School, Teacher, and Leadership Impacts on Student Achievement,” Policy Brief, Mid-continent Research for Education and Learning, November 2003 available from http://www.mcrel.org/PDF/PolicyBriefs/5032PI_PBSchoolTeacherLeaderBrief.pdf; Robert Marzano, What Works in Schools: Translating Research into Action (Alexandria, VA: ASCD, 2003).

¹⁴ Robert Marzano, What Works in Schools: Translating Research into Action (Alexandria, VA: ASCD, 2003).

¹⁵ Ibid.

The Academy's educational program thus includes a focus on developing college readiness in all students. Ultimately, the Academy promotes college readiness through a focus on both academic and psychosocial factors that influence school and life success: students develop key cognitive strategies and master content knowledge necessary to succeed in high school and beyond; students develop attitudinal and behavioral attributes correlated with college and life success; and students also develop contextual knowledge about high-school and college placement.¹⁶

These core beliefs, taken together, establish the foundation for the educational program of the Academy, and thereby ensure that the Academy both accomplishes its mission and vision and lives out its values.

Researched-based Practices

The educational program at the Academy is grounded in the systemic implementation of research-based educational practices that have been shown to produce positive results in terms of student learning. These research-based practices—which represent industry-leading standards and which characterize effective schools—have been refined and codified based on NHA's experience of managing charter schools over the past 15 years. These practices are:

- Measure Results
- Behave with Care
- Calendarize Priorities
- Manage Instruction
- Essential Learning Goals for All Students
- Teach Virtues
- Formative Assessment
- Utilize Common Curricular Tools
- Classrooms Exemplify Engagement, Clarity of Instructional Intent and Rigor
- Engage Parents
- Best Practices Become Common Practice

Faithful implementation of these practices enables the Academy to provide a high-quality K-8 education placing each student on the path to college readiness.

In order to know the Academy is fulfilling its responsibility to promote student learning, the Academy measures results at the student, classroom, teacher and school level. These results inform all of the Academy's decisions, from accountability to intervention. With data to inform decisions, relationships with students and amongst adults enable the Academy to act on evidence. An intentional school climate and culture has been established where all in the Academy behave with care for each student as a family does for its children, with the goal of self-managed classrooms.

Time is a critical resource for learning. Given this, classroom and school schedules reflect the principle that priorities need to be calendarized: math and ELA are scheduled to be taught in the morning, when possible; science and social studies are a focused priority; collaborative

¹⁶ See David T. Conley, *Toward a More Comprehensive Definition of College Readiness* (Eugene, WA: EPIC, 2007).

teacher planning time guides the implementation of the curriculum; teachers create, share and refine lessons and units in a professional learning community; and teachers examine evidence of student learning together with a focus on improving instruction and student learning. A distributed and shared leadership structure allows Academy leaders to manage instruction by observing and meeting one-on-one with all teachers on a weekly, scheduled basis in order to provide teachers with feedback and coaching.

The Academy's curriculum is deliberate in its college-preparatory design by defining essential learning goals for all students—and these learning goals closely align with the expectations outlined by the MAS. Since college and life success require more than academic aptitude, the Academy teaches virtues as an integrated and explicit part of the curriculum. Teachers and students use frequent, varying and ongoing assessment-based evidence to adjust instruction, and to implement and assess the Academy's curriculum. Additionally, the Academy utilizes common curricular materials that effectively support instruction and align with the Academy's curriculum.

A shared expectation across the Academy is that classrooms exemplify engagement, clarity of instructional intent and rigor. This is accomplished through effective instruction, classroom management and classroom curriculum design techniques. Further, teachers, staff and Academy leaders work to engage parents by initiating a positive relationship between the Academy and home. The Academy is a place where best practices become common practice. Research on effective schools consistently demonstrates the relationship between these practices and positive student outcomes.

Instructional Methods & Strategies

Learning is most effective when: 1) students are engaged in learning; 2) teachers can articulate what is being taught and students can describe what is being learned; and 3) students are performing work at the appropriate level of difficulty. Methods of instruction at the Academy, therefore, are designed to promote student engagement, to include clarity of instructional intent and to be appropriately rigorous. Since true learning requires that teachers shift the cognitive load to students in a purposeful and intentional way, teachers work to develop students' knowledge, understanding and skill gradually. Instruction takes various forms, including focused lessons, guided instruction, collaborative learning and independent work.¹⁷ The best approach is contextually-driven and contingent upon students' progress toward meeting instructional goals.

Beyond this, instruction includes effective, research-based instructional strategies embedded within daily lessons, implemented during instruction. Strategies with high probabilities of effectiveness¹⁸ are utilized based on the expected student learning outcomes of the lesson and are employed by teachers in accordance with student need. Such instructional strategies include the following, which have been identified as highly effective by researchers at Mid-continent Research for Education and Learning ("McREL"): 1) Identifying Similarities and Differences; 2) Summarizing and Note Taking; 3) Reinforcing Effort and Providing Recognition; 4) Homework and Practice; 5) Nonlinguistic Representations; 6) Cooperative Learning; 7) Setting Objectives

¹⁷ See Douglas Fisher and Nancy Frey, *Better Learning through Structured Teaching* (Alexandria, VA: ASCD, 2008).

¹⁸ See Robert Marzano, Debra Pickering, and Jane Pollock, *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement* (Upper Saddle River, NJ: Pearson Education, Inc., 2001).

and Providing Feedback; 8) Generating and Testing Hypotheses; and 9) Cues, Questions and Advanced Organizers. Teachers integrate these methods into instruction as appropriate, based both on student need and what research identifies as the most effective approach for content delivery.

The pedagogical approaches employed by teachers at the Academy ensure students master the essential learning goals articulated by the curriculum and develop college readiness in accordance with the Academy's educational design, the aligned Michigan GLCEs and the MAS. As teachers plan and implement instruction using these instructional methods and strategies, students gain the knowledge, proficiency and skills needed to perform at high levels.

Because effective instruction is the result of intentional planning, instruction is driven by a unique and collaborative planning approach. Planning is characterized by three sequential but interrelated types of planning: year-long planning, unit planning and daily planning. Each is discussed briefly below.

Year-long Plans: Teachers use year-long plans to ensure that students have the time and opportunity to learn all essential grade-level standards as outlined in the curriculum. Learning opportunities are organized using this instructional framework, an outline of what students are expected to learn over the course of the school year.

Unit Plans: Unit-level planning builds off of the year-long plan. Teachers use strategies and tools to routinely check for student understanding. Adjustments to instruction are made based on this student-elicited evidence. For example, a teacher may use small whiteboards, having students respond to questions or prompts. Students will write their answers and hold them up to show the teacher. Based on the students' level of understanding and responses, the teacher will adjust further instruction or grouping to meet the needs of the learners. Students also use the assessment results to track their learning and measure growth toward their academic goals using graphing or another form of record keeping.

Daily Plans: Daily instructional planning allows teachers to connect standards with specific instructional resources, effective teaching strategies, and the instructional methods that best support students' daily learning. Daily planning also includes developing strategies both to check for understanding and to determine if learning activities are providing intellectual engagement for each student.

Teachers work to differentiate instruction within each classroom to account for the diverse learning needs of the students who attend the Academy. According to Carol Ann Tomlinson, teachers may differentiate instruction by making adjustments to content, process, products and/or learning environment. Teachers work to ensure each student is provided with a rigorous academic and overall school culture leading to college readiness. By combining differentiation techniques with high-probability instructional methods and strategies teachers effectively promote and accelerate student learning.

Success in College, Work and Life

As noted above, the Academy's educational program has been designed to place students on a college readiness trajectory, effectively preparing students for success in college, work and life.

The Academy's curriculum has been developed to ensure students are academically prepared to enroll in rigorous high school programming upon leaving the Academy. Because college readiness and life success are dependent upon more than just academic aptitude, the Academy's educational program includes the development of attitudinal and behavioral characteristics associated with college and life success. It also provides students with opportunities to develop contextual readiness, including the development of awareness regarding high-school and college placement.

The Academy's curriculum, which is the core of its educational program, defines essential learning goals for all students. These learning goals prepare students academically and affectively for rigorous high school study and, subsequently, for college. The implementation of the curriculum enables the Academy to ensure all students are engaged with and progressively mastering instructional content. When instructional adjustments or interventions are needed, teachers work collaboratively under the direction of an instructional leader to ensure each student learns as required. Instruction is systemically designed to provide engagement, clarity of instructional intent and rigor, and student learning needs are addressed proactively through quick identification and response. Instructional leaders, including the principal and Academy deans, are actively involved in school-wide efforts to manage instruction through the provision of ongoing feedback and coaching based on regular and frequent classroom observations, one-on-one meetings and grade-level team meetings. The Classroom Framework of Instructional Practice is used by instructional leaders on an ongoing basis throughout efforts to capture and report teaching effectiveness within the Academy. This regular measurement of instruction, classroom management and classroom curricular design enables Academy leaders to provide practical feedback in a regular and timely manner and ensure all students receive high-quality instruction meeting individual learning needs. Academy leaders are also able to ensure all students are engaged in learning and progressing appropriately in terms of academic development.

Alignment of the Michigan Academic Standards

The Academy's educational program is driven by its curriculum, which includes the intended curriculum (essential learning goals for all students), the implemented curriculum (instructional content delivered by teachers in the classroom) and the assessed curriculum (the learning goals and objectives actually mastered by students). The curriculum's learning goals encompass academic standards in the core areas of learning including ELA, mathematics, science and social studies, as well as in other areas such as the arts, music and physical education. Because individual responsibility, integrity, personal character and effort are important contributors to success in school and life, and because character traits such as perseverance are highly correlated with college success, character development and the teaching of virtues is an explicit and integrated component of the curriculum.¹⁹ When coupled with high-quality instruction, solid curricular tools to support instruction and rigorous assessment, the curriculum promotes academic success, equipping students with the knowledge, understanding and skills needed to meet or exceed the performance standards currently established by the MDE.

¹⁹ See Matthew Davidson and Thomas Lickona, *Smart & Good High Schools: Integrating Excellence and Ethics for Success in School, Work, and Beyond* (Cortland, NY: Center for the 4th and 5th Rs, 2005). Respect and Responsibility / Washington D.C.: Character Education Partnership.

Curriculum Modification and Adaptation

The Academy's educational program has been designed to ensure all students achieve at high levels. It is the Academy's responsibility to ensure students master the expected grade level content, as articulated through the curriculum and the Michigan GLCEs. If students struggle to master this content, or are not yet on a learning trajectory corresponding with college readiness, then instruction must be adjusted and, if needed, intervention must be provided. Likewise, if students master content more quickly than expected, then enrichment or extension opportunities should be provided. The Academy uses a three-tier approach to ensure students' individual learning needs are met, and this approach allows teachers to make appropriate adaptations or modifications in order to meet the needs of all students.

Academic & Enrichment Support

In the first tier, classroom teachers respond to student learning needs for all students within the context of regular classroom instruction. Students complete a diagnostic assessment at the beginning of each school year, providing useful information for planning more effective instruction, and short-cycle assessments are used during daily instruction to check for understanding. Students who struggle to demonstrate mastery of curricular learning goals are provided with supplemental support within the classroom; corrective approaches include re-teaching, cooperative learning opportunities, differentiated instructional strategies targeting individual student need, learning centers and alternative materials. Likewise, students who exhibit mastery more quickly than expected or demonstrate learning going beyond grade-level expectations are provided with extension and enrichment opportunities to extend learning. These extension opportunities allow students to increase the depth of knowledge pertaining to grade-level content. Extensions and enrichment may be provided through cooperative learning opportunities, differentiated instructional strategies targeting individual needs for enrichment, learning centers and through the provision of alternative learning materials.

If struggling students do not master content through the Academy's first tier of intervention, then a more prescriptive second tier of intervention is utilized. This is based on a review of the following:

- Teacher referral; data from classroom assessments administered through daily operations to check for understanding, formative assessments and end-of-instruction assessments
- Northwest Evaluation Association™ ("NWEA™") results
- State assessment results
- Interim assessment results
- Parent input

As needed, students receive supplemental interventions using programs and approaches proven to accelerate student learning. For example, recent research on Direct Instruction confirms this approach can produce rapid and consistent improvements for students at-risk of academic failure.²⁰ Intervention programs, such as SRA's *Corrective Reading* and *Corrective Math*, may be used to quickly increase student achievement. When possible, interventions align closely with core content being taught to the whole class.

²⁰ Michael Rebar, *Academic Acceleration in First Grade Using the Direct Instruction Model*, Cheney, WA: Eastern Washington University, 2007), available from http://www.ewu.edu/getset/Academic_Acceleration_G1_TR_2007-1.pdf.

Other intervention strategies are provided in the classroom in a workshop setting, or are delivered through supplemental support outside of the general education classroom, during non-core educational programming. These include one or more of the following: 1) Small group intervention services to provide more individualized assistance for students with similar academic needs; 2) Extended learning time before or after school for students needing more time to master content; and 3) Summer learning programs for students requiring extended learning opportunities during the summer months.

If data demonstrate some students continue struggling to make appropriate progress, then the teachers refer those students to the Academy's Intervention Assistance Team ("IAT") for consideration for tier three interventions. The IAT consists of a student's classroom teacher(s), parent/guardian, a special education teacher and other specialists, and includes, as needed, a speech occupational therapist, psychologist, school social worker or any other person who has pertinent knowledge about the student. The IAT reviews current intervention strategies, monitors student progress and works together as student learning progresses. The IAT may prescribe an intensified approach focusing on fewer high-priority reading and math skills. Also, one-on-one concentrated and focused tutoring are considered as needed.

If the third-tier of intervention is successful, then the IAT continues to monitor student progress on a regular, frequent basis. However, if the intervention does not successfully promote student learning, the Academy's special education team conducts a referral meeting to decide whether psycho-educational or other testing is needed to determine if the student has special needs as defined by the Individuals with Disabilities Educational Improvement Act ("IDEIA").

Special education programming and English Language Learner ("ELL") programming is outlined below.

Special Education

When making educational placement decisions for students with disabilities, the Academy will ensure parents are contributing members of the Individualized Educational Program ("IEP") team, and together the team will make decisions that are subject to requirements regarding provision of the least-restrictive environment. When determining how services will be delivered to students with disabilities, the Academy will follow all Special Education Rules as issued by the MDE. If a child with a current IEP enrolls in the Academy, the Academy will implement the existing IEP to the extent possible or will provide an interim IEP agreed upon by parents until a new IEP can be developed. IEPs will be developed, revised and implemented in accordance with IDEIA and state law and regulations.

The Academy will fully comply with federal laws and regulations governing children with disabilities as follows:

1. The Academy is responsible for providing a free, appropriate public education to children with disabilities enrolled in the Academy determined through an IEP to require Special Education programs and services.
2. The Academy will ensure that children who are suspected of having disabilities are

properly evaluated by a multidisciplinary team, as defined in the Michigan Special Education Rules, and that children who have already been identified are re-evaluated by the multidisciplinary team at least every three years.

3. When a multidisciplinary team determines a special education student requires Special Education programs and services, the Academy will ensure the IEP is fully implemented in accordance with IDEIA and reviewed on an annual basis or more frequently as determined by the IEP team.

English Language Learners

The Academy is committed to providing a high-quality education to ELL students. As such, the Academy has developed an ELL program to ensure ELL students are successful learners equipped by the Academy with the essential knowledge and skills necessary for academic success, both in school and beyond. The Academy's ELL program has been designed with a number of foundational principles in mind, based on the Guiding Principles of Effective Practice as identified by the Center for Equity and Excellence in Education at The George Washington University. These principles are as follows:

- ELL students will be held to the same high expectations of learning established for all students;
- ELL students will develop full receptive and productive proficiencies in English in the domains of listening, speaking, reading and writing, consistent with expectations for all students;
- ELL students will be taught challenging content to enable them to meet performance standards in all content areas, including reading and language arts, mathematics, social studies, science, the fine arts, health and physical education, consistent with those for all students;
- ELL students will receive instruction building on their previous education and cognitive abilities and reflecting their language proficiency levels;
- ELL students will be evaluated with appropriate and valid assessments aligned to state and local standards, taking into account the language acquisition stages and cultural background of the students; and
- The academic success of ELL students will be a responsibility shared by all educators, the family and the community.

The ELL program includes Sheltered English Immersion ("SEI") in the classroom and English Language Development ("ELD") for specific language acquisition. SEI is the vehicle for the acquisition of grade level content and is present in all teacher-directed instruction, while ELD is the vehicle for accelerated proficiency in the English language. ELL students receive ELD from a qualified teacher (e.g. TESOL or ESL certification) and may take place during the workshop time or other non-core instructional time. The sum of all services to ELL students is referred to as the ELL Program and these services are administered by the principal and the appointed ELL coordinator at the Academy.

Assessment Program

In order to support regular and frequent assessment of the Academy's educational program, and progress toward the Academy's charter Contract educational goals, the regular collection of evidence has been established. The educational program is assessed through three cycles of

assessment: short-cycle, medium-cycle and long-cycle. While short- and medium-cycle assessments are used to measure students' progress toward mastery of each educational objective within the Academy's curriculum, medium- and long-cycle assessments are used to track student and Academy performance over time. Evidence of student learning is gathered frequently and through multiple means, including Oral Language, Questioning, Writing, Projects and Performances and Tests. Teachers use assessment results to understand how students are progressing and to adjust the instruction to support student needs. Additional information about each assessment cycle is provided below.

1. *Short-cycle assessment:* Teachers use short-cycle assessment to inform needed adjustments to the sequencing and pacing of unit plans. Teachers also use short-cycle assessment data to adjust instructional strategies and delivery methods within daily lessons.
2. *Medium-cycle assessment:* Medium-cycle assessment data are used to measure the progress of students toward proficiency in terms of the standards assessed through the state assessment. Data from medium-cycle assessments are used as teachers plan unit and daily instruction.
3. *Long-cycle assessment:* Long-cycle assessment data are used to understand student learning over extended periods of time. Assessments in this category include: state assessments; NWEA norm-referenced, growth-modeled assessments, given twice per year; and the English Language Proficiency Assessment.

NHA's Common Assessment Model

Contributing to the set of short- and medium-cycle assessments NHA has established a common assessment model including the use of optional weekly/chapter curriculum-based assessments and required interim assessments, in accordance with curricular program sequences.

- Curriculum-based assessments are used as 'end-of-instruction' assessments and are administered on a regular and frequent basis between interim testing periods. Curriculum-based assessments measure student mastery of standards that have been the focus of recent instruction and that are tested on subsequently-administered interim assessments.
- Interim assessments are administered every 6 or 9 weeks and their data provide high-level evidence of student mastery of the standards taught over an extended period of time. Ultimately, the common assessment model provides a system of integrated assessments that well-align with instructional objectives, are easy to access and administer, are scored through a streamlined and automated process (to the extent possible), and provide solid evidence about where students are in their learning and what support is needed to ensure appropriate learning progress is made.

Implementation of NHA's Common Assessment Model

NHA's common assessment model affords assessments in both ELA and mathematics for grades K-8.

Curriculum-based assessments and interim assessments are not intended to be the only point of

evidence of student performance for a recent instructional period, but they do represent one set of common data—across students in a classroom, classrooms in a school, and schools—that reflects students’ progression toward mastery of grade level curriculum.

The below table summarizes the assessments the Academy administers to ensure progress toward the Academy’s charter Contract educational goals.

Assessment *	Cycle	Grades	Description and Dates/Months Used	Rationale
State Assessment ELA and Math Tests	Long Cycle	3-8	<ul style="list-style-type: none"> • Criterion-referenced assessment administered as required for state and federal accountability purposes • 1 x per year/Spring 	Required by Michigan Department of Education; provides data regarding student performance in relation to accountability goals
State Assessment Science Tests	Long Cycle	5 & 8	<ul style="list-style-type: none"> • Criterion-referenced assessment administered as required for state and federal accountability purposes • 1 x per year/Spring 	Required by Michigan Department of Education; provides data regarding student performance in relation to accountability goals
State Assessment Social Studies Tests	Long Cycle	6	<ul style="list-style-type: none"> • Criterion-referenced assessment administered as required for state and federal accountability purposes • 1 x per year/Spring 	Required by Michigan Department of Education; provides data regarding student performance in relation to accountability goals
NWEA Measures of Academic Progress® (MAP®) for Primary Grades	Long Cycle	K-1	<ul style="list-style-type: none"> • Norm-referenced, growth modeled assessment administered to measure student growth and performance in Reading, Language Usage (Gr. 2-8 only) and Math • 2 x per year/Fall & Spring 	Enables Academy to measure: 1) student performance and growth over time; 2) comparative school and student performance among nationally normed sample; and 3) teaching and schooling effectiveness. Fall test will serve as a baseline measure of student performance, and may identify students at-risk of academic failure. Spring test will show student learning growth, as well as year-over-year student, grade and school growth.
NWEA MAP	Long Cycle	2-8		
English Language Proficiency Assessment (“ELPA”)	Long Cycle	K-8	<ul style="list-style-type: none"> • Students identified as ELLs participate in annual assessment of proficiency in English. As needed, students will be identified as ELLs through the ELPA Screener • 1 x per year/March-April 	Student progress through the levels of proficiency in English will be measured. Specific language domains requiring additional instruction are revealed through the assessment. Evaluation of the Academy’s programming for ELLs will be facilitated through test results and the Annual Measurable Achievement Objectives.
Common Interim Assessments	Medium Cycle	3-8	<ul style="list-style-type: none"> • Paper-based criterion-referenced assessments • 8-9 week intervals 	Interim assessments measure student progress toward mastery of the school curriculum, MAS, and Michigan’s GLCEs. The assessments inform instructional design and focus, enabling teachers to support individual student learning needs and promote mastery of standards. Results serve as feedback on the overall curriculum allowing for

				changes, adjustments, and improvements.
Curriculum-based Assessments	Short Cycle	K-8	<ul style="list-style-type: none"> • Paper-based criterion-referenced assessments • Weekly/every 2-3 weeks 	Curriculum-based assessments measure student progress toward mastery of the school curriculum and NYS Learning Standards. The assessments will inform instructional design and focus, enabling teachers to support individual student learning needs and promote mastery of standards on a regular basis.
Ongoing Teacher Assessments (Opportunities to Check for Understanding)	Short Cycle	K-8	<ul style="list-style-type: none"> • Teacher-developed assessments to measure student learning in terms of daily instructional objectives • Daily 	Data gathered through multiple means informs teachers' understanding of student progress regarding daily and unit learning goals. The use of multiple assessment approaches provides teachers with regular and frequent feedback on student progress toward mastery of learning goals.

* These assessments are those the Academy intends to administer during its renewal charter term. However, the list is subject to modification in accordance with MDE guidelines and schedules and in order to meet the assessment needs of the Academy.

The Academy's assessment program begins with assessment of student performance, specifically student growth and student proficiency. Using the battery of instruments described above, the Academy regularly reports the instances and magnitude of academic growth for its students, comparing the evidence of growth at the Academy with the results from other schools around the country. Student proficiency rates are considered as the Academy tracks its performance. The Academy employs several definitions of proficiency: mastery of the Michigan state test, above the 50th percentile of the NWEA national population of test takers and meeting college academic readiness standards. By using several proficiency comparison points, the Academy communicates performance levels to students in the context of state expectations (state assessment) and national expectations (NWEA).

Measures of student growth and proficiency are rolled into Academy-level statistics, where further analysis is often conducted. For example, in order to understand proficiency, the Academy may employ both absolute proficiency and risk-adjusted measures, which accommodate the important context variables related to student achievement. These measures, taken together, ensure the Academy appropriately tracks student learning and overall progress toward meeting the educational goals outlined in its charter Contract.

Middle School: Success in College, Work and Life

As introduced above, the educational program has been designed to be highly rigorous and to promote student engagement with classroom content. Because preparing students for college readiness is one of the principles upon which the Academy's entire educational program is based, its middle school program is designed to promote learning placing students on a college readiness trajectory. The Academy's educational program, including its curriculum and its instructional approach, provides middle school students with the types of knowledge, skill, understanding and behavior attributable to those who are enrolled in rigorous high school programming and those who, in turn, are successful in college, work and life.

In addition to its curriculum and its instructional approach, the Academy employs various strategies at the middle school level to ensure middle school students gain the skills required to be prepared for success in college, work and life. First, students engage in writing across the curriculum. David Conley identifies writing as one of the “two academic skills that are repeatedly identified as being centrally important to college success.”²¹ Because of this, the Academy works to provide students with ample opportunities to write—not just in ELA, but in other academic areas as well. This not only promotes college readiness in students, but also increases student performance in content areas like reading, math, science and social studies.²² Second, the Academy’s mathematics program has been designed to allow students to complete Algebra I by 8th grade. Algebra I is known to be an important gateway to the study of higher mathematics in high school; the Academy’s focus on preparing students to take more advanced mathematics programming in high school is consistent with its commitment to promote college readiness in all students and helps students develop the skills necessary to be successful in high school, college, work and life.

Educational Development Plans (“EDP”)

As per P.A. 141 of 2007, the Academy provides students with the opportunity to develop EDPs in grade seven. These EDPs include students’ personal information, career goals, assessment results, educational/training goals, plans of action for high school and post-secondary and post-school options, in accordance with the requirements of the law. EDPs are reviewed by parents as appropriate.

Program Evaluation

The Academy’s curriculum is designed to promote learning in accordance with the Academy’s goals and the requirements of the MDE. A key activity in determining the effectiveness of the Academy’s educational program is the alignment of the Academy’s various assessment practices to the academic standards articulated through Michigan’s standards. Such alignment allows Academy instructional staff and leadership to continuously monitor student progress against those standards. Through its partnership with NHA, the Academy has access to a suite of measures and assessments providing mounting evidence of student growth and competency with respect to the educational goals and expectations of the State of Michigan. These measures enable the Academy to evaluate if its educational program is being implemented effectively for all students.

Building an instructive suite of assessments is more than just picking tests to utilize. Each instrument to be used must be evaluated for what it assesses and how the constructs it employs for measuring student learning relate to the overarching goal of mastery of the Academy’s curriculum and the aligned GLCEs, MAS or Content Standards. Based on its partnership with NHA, the Academy has access to various vertical alignment documents matching data produced by assessments of the Academy’s curriculum with the data captured by the NWEA MAP, which will be predictive of performance on state assessments. Additionally, NWEA customizes its instrument to the state assessment, so the measurement topics described in the NWEA data can be aligned with the Academy’s curriculum and with the expectations outlined by the state.

²¹ Conley, D. (2010). *College and Career Readiness*. San Francisco, CA: Jossey-Bass.

²² See Reeves, D. “The Write Way.” *The American School Board Journal* 197(11): 46-47.

Each of these pieces, including teacher developed assessments, Common Assessments from NHA, NWEA MAP, other interim assessments and the state assessment must work together to produce a complete portrait of student learning if the Academy is to understand whether its educational program is successfully implemented and effective. Teacher-developed assessments are delivered in accordance with the implementation of the curriculum in order to determine student learning progress. Notably, Scoring Scales can be used to measure student learning progress on all Educational Objectives, and scores are tracked by both teachers and students in order to monitor student learning growth over time. The tracking of learning by students is a powerful tool in the learning process, as it “provides a vehicle for students to establish their own learning goals and to define success in terms of their own learning . . . allowing [them] to see their ‘knowledge gain’ throughout a grading period.” This is important because it “elicits ‘intrinsic’ motivation” and promotes student engagement with learning.²³ In addition to teacher-developed assessments, periodic interim assessments, which are also designed to measure students’ mastery of the curriculum’s Educational Objectives, may be used. Data from teacher-developed and common interim assessments are analyzed by teachers and Academy leadership to understand areas of student learning need and to determine the degree to which the educational program is effective in meeting the needs of all students. Predictive analytics are performed with assessment data to gauge the likelihood of student success on the state assessments, and interventions are subsequently organized, when needed, in order to promote student growth and mastery of curricular content.

The Academy also utilizes NWEA growth-modeled, criterion-referenced assessments to measure growth rates and proficiency levels of all students, as determined by NWEA’s norm-referenced criteria. NWEA assessments are administered at least two times per year and assessment results are reviewed after each administration. Fall test data serves as a baseline measure of student performance and may identify students at-risk of academic failure. Spring test data shows student learning growth within the year as well as year-to-year growth. Disaggregated data from NWEA assessments is used to identify specific student groups within the Academy that may be struggling with growth or proficiency. Additionally, Academy leadership utilizes this data to identify student learning needs within the Academy as a whole, looking for areas needing improvement within and across grade levels, in specific classrooms or in specific content or subject areas. NWEA assessment data are also utilized to identify gaps in the intended and implemented curriculum, and therefore help teachers during instructional planning.

The Academy strongly believes this balanced and integrated approach to evaluating the performance of its educational program ensures students progress appropriately. Results are measured at the school, classroom, teacher and student level in order to ensure all students’ learning needs are met while the Academy also progresses appropriately in terms of overall goals.

²³ Robert Marzano, *Classroom Assessment and Grading that Work* (Alexandria, VA: ASCD, 2006).

SECTION D
CURRICULUM

CURRICULUM

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.4, the Academy shall implement, deliver, and support the curriculum identified in this schedule.

The Academy has adopted the NHA curriculum. The curriculum for all subjects and courses is identified in this schedule. The curriculum has been reviewed and approved by The Center for Charter Schools.

Elementary

The following subjects/courses are offered at the Academy:

Course	K	1	2	3	4	5	6	7	8
English Language Arts	X	X	X	X	X	X	X	X	X
Mathematics	X	X	X	X	X	X	X	X	X
Science	X	X	X	X	X	X	X	X	X
Social Studies	X	X	X	X	X	X	X	X	X
Physical Education	X	X	X	X	X	X	X	X	X
Music	X	X	X	X	X	X	X	X	X
Art	X	X	X	X	X	X	X	X	X



ELA Common Core State Standards

Strand: Reading – Literature

Topic: Key Ideas and Details

Anchor 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Grade	Common Core State Standard
11-12	RL.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
9-10	RL.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
8	RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
7	RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
6	RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
5	RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
4	RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
3	RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2	RL.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
1	RL.1.1 Ask and answer questions about key details in a text.
K	RL.K.1 With prompting and support, ask and answer questions about key details in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Key Ideas and Details

Anchor 2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

Grade	Common Core State Standard
11-12	RL.11-12.2 Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.
9-10	RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
8	RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
7	RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.
6	RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
5	RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
4	RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.
3	RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
2	RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
1	RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.
K	RL.K.2 With prompting and support, retell familiar stories, including key details.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Key Ideas and Details

Anchor 3: Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Grade	Common Core State Standard
11-12	RL.11-12.3 Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).
9-10	RL.9-10.3 Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.
8	RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
7	RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).
6	RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
5	RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
4	RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).
3	RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
2	RL.2.3 Describe how characters in a story respond to major events and challenges.
1	RL.1.3 Describe characters, settings, and major events in a story, using key details.
K	RL.K.3 With prompting and support, identify characters, settings, and major events in a story.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Reading – Literature

Topic: Craft and Structure

Anchor 4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Grade	Common Core State Standard
11-12	RL.11-12.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)
9-10	RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).
8	RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
7	RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.
6	RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
5	RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
4	RL.4.1 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).
3	RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.
2	RL.2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
1	RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
K	RL.K.4 Ask and answer questions about unknown words in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Craft and Structure

Anchor 5: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

Grade	Common Core State Standard
11-12	RL.11-12.5 Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.
9-10	RL.9-10.5 Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.
8	RL.8.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
7	RL.7.5 Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.
6	RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
5	RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
4	RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.
3	RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
2	RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
1	RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
K	RL.K.5 Recognize common types of texts (e.g., storybooks, poems).

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Reading – Literature

Topic: Craft and Structure

Anchor 6: Assess how point of view or purpose shapes the content and style of a text.

Grade	Common Core State Standard
11-12	RL.11-12.6 Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).
9-10	RL.9-10.6 Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.
8	RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.
7	RL.7.6 Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.
6	RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text.
5	RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.
4	RL.4.6 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.
3	RL.3.6 Distinguish their own point of view from that of the narrator or those of the characters.
2	RL.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.
1	RL.1.6 Identify who is telling the story at various points in a text.
K	RL.K.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Reading – Literature

Topic: Integration of Knowledge and Ideas

Anchor 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Grade	Common Core State Standard
11-12	RL.11-12.7 Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)
9-10	RL.9-10.7 Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's —Musée des Beaux Artsll and Breughel's Landscape with the Fall of Icarus).
8	RL.8.7 Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.
7	RL.7.7 Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).
6	RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they —seell and —hearll when reading the text to what they perceive when they listen or watch.
5	RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
4	RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
3	RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).
2	RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
1	RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.
K	RL.K.7 With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Integration of Knowledge and Ideas

Anchor 8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

Grade	Common Core State Standard
11-12	RL.11-12.8 (Not applicable to literature)
9-10	RL.9-10.8 (Not applicable to literature)
8	RL.8.8 (Not applicable to literature)
7	RL.7.8 (Not applicable to literature)
6	RL.6.8 (Not applicable to literature)
5	RL.5.8 (Not applicable to literature)
4	RL.4.8 (Not applicable to literature)
3	RL.3.8 (Not applicable to literature)
2	RL.2.8 (Not applicable to literature)
1	RL.1.8 (Not applicable to literature)
K	RL.K.8 (Not applicable to literature)

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Integration of Knowledge and Ideas

Anchor 9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Grade	Common Core State Standard
11-12	RL.11-12.9 Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.
9-10	RL.9-10.9 Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).
8	RL.8.9 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new
7	RL.7.9 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.
6	RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.
5	RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
4	RL.4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.
3	RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
2	RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.
1	RL.1.9 Compare and contrast the adventures and experiences of characters in stories.
K	RL.K.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Literature

Topic: Range of Reading and Level of Text Complexity

Anchor 10: Read and comprehend complex literary and informational texts independently and proficiently.

Grade	Common Core State Standard
11-12	RL.11-12.10 By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.
9-10	RL.9-10.10 By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.
8	RL.8.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.
7	RL.7.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
6	RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
5	RL.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.
4	RL.4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
3	RL.3.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.
2	RL.2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.
1	RL.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1.
K	RL.K.10 Actively engage in group reading activities with purpose and understanding.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Key Ideas and Details

Anchor 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Grade	Common Core State Standard
11-12	RI.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
9-10	RI.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
8	RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
7	RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
6	RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
5	RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
4	RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
3	RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
2	RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
1	RI.1.1 Ask and answer questions about key details in a text.
K	RI.K.1 With prompting and support, ask and answer questions about key details in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Key Ideas and Details

Anchor 2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

Grade	Common Core State Standard
11-12	RI.11-12.2 Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
9-10	RI.9-10.2 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
8	RI.8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
7	RI.7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
6	RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
5	RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
4	RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.
3	RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.
2	RL.2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
1	RI.1.2 Identify the main topic and retell key details of a text
K	RI.K.2 With prompting and support, identify the main topic and retell key details of a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Key Ideas and Details

Anchor 3: Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Grade	Common Core State Standard
11-12	RI.11-12.3 Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
9-10	RI.9-10.3 Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
8	RI.8.3 Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
7	RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).
6	RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).
5	RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
4	RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
3	RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
2	RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
1	RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.
K	RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Craft and Structure

Anchor 4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Grade	Common Core State Standard
11-12	RI.11-12.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
9-10	RI.9-10.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
8	RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
7	RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
6	RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
5	RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
4	RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
3	RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
2	RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
1	RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
K	RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Craft and Structure

Anchor 5: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

Grade	Common Core State Standard
11-12	RI.11-12.5 Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
9-10	RI.9-10.5 Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).
8	RI.8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.
7	RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.
6	RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.
5	RI.5.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
4	RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
3	RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
2	RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
1	RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
K	RI.K.5 Identify the front cover, back cover, and title page of a book.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Craft and Structure

Anchor 6: Assess how point of view or purpose shapes the content and style of a text.

Grade	Common Core State Standard
11-12	RI.11-12.6 Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text.
9-10	RI.9-10.6 Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.
8	RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
7	RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.
6	RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.
5	RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
4	RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.
3	RI.3.6 Distinguish their own point of view from that of the author of a text.
2	RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
1	RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
K	RI.K.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Integration of Knowledge and Ideas

Anchor 7: Assess how point of view or purpose shapes the content and style of a text.

Grade	Common Core State Standard
11-12	RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
9-10	RI.9-10.7 Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
8	RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
7	RI.7.7 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).
6	RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
5	RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
4	RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
3	RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
2	RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
1	RI.1.7 Use the illustrations and details in a text to describe its key ideas.
K	RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Integration of Knowledge and Ideas

Anchor 8: Assess how point of view or purpose shapes the content and style of a text.

Grade	Common Core State Standard
11-12	RI.11-12.8 Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses).
9-10	RI.9-10.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
8	RI.8.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
7	RI.7.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.
6	RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
5	RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
4	RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.
3	RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
2	RI.2.8 Describe how reasons support specific points the author makes in a text.
1	RI.1.8 Identify the reasons an author gives to support points in a text.
K	RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Integration of Knowledge and Ideas

Anchor 9: Assess how point of view or purpose shapes the content and style of a text.

Grade	Common Core State Standard
11-12	RI.11-12.9 Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.
9-10	RI.9-10.9 Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.
8	RI.8.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.
7	RI.7.9 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.
6	RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).
5	RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
4	RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.
3	RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.
2	RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.
1	RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
K	RI.K.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Informational Texts

Topic: Range of Reading and Level of Text Complexity

Anchor 10: Read and comprehend complex literary and informational texts independently and proficiently.

Grade	Common Core State Standard
11-12	RI.11-12.10 By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.
9-10	RI.9-10.10 By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.
8	RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.
7	RI.7.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
6	RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
5	RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently
4	RI.4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
3	RI.3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.
2	RI.2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.
1	RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.
K	RI.K.10 Actively engage in group reading activities with purpose and understanding.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Reading – Foundational Skills

Topic: Print Concepts

Grade	Common Core State Standard
5	RF.5.1 Not applicable
4	RF.4.1 Not applicable
3	RF.3.1 Not applicable
2	RF.2.1 Not applicable
1	RF.1.1 Demonstrate understanding of the organization and basic features of print. <ul style="list-style-type: none"> a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).
K	RF.K.1 Demonstrate understanding of the organization and basic features of print. <ul style="list-style-type: none"> a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet.

Strand: Reading – Foundational Skills

Topic: Phonological Awareness

Grade	Common Core State Standard
5	RF.5.2 Not applicable
4	RF.4.2 Not applicable
3	RF.3.2 Not applicable
2	RF.2.2 Not applicable
1	RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). <ul style="list-style-type: none"> a. Distinguish long from short vowel sounds in spoken single-syllable words. b. Orally produce single-syllable words by blending sounds (phonemes) including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).
K	RF.K.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). <ul style="list-style-type: none"> a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.* (This does not include CVCs ending with /l/, /r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

Note: Reading Foundational Skills apply to grades K-5 only.



Strand: Reading – Foundational Skills

Topic: Phonics and Word Recognition

Grade	Common Core State Standard
5	RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
4	RF.4.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
3	RF.3.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Identify and know the meaning of the most common prefixes and derivational suffixes. Decode words with common Latin suffixes. Decode multisyllable words. Read grade-appropriate irregularly spelled words.
2	RF.2.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Distinguish long and short vowels when reading regularly spelled one-syllable words. Know spelling-sound correspondences for additional common vowel teams. Decode regularly spelled two-syllable words with long vowels. Decode words with common prefixes and suffixes. Identify words with inconsistent but common spelling-sound correspondences. Recognize and read grade-appropriate irregularly spelled words.
1	RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Know the spelling-sound correspondences for common consonant digraphs. Decode regularly spelled one-syllable words. Know final -e and common vowel team conventions for representing long vowel sounds. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. Decode two-syllable words following basic patterns by breaking the words into syllables. Read words with inflectional endings. Recognize and read grade-appropriate irregularly spelled words.
K	RF.K.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. Read common high-frequency words by sight (e.g., <i>the, of, to, you, she, my, is, are, do, does</i>). Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

Note: Reading Foundational Skills apply to grades K-5 only.



Strand: Reading – Foundational Skills

Topic: Fluency

Grade	Common Core State Standard
5	RF.5.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
4	RF.4.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
3	RF.3.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
2	RF.2.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
1	RF.1.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
K	RF.K.4 Read emergent-reader texts with purpose and understanding.

Note: Reading Foundational Skills apply to grades K-5 only.



Strand: Writing

Topic: Text Types and Purposes

Anchor 1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Grade	Common Core State Standard
11-12	<p>W.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <ol style="list-style-type: none"> Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. Provide a concluding statement or section that follows from and supports the argument presented.
9-10	<p>W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <ol style="list-style-type: none"> Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. Provide a concluding statement or section that follows from and supports the argument presented.
8	<p>W.8.1 Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented.



7	<p>W.7.1 Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented.
6	<p>W.6.1 Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> Introduce claim(s) and organize the reasons and evidence clearly. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. Establish and maintain a formal style. Provide a concluding statement or section that follows from the argument presented.
5	<p>W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <ol style="list-style-type: none"> Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. Provide logically ordered reasons that are supported by facts and details. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). Provide a concluding statement or section related to the opinion presented.
4	<p>W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <ol style="list-style-type: none"> Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. Provide reasons that are supported by facts and details. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). Provide a concluding statement or section related to the opinion presented.
3	<p>W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.</p> <ol style="list-style-type: none"> Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. Provide reasons that support the opinion. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. Provide a concluding statement or section.
2	<p>W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.</p>



1	W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
K	W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...).

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Writing

Topic: Text Types and Purposes

Anchor 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Grade	Common Core State Standard
11-12	<p>W.11-12.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <ul style="list-style-type: none"> a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
9-10	<p>W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <ul style="list-style-type: none"> a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).



8	<p>W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ul style="list-style-type: none"> a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.
7	<p>W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ul style="list-style-type: none"> a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.
6	<p>W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ul style="list-style-type: none"> a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.



5	<p>W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., <i>in contrast</i>, <i>especially</i>). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.
4	<p>W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., <i>another</i>, <i>for example</i>, <i>also</i>, <i>because</i>). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.
3	<p>W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., <i>also</i>, <i>another</i>, <i>and</i>, <i>more</i>, <i>but</i>) to connect ideas within categories of information. d. Provide a concluding statement or section.
2	<p>W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.</p>
1	<p>W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</p>
K	<p>W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.</p>

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Writing

Topic: Text Types and Purposes

Anchor 3: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Grade	Common Core State Standard
11-12	<p>W.11-12.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> <ul style="list-style-type: none"> a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
9-10	<p>W.9-10.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> <ul style="list-style-type: none"> a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
8	<p>W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <ul style="list-style-type: none"> a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

7	<p>W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <ol style="list-style-type: none"> Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. Provide a conclusion that follows from and reflects on the narrated experiences or events.
6	<p>W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <ol style="list-style-type: none"> Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. Provide a conclusion that follows from the narrated experiences or events.
5	<p>W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events.
4	<p>W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use dialogue and description to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words and phrases to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events.

3	<p>W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ul style="list-style-type: none"> a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.
2	<p>W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.</p>
1	<p>W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.</p>
K	<p>W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.</p>

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Production and Distribution of Writing

Anchor 4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Grade	Common Core State Standard
11-12	W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
9-10	W.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
8	W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
7	W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
6	W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5	W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
4	W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
3	W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
2	W.2.4 (Begins in grade 3)
1	W.1.4 (Begins in grade 3)
K	W.K.4 (Begins in grade 3)

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Production and Distribution of Writing

Anchor 5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

Grade	Common Core State Standard
11-12	W.11-12.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
9-10	W.9-10.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
8	W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
7	W.7.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
6	W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
5	W.5.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
4	W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
3	W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
2	W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
1	W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
K	W.K.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Production and Distribution of Writing

Anchor 6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Grade	Common Core State Standard
11-12	W.11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
9-10	W.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
8	W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
7	W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.
6	W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
5	W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.
4	W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.
3	W.3.6 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.
2	W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
1	W.1.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
K	W.K.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Research to Build and Present Writing

Anchor 7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

Grade	Common Core State Standard
11-12	W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
9-10	W.9-10.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
8	W.8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
7	W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
6	W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
5	W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
4	W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
3	W.3.7 Conduct short research projects that build knowledge about a topic.
2	W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
1	W.1.7 Participate in shared research and writing projects (e.g., explore a number of —how-to books on a given topic and use them to write a sequence of instructions).
K	W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Research to Build and Present Writing

Anchor 8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Grade	Common Core State Standard
11-12	W.11-12.1 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
9-10	W.9-10.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
8	W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
7	W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
6	W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
5	W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
4	W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
3	W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
2	W.2.8 Recall information from experiences or gather information from provided sources to answer a question.
1	W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
K	W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.



Strand: Writing

Topic: Research to Build and Present Writing

Anchor 9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

Grade	Common Core State Standard
11-12	<p>W.11-12.1 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grades 11–12 Reading standards</i> to literature (e.g., —Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics¹¹). b. Apply <i>grades 11–12 Reading standards</i> to literary nonfiction (e.g., —Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes, and arguments in works of public advocacy [e.g., <i>The Federalist</i>, presidential addresses]¹¹).
9-10	<p>W.9-10.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grades 9–10 Reading standards</i> to literature (e.g., —Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]¹¹). b. Apply <i>grades 9–10 Reading standards</i> to literary nonfiction (e.g., —Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning¹¹).
8	<p>W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grade 8 Reading standards</i> to literature (e.g., —Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new¹¹). b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., —Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced¹¹).
7	<p>W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grade 7 Reading standards</i> to literature (e.g., —Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history¹¹). b. Apply <i>grade 7 Reading standards</i> to literary nonfiction (e.g. —Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims¹¹).



6	<p>W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grade 6 Reading standards</i> to literature (e.g., —Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics). b. Apply <i>grade 6 Reading standards</i> to literary nonfiction (e.g., —Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not).
5	<p>W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grade 5 Reading standards</i> to literature (e.g., —Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]). b. Apply <i>grade 5 Reading standards</i> to informational texts (e.g., —Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]).
4	<p>W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply <i>grade 4 Reading standards</i> to literature (e.g., —Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions].). b. Apply <i>grade 4 Reading standards</i> to informational texts (e.g., —Explain how an author uses reasons and evidence to support particular points in a text).
3	W.3.9 (Begins in grade 4)
2	W.2.9 (Begins in grade 4)
1	W.1.9 (Begins in grade 4)
K	W.K.9 (Begins in grade 4)

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Writing

Topic: Range of Writing

Anchor 10: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Grade	Common Core State Standard
11-12	W.11-12.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
9-10	W.9-10.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
8	W.8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
7	W.7.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
6	W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
5	W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
4	W.4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
3	W.3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
2	W.2.10 (Begins in grade 3)
1	W.1.10 (Begins in grade 3)
K	W.K.10 (Begins in grade 3)

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Speaking and Listening

Topic: Comprehension and Collaboration

Anchor 1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Grade	Common Core State Standard
11-12	<p>SL.11-12.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
9-10	<p>SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.



8	<p>SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.
7	<p>SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.
6	<p>SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
5	<p>SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.



4	<p>SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.
3	<p>SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.
2	<p>SL.2.1 Participate in collaborative conversations with diverse partners about <i>grade 2 topics and texts</i> with peers and adults in small and larger groups.</p> <ul style="list-style-type: none"> a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
1	<p>SL.1.1 Participate in collaborative conversations with diverse partners about <i>grade 1 topics and texts</i> with peers and adults in small and larger groups.</p> <ul style="list-style-type: none"> a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion.
K	<p>SL.K.1 Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups.</p> <ul style="list-style-type: none"> a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Speaking and Listening

Topic: Comprehension and Collaboration

Anchor 2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Grade	Common Core State Standard
11-12	SL.11-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
9-10	SL.9-10.2 Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
8	SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.
7	SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
6	SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
5	SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
4	SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
3	SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
2	SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
1	SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
K	SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Speaking and Listening

Topic: Comprehension and Collaboration

Anchor 3: Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Grade	Common Core State Standard
11-12	SL.11-12.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
9-10	SL.9-10.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.
8	SL.8.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.
7	SL.7.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
6	SL.6.3 Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.
5	SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
4	SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.
3	SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
2	SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
1	SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
K	SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Speaking and Listening

Topic: Presentation of Knowledge and Ideas

Anchor 4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Grade	Common Core State Standard
11-12	SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
9-10	SL.9-10.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.
8	SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
7	SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
6	SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
5	SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
4	SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
3	SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
2	SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.
1	SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
K	SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.



Strand: Speaking and Listening

Topic: Presentation of Knowledge and Ideas

Anchor 5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Grade	Common Core State Standard
11-12	SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
9-10	SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
8	SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
7	SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
6	SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
5	SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
4	SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
3	SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
2	SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
1	SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings
K	SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Speaking and Listening

Topic: Presentation of Knowledge and Ideas

Anchor 6: Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Grade	Common Core State Standard
11-12	SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.
9-10	SL.9-10.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
8	SL.8.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
7	SL.7.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
6	SL.6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
5	SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.
4	SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.
3	SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
2	SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
1	SL.1.6 Produce complete sentences when appropriate to task and situation.
K	SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Language

Topic: Conventions of Standard English

Anchor 1: Demonstrate command of the conventions of standard English grammar and usage when writing and speaking.

Grade	Common Core State Standard
11-12	<p>L.11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. b. Resolve issues of complex or contested usage, consulting references (e.g., <i>Merriam-Webster's Dictionary of English Usage</i>, <i>Garner's Modern American Usage</i>) as needed.
9-10	<p>L.9-10.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Use parallel structure.* b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.
8	<p>L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. b. Form and use verbs in the active and passive voice. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. c. Recognize and correct inappropriate shifts in verb voice and mood.*
7	<p>L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of phrases and clauses in general and their function in specific sentences. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.*
6	<p>L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Use intensive pronouns (e.g., <i>myself</i>, <i>ourselves</i>). c. Recognize and correct inappropriate shifts in pronoun number and person.* d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).* e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*



5	<p>L.5.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., <i>I had walked</i>; <i>I have walked</i>; <i>I will have walked</i>) verb tenses. c. Use verb tense to convey various times, sequences, states, and conditions. d. Recognize and correct inappropriate shifts in verb tense.* e. Use correlative conjunctions (e.g., <i>either/or</i>, <i>neither/nor</i>).
4	<p>L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Use relative pronouns (<i>who</i>, <i>whose</i>, <i>whom</i>, <i>which</i>, <i>that</i>) and relative adverbs (<i>where</i>, <i>when</i>, <i>why</i>). b. Form and use the progressive (e.g., <i>I was walking</i>; <i>I am walking</i>; <i>I will be walking</i>) verb tenses. c. Use modal auxiliaries (e.g., <i>can</i>, <i>may</i>, <i>must</i>) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., <i>to</i>, <i>too</i>, <i>two</i>; <i>there</i>, <i>their</i>).*
3	<p>L.3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., <i>childhood</i>). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., <i>I walked</i>; <i>I walk</i>; <i>I will walk</i>) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.
2	<p>L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Use collective nouns (e.g., <i>group</i>). b. Form and use frequently occurring irregular plural nouns (e.g., <i>feet</i>, <i>children</i>, <i>teeth</i>, <i>mice</i>, <i>fish</i>). c. Use reflexive pronouns (e.g., <i>myself</i>, <i>ourselves</i>). d. Form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat</i>, <i>hid</i>, <i>told</i>). e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie</i>; <i>The little boy watched the movie</i>; <i>The action movie was watched by the little boy</i>).

1	<p>L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Print all upper- and lowercase letters. b. Use common, proper, and possessive nouns. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop). d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything). e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home). f. Use frequently occurring adjectives. g. Use frequently occurring conjunctions (e.g., <i>and</i>, <i>but</i>, <i>or</i>, <i>so</i>, <i>because</i>). h. Use determiners (e.g., articles, demonstratives). i. Use frequently occurring prepositions (e.g., <i>during</i>, <i>beyond</i>, <i>toward</i>). j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
K	<p>L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog</i>, <i>dogs</i>; <i>wish</i>, <i>wishes</i>). d. Understand and use question words (interrogatives) (e.g., <i>who</i>, <i>what</i>, <i>where</i>, <i>when</i>, <i>why</i>, <i>how</i>). e. Use the most frequently occurring prepositions (e.g., <i>to</i>, <i>from</i>, <i>in</i>, <i>out</i>, <i>on</i>, <i>off</i>, <i>for</i>, <i>of</i>, <i>by</i>, <i>with</i>). f. Produce and expand complete sentences in shared language activities.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Language

Topic: Conventions of Standard English

Anchor 2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Grade	Common Core State Standard
11-12	<p>L.11-12.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Observe hyphenation conventions. b. Spell correctly.
9-10	<p>L.9-10.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. b. Use a colon to introduce a list or quotation. c. Spell correctly.
8	<p>L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. b. Use an ellipsis to indicate an omission. c. Spell correctly.
7	<p>L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i> but not <i>He wore an old[,] green shirt</i>). b. Spell correctly.
6	<p>L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly.
5	<p>L.5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use punctuation to separate items in a series.* b. Use a comma to separate an introductory element from the rest of the sentence. c. Use a comma to set off the words <i>yes</i> and <i>no</i> (e.g., <i>Yes, thank you</i>), to set off a tag question from the rest of the sentence (e.g., <i>It's true, isn't it?</i>), and to indicate direct address (e.g., <i>Is that you, Steve?</i>). d. Use underlining, quotation marks, or italics to indicate titles of works. e. Spell grade-appropriate words correctly, consulting references as needed.



4	<p>L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed.
3	<p>L.3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Capitalize appropriate words in titles. b. Use commas in addresses. c. Use commas and quotation marks in dialogue. d. Form and use possessives. e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., <i>sitting, smiled, cries, happiness</i>). f. Use spelling patterns and generalizations (e.g., <i>word families, position-based spellings, syllable patterns, ending rules, meaningful word parts</i>) in writing words. g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
2	<p>L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., <i>cage</i> → <i>badge</i>; <i>boy</i> → <i>boil</i>). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
1	<p>L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Capitalize dates and names of people. b. Use end punctuation for sentences. c. Use commas in dates and to separate single words in a series. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
K	<p>L.K.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Capitalize the first word in a sentence and the pronoun <i>I</i>. b. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Language

Topic: Knowledge of Language

Anchor 3: Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Grade	Common Core State Standard
11-12	<p>L.11-12.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> <p>a. Vary syntax for effect, consulting references (e.g., Tufte's <i>Artful Sentences</i>) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.</p>
9-10	<p>L.9-10.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> <p>a. Write and edit work so that it conforms to the guidelines in a style manual (e.g., <i>MLA Handbook</i>, <i>Turabian's Manual for Writers</i>) appropriate for the discipline and writing type.</p>
8	<p>L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).</p>
7	<p>L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*</p>
6	<p>L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Vary sentence patterns for meaning, reader/listener interest, and style.*</p> <p>b. Maintain consistency in style and tone.*</p>
5	<p>L.5.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p> <p>b. Compare and contrast the varieties of English (e.g., <i>dialects</i>, <i>registers</i>) used in stories, dramas, or poems.</p>
4	<p>L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Choose words and phrases to convey ideas precisely.*</p> <p>b. Choose punctuation for effect.*</p> <p>c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).</p>

3	L.3.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ul style="list-style-type: none"> a. Choose words and phrases for effect.* b. Recognize and observe differences between the conventions of spoken and written standard English.
2	L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ul style="list-style-type: none"> a. Compare formal and informal uses of English.
1	L.1.3 (Begins in grade 2)
K	L.K.3 (Begins in grade 2)

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Language

Topic: Vocabulary Acquisition and Use

Anchor 4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

Grade	Common Core State Standard
11-12	<p>L.11-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 11–12 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., <i>conceive</i>, <i>conception</i>, <i>conceivable</i>). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
9-10	<p>L.9-10.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 9–10 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., <i>analyze</i>, <i>analysis</i>, <i>analytical</i>; <i>advocate</i>, <i>advocacy</i>). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
8	<p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on <i>grade 8 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>precede</i>, <i>recede</i>, <i>secede</i>). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).



7	<p>L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i>, <i>bellicose</i>, <i>rebel</i>). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
6	<p>L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 6 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience</i>, <i>auditory</i>, <i>audible</i>).
5	<p>L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 5 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>photograph</i>, <i>photosynthesis</i>). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
4	<p>L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 4 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph</i>, <i>photograph</i>, <i>autograph</i>). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
3	<p>L.3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on <i>grade 3 reading and content</i>, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., <i>agreeable/disagreeable</i>, <i>comfortable/uncomfortable</i>, <i>care/careless</i>, <i>heat/preheat</i>). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company</i>, <i>companion</i>). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.

2	<p>L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.</p> <ul style="list-style-type: none"> a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy</i>, <i>tell/retell</i>). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition</i>, <i>additional</i>). d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse</i>, <i>lighthouse</i>, <i>housefly</i>; <i>bookshelf</i>, <i>notebook</i>, <i>bookmark</i>). e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
1	<p>L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i>, choosing flexibly from an array of strategies.</p> <ul style="list-style-type: none"> a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Use frequently occurring affixes as a clue to the meaning of a word. c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks</i>, <i>looked</i>, <i>looking</i>).
K	<p>L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.</p> <ul style="list-style-type: none"> a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb to <i>duck</i>). b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i>, <i>-s</i>, <i>re-</i>, <i>un-</i>, <i>pre-</i>, <i>-ful</i>, <i>-less</i>) as a clue to the meaning of an unknown word.

Note: Grades 9-12 are included for information and acceleration possibilities only.



Strand: Language

Topic: Vocabulary Acquisition and Use

Anchor 5: Demonstrate understanding of word relationships and nuances in word meanings.

Grade	Common Core State Standard
11-12	<p>L.11-12.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.
9-10	<p>L.9-10.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.
8	<p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g. verbal irony, puns) in context. b. Use the relationship between particular words to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>bullheaded</i>, <i>willful</i>, <i>firm</i>, <i>persistent</i>, <i>resolute</i>).
7	<p>L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>refined</i>, <i>respectful</i>, <i>polite</i>, <i>diplomatic</i>, <i>condescending</i>).
6	<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g., personification) in context. b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>stingy</i>, <i>scrumping</i>, <i>economical</i>, <i>unwasteful</i>, <i>thrifty</i>).
5	<p>L.5.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.



4	<p>L.4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).
3	<p>L.3.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., <i>take steps</i>). b. Identify real-life connections between words and their use (e.g., describe people who are <i>friendly</i> or <i>helpful</i>). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew</i>, <i>believed</i>, <i>suspected</i>, <i>heard</i>, <i>wondered</i>).
2	<p>L.2.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Identify real-life connections between words and their use (e.g., <i>describe foods that are spicy</i> or <i>juicy</i>). b. Distinguish shades of meaning among closely related verbs (e.g., <i>toss</i>, <i>throw</i>, <i>hurl</i>) and closely related adjectives (e.g., <i>thin</i>, <i>slender</i>, <i>skinny</i>, <i>scrawny</i>).
1	<p>L.1.5 With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes). c. Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>). d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look</i>, <i>peek</i>, <i>glance</i>, <i>stare</i>, <i>glare</i>, <i>scowl</i>) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.
K	<p>L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are colorful). d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk</i>, <i>march</i>, <i>strut</i>, <i>prance</i>) by acting out the meanings.

Note: Grades 9-12 are included for information and acceleration possibilities only.

Strand: Language

Topic: Vocabulary Acquisition and Use

Anchor 6: Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Grade	Common Core State Standard
11-12	L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
9-10	L.9-10.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
8	L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
7	L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
6	L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
5	L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., <i>however, although, nevertheless, similarly, moreover, in addition</i>).
4	L.4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed, whined, stammered</i>) and that are basic to a particular topic (e.g., <i>wildlife, conservation, and endangered</i> when discussing animal preservation).
3	L.3.6 Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i>).
2	L.2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids are happy that makes me happy</i>).



1	L.1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).
K	L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Note: Grades 9-12 are included for information and acceleration possibilities only.

KINDERGARTEN LANGUAGE ARTS

Alphabet **RF.K.1**

Back cover/Front cover **RI.K.5**

Beginning/ending sound **RF.K.2**

Character **RL.K.3, RL.K.9**

Compare **RL.K.9**

Consonant **RF.K.3**

Contrast **RL.K.9**

Detail **W.K.5, RI.K.1**

Drawing **W.K.1, W.K.2, W.K.3, SL.K.5**

Fairy Tale **RL.K.5**

First name/Last name

Follow/Give directions **SL.K.1**

Letter **RF.K.1, L.K.1, L.K.2**

Listening skill **RL.K.2**

Picture book **RL.K.5**

Letter-sound relationship **L.K.2, RF.K.3**

Picture dictionary **W.K.7**

Poem **RL.K.5**

Print **L.K.1, RF.K.1**

Retell **RL.K.2, RF.K.4**

Rhyme **RF.K.2**

Sight Word **RF.K.4, RF.K.3**

Title/Title Page **RI.K.5**

Vowel **RF.K.2, RF.K.3**

Word **RF.K.1, RF.K.2, RF.K.3**

Word Families **RF.K.2**

FIRST GRADE LANGUAGE ARTS

Antonyms L.1.4	Language L.1.1, L.1.2
Author/Illustrator RL.1.7, RI.1.7, RI.1.8	Magazine W.1.6
Blends RF.1.2	Media RL.1.11
Capitalization RF.1.1, L.1.2	Middle Sounds RF.1.2
Chapter RF.1.1	Order W.1.3
Character RL.1.6, RL.1.7	Predict RL.1.1, RI.1.4
Compound Word L.1.1	Punctuation RF.1.1, L.1.2
Complete SL.1.6	Questions W.1.7, SL.1.1, SL.1.2, SL.1.3
Comprehension RF.1.4	Reality L.1.5
Consonants/Consonant Blends RF.1.2	Sentence RF.1.1, SL.1.6, L.1.1
Create SL.1.6	Setting RL.1.3, RL.1.7
Describe RL.1.3, RL.1.7	Sequence W.1.3, W.1.7
Fantasy RL.1.5	Syllable RF.1.2
Final RF.1.2	Uppercase/Lowercase L.1.1
Homophone L.1.4	Vocabualry RF.1.2
Illustrate RI.1.6, RI.1.7, RL.1.7	Vowel (long/short) RF.1.2
Initial RF.1.2	

SECOND GRADE LANGUAGE ARTS

Adverb **L.2.1, L.2.6**

Adjective **L.2.1, L.2.6**

Composition **L.2.3**

Conversation **SL.2.1, L.2.6**

Create **SL.2.5**

Dictionary **L.2.2, L.2.4**

Discussion **SL.2.1**

Everyday Language **L.2.3**

Fiction **RL.2.2**

Folktale **RL.2.2**

Glossary **RI.2.5**

Group Discussion **SL.2.1**

Guest Speaker **SL.2.3**

Main Character **RL.2.5, RL.2.3**

Main Idea **RI.2.2**

Margin **W.2.5**

Message **RL.2.2**

Nonfiction **RL.2.2**

Noun **L.2.5**

Predictable Book **RF.2.4**

Prewriting **W.2.2, W.2.1, W.2.3, W.2.5**

Pronoun **L.2.1**

Publish **W.2.5**

Purpose **RI.2.2, RI.2.6, RI.2.8**

Reread **RL.2.2, RI.2.10, RL.2.10**

Spelling Pattern **RF.2.3, L.2.2**

Synonym **L.2.4**

Table of Contents **RI.2.5**

Textbooks **RI.2.10, SL.2.1**

Theater **SL.2.5**

Verb **L.2.1, L.2.5**

Visualize **RL.2.10, RI.2.10, SL.2.5**

THIRD GRADE LANGUAGE ARTS

Affix **RF.3.3, L.3.4**

Captions **RI.3.5**

Concluding Statement **W.3.2, W.3.3**

Context clues **RL.3.4, RF.3.4**

Details **RL.3.1, RI.3.1, RI.3.2, SL.3.2, SL.3.4**

Draft **W.3.5, W.3.6**

Drama **RL.3.5**

Edit **W.3.5, W.3.6**

Fable **RL.3.2**

Fact **RI.3.9**

Graphic Organizer **W.3.4**

Informational Text **RI.3.7**

Mood **L.3.5**

Myth **RL.3.2**

Opinion **W.3.1**

Organizational Structure **W.3.1**

Point of View **RL.3.6, RI.3.6, W.3.1**

Prefix **RF.3.3**

Reference Material **L.3.4**

Revise **W.3.5, W.3.6**

Root word **RF.3.3, L.3.4**

Scene **RL.3.5**

Search tool (e.g., key words, side bars,
hyperlinks) **RI.3.5**

Sentence Types **L.3.1**

Sequence **RL.3.3, RI.3.3, RI.3.8**

Stanza **RL.3.5**

State of Mind **L.3.5**

Story elements (character, setting, plot) **RL.3.9**

Suffix **RF.3.3**

Text Features **RI.3.5**

Theme **RL.3.2, RL.3.9**

FOURTH GRADE LANGUAGE ARTS

Adage L.4.5	Modal auxiliaries L.4.1
Adverb L.4.1	Morphology (roots and affixes) RF.4.3
Alliteration RL.4.4	Onomatopoeia RL.4.4
Analogy L.4.5	Outline W.4.8
Argument W.4.1	Paraphrase SL.4.1
Audience W.4.4, SL.4.4	Plagiarism W.4.7, W.4.8
Cause/effect RI.4.5	Prepositional phrases L.4.1
Compare/contrast RI.4.5	Prose RL.4.5
Drawing conclusions RL.4.1	Proverb L.4.5
Evidence RI.4.7, W.4.1, SL.4.3	Secondhand account RI.4.6
Firsthand account RI.4.6	Sentence fragment L.4.1
Genre RL.4.9	Simile L.4.5
Idiom L.4.5	Stanza RL.4.5
Index RI.4.4	Text structure RI.4.5, RL.4.5
Inference RL.4.1, RI.4.1	Transition W.4.3
Legend RL.4.4	Verb tense L.4.1
Metaphor L.4.5	

FIFTH GRADE LANGUAGE ARTS

Analysis W.5.9	Interjections L.5.1, L.5.2
Appositive L.5.2, L.5.4	Italics L.5.2
Bias RL.5.6	Multimedia component RL.5.7, SL.5.5
Central question W.5.7	Mystery RL.5.9
Claim RI.5.8, W.5.1, W.5.2, SL.5.3	Paraphrase W.5.8
Connotation RL.5.4, RI.5.4	Personification RL.5.4
Denotation RL.5.4, RI.5.4	Prepositional phrase L.5.1
Coordinating conjunctions L.5.1	Quote RL.5.1, RI.5.1
Evidence RI.5.8, W.5.1, W.5.2, SL.5.3	Reason RI.5.8, W.5.1, W.5.2, SL.5.3
Exaggeration L.5.5	Science Fiction RL.5.9
Explicit RL.5.1, RI.5.1	Shades of meaning RL.5.4
Figurative language RL.5.4	Scene RL.5.5
Historical fiction RL.5.9, RI.5.3	Suspense RL.5.9
Homographs L.5.5	Symbolism RL.5.4
Hyperbole L.5.5	Tone RL.5.7



SIXTH GRADE LANGUAGE ARTS

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Anecdote **RI.6.3**

Antecedent **L.6.1**

Appositive **L.6.2**

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Bibliographic information **W.6.8**

Central question **W.6.7**

Chronology **RI.6.5, W.6.2**

Claim **RI.6.8, W.6.1, SL.6.3**

Collaborate **W.6.6, SL.6.1**

Collegial **SL.6.1**

Connotation/denotation **RL.6.4, RI.6.4, L.6.5**

Credibility **RI.6.8, W.6.1, W.6.8**

Delineate **SL.6.3**

Dependent/independent clause **L.6.3**

Elaborate **SL.6.1**

Expository **RI.6.3**

Formal style **W.6.1**

Intensive/objective/subjective pronoun **L.6.1**

Literal **RL.6.4, RI.6.4, L.6.5**

Memoir **RI.6.9**

Nuance **L.6.5**

Objective **RL.6.2, RI.6.2**

Parenthetical **L.6.2**

Plagiarism **W.6.8**

Poetic elements (rhyme, rhythm, figurative language) **RL.6.5**

Propaganda **RI.6.8, SL.6.3**

Prose **RL.6.5**

Sensory language **W.6.3**

Thesis statement **W.6.1, W.6.2, W.6.7**

Third person limited/omniscient **RL.6.6**

Trace **RI.6.8**

Transition **RL.6.5, RI.6.5, W.6.1**

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SEVENTH GRADE LANGUAGE ARTS

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EIGHTH GRADE LANGUAGE ARTS

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QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.K.1and RI.K.1 With prompting and support, ask and answer questions about key details in a text.</p> <p>RL.K.2 With prompting and support, retell familiar stories, including key details.</p> <p>RI.K.2 With prompting and support, identify the main topic and retell key details of a text.</p> <p>RL.K.3 With prompting and support, identify characters, settings, and major events in a story.</p> <p>RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>Craft and Structure RL.K.4 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information of a text.</p> <p>RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.</p> <p>RI.K.5 Identify the front cover, back cover, and title</p> <p>RL.K.5 Recognize common types of texts,(e.g., storybooks, poems).</p>	<p>Text Types and Purposes W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is)</p> <p>W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the text.</p> <p>W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.</p>	<p>Comprehension and Collaboration SL.K.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).</p> <p>b. Continue a conversation through multiple exchanges</p>	<p>Conventions of Standard English L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a Print many upper- and lowercase letters.</p> <p>b Use frequently occurring nouns and verbs.</p> <p>c Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).</p> <p>d Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).</p> <p>e Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).</p> <p>f Produce and expand complete sentences in share language</p> <p>Vocabulary Acquisition and Use L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.</p> <p>a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).</p>



<p>Print Concepts RF.K.1 Demonstrate understanding of the organization and basic features of print.</p> <p>a Follow words from left to right, top to bottom, and page by page.</p> <p>b Recognize that spoken words are represented in written language by specific sequences of letters.</p> <p>c Understand that words are separated by spaces in print.</p> <p>d Recognize and name all upper- and lowercase letters of the alphabet.</p> <p>Phonological Awareness RF.K.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a Recognize and produce rhyming words.</p> <p>b Count, pronounce, blend, and segment syllables in spoken words.</p> <p>c Blend and segment onsets and rimes of single-syllable spoken words.</p> <p>d Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. *(This does not include CVCs ending with /l/, /r/, or /x/.)</p> <p>e Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.</p>			<p>b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.</p>
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.K.1 and RI.K.1 With prompting and support, ask and answer questions about key details.</p> <p>RL.K.2 With prompting and support, retell familiar stories, including key details.</p> <p>RI.K.2 With prompting and support, identify the main topic and retell key details of a text.</p> <p>Craft and Structure RL.K.4 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.</p> <p>RI.K.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.</p> <p>RL.K.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.</p>	<p>Production and Distribution of Writing W.K.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.</p> <p>W.K.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p>Comprehension and Collaboration SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</p> <p>SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.</p>	<p>Conventions of Standard English L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a Print many upper- and lowercase letters.</p> <p>b Use frequently occurring nouns and verbs.</p> <p>c Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).</p> <p>d Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).</p> <p>e Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).</p> <p>f Produce and expand complete sentences in share language</p> <p>Vocabulary Acquisition and Use L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <p>a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.</p> <p>b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).</p>



<p>Phonics and Word recognition RF.K.3 Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant.</p> <p>b. Associate the long and short sounds with the common spellings (graphemes) for the five major vowels.</p> <p>c. Read common high-frequency words by sight. (e.g., the, of, to, you, she, my, is, are, do, does).</p> <p>d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.</p>			<p>c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).</p> <p>d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.</p>
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.K.1 and RI.K.1 With prompting and support, ask and answer questions about key details.</p> <p>Integration of Knowledge and Ideas RL.K.7 With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).</p> <p>RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).</p> <p>RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.</p> <p>Fluency RF.K.4 Read emergent-reader texts with purpose and understanding.</p>	<p>Research to Build and Present Knowledge W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).</p>	<p>Comprehension and Collaboration SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.</p> <p>Presentation of Knowledge and Ideas SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.</p>	<p>Conventions of Standard English L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a Print many upper- and lowercase letters.</p> <p>b Use frequently occurring nouns and verbs.</p> <p>c Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).</p> <p>d Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).</p> <p>e Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).</p> <p>f Produce and expand complete sentences in share language</p> <p>Vocabulary Acquisition and Use L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.</p>



QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.K.1and RI.K.1 With prompting and support, ask and answer questions about key details.</p> <p>Integration of Knowledge and Ideas RL.K.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</p> <p>RI.K.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</p>	<p>Research to Build and Present Knowledge W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p>	<p>Presentation of Knowledge and Ideas SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.</p>	<p>Conventions of Standard English L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a Print many upper- and lowercase letters.</p> <p>b Use frequently occurring nouns and verbs.</p> <p>c Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).</p> <p>d Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).</p> <p>e Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).</p> <p>f Produce and expand complete sentences in share language</p>



Objectives Assessed Throughout the Year

RL.K.10 and RI.K.10 Actively engage in group reading activities with purpose and understanding.

W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).

L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- a. Print many upper- and lowercase letters.
- b. Use frequently occurring nouns and verbs.
- c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).
- d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).
- e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).
- f. Produce and expand complete sentences in share language.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.1.1 and RL.1.1 Ask and answer questions about key details.</p> <p>RI.1.2 Identify the main topic and retell key details of a text.</p> <p>RL.1.3 Describe characters, settings, and major events in a story, using key details.</p> <p>RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or</p> <p>Craft and Structure RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>RI.1.7 Use the illustrations and details in a text to describe its key ideas.</p> <p>Print Concepts RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. Distinguish long from short vowel sounds in spoken single-syllable words.</p> <p>b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.</p> <p>c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.</p>	<p>Text Types and Purposes W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.</p>	<p>Comprehension and Collaboration SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p>	<p>Vocabulary Acquisition and Use L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.</p> <p>a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).</p> <p>b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.</p> <p>Conventions of Standard English L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Print all upper- and lowercase letters.</p> <p>b. Use common, proper, and possessive nouns.</p> <p>c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).</p> <p>d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).</p> <p>e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).</p> <p>f. Use frequently occurring adjectives.</p> <p>h. Use determiners (e.g., articles, demonstratives).</p>



<p>d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).</p> <p>Phonological Awareness RF.1.1 Demonstrate understanding of the organization and basic features of print.</p> <p>a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending).</p> <p>RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Know the spelling-sound correspondences for common consonant digraphs (two letters that represent one sound).</p> <p>b. Decode regularly spelled one-syllable words.</p> <p>c. Know final -e and common vowel team conventions for representing long vowel sounds.</p> <p>d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.</p> <p>e. Decode two-syllable words following basic patterns by breaking the words into syllables.</p> <p>f. Read words with inflectional endings.</p> <p>g. Recognize and read grade-appropriate irregularly spelled.</p>			<p>i. Use frequently occurring prepositions (e.g., during, beyond, toward).</p> <p>j Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.</p> <p>L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a Capitalize dates and names of people.</p> <p>b Use end punctuation for sentences.</p> <p>c Use commas in dates and to separate single words in a series.</p> <p>d Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.</p> <p>e Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.</p> <p>Vocabulary Acquisition and Use L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.</p> <p>a Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>b Use frequently occurring affixes as a clue to the meaning of a word.</p> <p>c Identify frequently occurring root words (e.g., look) and their inflectional forms.</p>
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.1.1 and RL.1.1 Ask and answer questions about key details.</p> <p>RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message.</p> <p>RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>RL.1.3 Describe characters, settings, and major events in a story, using key details.</p> <p>Craft and Structure RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.</p> <p>RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.</p> <p>RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</p> <p>Integration of Knowledge and Ideas RI.1.7 Use the illustrations and details in a text to describe its key ideas.</p>	<p>Text Types and Purposes W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.</p> <p>W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</p> <p>Production and Distribution of Writing W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.</p>	<p>Comprehension and Collaboration SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>a Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>b Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>c Ask questions to clear up any confusion about the topics and texts under discussion</p>	<p>Vocabulary Acquisition and Use L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a Capitalize dates and names of people.</p> <p>b Use end punctuation for sentences.</p> <p>c Use commas in dates and to separate single words in a series.</p> <p>d Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.</p> <p>e Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.</p> <p>L.1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.</p> <p>a Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.</p> <p>b Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes).</p> <p>c Identify real-life connections between words and their use (e.g., note places at home that are cozy).</p>



<p>RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.</p> <p>Reading Foundational Skills Phonics and Word recognition</p> <p>RF.1.4 Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p> <p>b. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>			<p>d Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings .</p>
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.1.1 and RL.1.1 Ask and answer questions about key details.</p> <p>RI.1.2 Identify the main topic and retell key details of a text.</p> <p>RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or main idea.</p> <p>RL.1.3 Describe characters, settings, and major events in a story, using key details.</p> <p>RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>Craft and Structure RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>RL.1.6 Identify who is telling the story at various points in a text.</p> <p>RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p> <p>Integration of Knowledge and Ideas RI.1.7 Use the illustrations and details in a text to describe its key ideas.</p> <p>RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events.</p>	<p>Text Types and Purposes W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.</p> <p>W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</p> <p>Production and Distribution of Writing W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.</p>	<p>Comprehension and Collaboration SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>c. Ask questions to clear up any confusion about the topics and texts under discussion.</p>	<p>Conventions of Standard English L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a Print all upper- and lowercase letters.</p> <p>b Use common, proper, and possessive nouns.</p> <p>c Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).</p> <p>d Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).</p> <p>e Use verbs to convey a sense of past,</p> <p>Vocabulary Acquisition and Use L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Capitalize dates and names of people.</p> <p>b. Use end punctuation for sentences.</p> <p>c. Use commas in dates and to separate single words in a series.</p> <p>d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.</p>



<p>Reading Foundational Skills Fluency RF.1.4 Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p> <p>b. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>			<p>e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.</p> <p>L.1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.</p> <p>a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.</p> <p>b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes).</p> <p>c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).</p> <p>d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.</p>
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.1.1 and RL.1.1 Ask and answer questions about key details.</p> <p>Craft and Structure RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>Integration of Knowledge and Ideas RL.1.9 Compare and contrast the adventures and experiences of characters in stories.</p> <p>RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1.</p> <p>RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</p> <p>RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.</p> <p>RF.1.4 Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p> <p>b. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>	<p>W.1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).</p> <p>W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p>	<p>Presentation of Knowledge and Ideas SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings</p> <p>SL.1.6 Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 on page 26 for specific expectations.)</p>	<p>Conventions of Standard English L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Print all upper- and lowercase letters.</p> <p>b. Use common, proper, and possessive nouns.</p> <p>c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).</p> <p>d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).</p> <p>e Use verbs to convey a sense of past.</p> <p>L.1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibbles because she nibbles too much because she likes that).</p>



Objectives Assessed Throughout the Year

RI.1.1 and RL.1.1 Ask and answer questions about key details.

RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- a. Print all upper- and lowercase letters.
- b. Use common, proper, and possessive nouns.
- c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).
- d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).
- e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).
- f. Use frequently occurring adjectives.
- h. Use determiners (e.g., articles, demonstratives).
- i. Use frequently occurring prepositions (e.g., during, beyond, toward).
- j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.2.1 and RL.2.1 Ask and answer questions such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</p> <p>RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</p> <p>RL.2.3 Describe how characters in a story respond to major events and challenges.</p> <p>RI.2.2 Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.</p> <p>RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in a technical procedures in a text.</p> <p>Craft and Structure RL.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.</p> <p>Integration of Knowledge and Ideas RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p>	<p>Text Types and Purposes W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.</p>	<p>Comprehension and Collaboration SL.2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p>a) Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>b) Build on others' talk in conversations by linking their comments to the remarks of others.</p> <p>c) Ask for clarification and further explanation as needed about the topics and texts under discussion.</p>	<p>L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a) Use collective nouns (e.g., group).</p> <p>b) Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).</p> <p>c) Use reflexive pronouns (e.g., myself, ourselves).</p> <p>d) Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).</p> <p>e) Use adjectives and adverbs, and choose between them depending on what is to be modified.</p> <p>f) Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).</p> <p>L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a) Capitalize holidays, product names, and geographic names.</p> <p>b) Use commas in greetings and closings of letters.</p>



<p>Print Concepts RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <ul style="list-style-type: none"> a. Distinguish long from short vowel sounds in spoken single-syllable words. b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes). <p>Phonological Awareness RF.1.1 Demonstrate understanding of the organization and basic features of print.</p> <ul style="list-style-type: none"> a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending). <p>RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words.</p> <ul style="list-style-type: none"> a. Know the spelling-sound correspondences for common consonant digraphs (two letters that represent one sound). 			<ul style="list-style-type: none"> c) Use an apostrophe to form contractions and frequently occurring possessives. d) Generalize learned spelling patterns when writing words (e.g., cage-badger; boy-boil). e) Consult reference materials, including beginning dictionaries, as needed to check and correct spellings. <p>Vocabulary Acquisition and Use L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. Compare formal and informal uses of English.</p> <p>L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibility from an array of strategies.</p>
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	<p>b. Decode regularly spelled one-syllable words.</p> <p>c. Know final -e and common vowel team conventions for representing long vowel sounds.</p> <p>d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.</p> <p>e. Decode two-syllable words following basic patterns by breaking the words into syllables.</p> <p>f. Read words with inflectional endings.</p> <p>g. Recognize and read grade-appropriate irregularly spelled.</p>			
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.2.1 and RL.2.1 Ask and answer questions such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</p> <p>RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</p> <p>RL.2.3 Describe how characters in a story respond to major events and challenges.</p> <p>Craft and Structure RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.</p> <p>RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.</p> <p>R.L.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.</p> <p>Integration of Knowledge and Ideas RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p> <p>RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p>	<p>Text Types and Purposes W.2.1 Write opinion pieces on topics or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and also) to connect opinion and reasons, and provide a concluding statement or section.</p> <p>W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.</p>	<p>Comprehension and Collaboration SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.</p> <p>SL.2.3 Ask and answer questions about what a speaker says on order to clarify comprehension, gather additional information or deepen understanding of a topic or issue.</p>	<p>Conventions of Standard English L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Use collective nouns (e.g., group). b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c. Use reflexive pronouns (e.g., myself, ourselves). d. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy). <p>Knowledge of Language L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ul style="list-style-type: none"> a. Compare formal and informal uses of English. <p>Vocabulary Acquisition and Use L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibility from an array of strategies.</p>



				<p>L.2.5 Demonstrate understanding of word relationships and nuances in word meanings.</p> <p>a. Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).</p> <p>b Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny)</p>
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.2.1 and RL.2.1 Ask and answer questions such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</p> <p>RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</p> <p>RL.2.3 Describe how characters in a story respond to major events and challenges.</p> <p>Craft and Structure RL.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.</p> <p>RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.</p> <p>Integration of Knowledge and Ideas RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p> <p>RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p> <p>RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.</p>	<p>Text Types and Purposes W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.</p> <p>W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.</p> <p>W.2.7 Participate in shared research and writing projects (e.g., read a number of books, on a single topic to produce a report; record science.</p> <p>W.2.8 Recall information from experiences or gather information from provided sources to answer a question.</p>	<p>Comprehension and Collaboration SL.2.3 Ask and answer questions about what a speaker says on order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.</p> <p>SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p>	<p>Conventions of Standard English L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a) Use collective nouns (e.g., group). b) Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c) Use reflexive pronouns (e.g., myself, ourselves). d) Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). e) Use adjectives and adverbs, and choose between them depending on what is to be modified. f) Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy). <p>Vocabulary Acquisition and Use L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a) Use collective nouns (e.g., group). b) Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c) Use reflexive pronouns (e.g., myself, ourselves). d) Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). e) Use adjectives and adverbs, and choose between them depending on what is to be modified.



			<p>f) Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).</p> <p>L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> Capitalize holidays, product names, and geographic names. Use commas in greetings and closing Use an apostrophe to form contractions and frequently occurring possessives. Generalize learned spelling patterns when writing words (e.g., cage-badge; boy- boil. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings. <p>Vocabulary Acquisition and Use</p> <p>L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. Compare formal and informal uses of English.</p> <p>L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibility from an array of strategies.</p>
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.2.1 and RL.2.1 Ask and answer questions such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</p> <p>Craft and Structure RL.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.</p> <p>Integration of Knowledge and Ideas RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p> <p>RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.</p> <p>RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.</p> <p>RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to clarify a position.</p> <p>RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p> <p>RL.2.10 By the end of the year, read and comprehend literature, including prose and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range</p>	<p>Text Types and Purposes W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding</p> <p>W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p>Presentation of Knowledge and Ideas SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.</p>	<p>L.2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including and adverbs to describe (e.g., When other kids are happy that makes me happy).</p>



Objectives Assessed Throughout the Year

RI.2.1 and RL.2.1 Ask and answer questions such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- a) Use collective nouns (e.g., group).
- b) Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).
- c) Use reflexive pronouns (e.g., myself, ourselves).
- d) Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).
- e) Use adjectives and adverbs, and choose between them depending on what is to be modified.
- f) Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).

L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- a) Capitalize holidays, product names, and geographic names.
- b) Use commas in greetings and closings of letters.
- c) Use an apostrophe to form contractions and frequently occurring possessives.
- d) Generalize learned spelling patterns when writing words (e.g., cage-badge; boy-boil).
- e) Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.</p> <p>RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.</p> <p>RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.</p> <p>Craft and Structure RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.</p> <p>RL.3.6 Distinguish their own point of view from that of the narrator or those of the characters.</p> <p>Integration of Knowledge and Ideas RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).</p>	<p>Text Types and Purposes W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. Use temporal words and phrases to signal event order. Provide a sense of closure 	<p>Comprehension and Collaboration SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. Explain their own ideas and understanding in light of the discussion. 	<p>Conventions of Standard English L.3.1 Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.</p> <p>Knowledge of Language L.3.2 Use commas in addresses.</p> <p>L.3.2 Use commas and quotation marks in dialogue.</p> <p>Vocabulary Acquisition and Use L.3.4 Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).</p> <p>L.3.4 Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).</p> <p>L.3.4 Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.</p>



	<p>RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).</p>			
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.</p> <p>RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.</p> <p>Craft and Structure RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.</p> <p>RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.</p> <p>RI.3.6 Distinguish their own point of view from that of the author of a text.</p> <p>Integration of Knowledge and Ideas RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).</p>	<p>Text Types and Purposes W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.</p> <ol style="list-style-type: none"> Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. Provide reasons that support the opinion. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. Provide a concluding statement or section. <p>Production and Distribution of Writing W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Comprehension and Collaboration SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.</p>	<p>Conventions of Standard English L.3.1 Form and use regular and irregular verbs.</p> <p>L.3.1 Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.</p> <p>L.3.1 Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.</p> <p>Knowledge of Language L.3.2 Form and use possessives.</p> <p>L.3.2 Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.</p> <p>L.3.3 Choose words and phrases for effect.</p> <p>Vocabulary Acquisition and Use L.3.4 Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>L.3.5.a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).</p> <p>L.3.5.b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).</p> <p>L.3.5.c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).</p>



	<p>RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).</p>			
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.</p> <p>RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.</p> <p>RI.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.</p> <p>Craft and Structure RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.</p> <p>RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</p>	<p>Research to Build and Present Knowledge W.3.7 Conduct short research projects that build knowledge about a topic.</p> <p>W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.</p> <p>a. Take notes when conducting research on a topic</p> <p>b. Sort researched information into categories</p>	<p>Presentation of Knowledge and Ideas SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p> <p>SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.</p> <p>SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.</p>	<p>Conventions of Standard English L.3.1 Ensure subject-verb and pronoun-antecedent agreement.</p> <p>L.3.1 Use coordinating and subordinating conjunctions.</p> <p>Knowledge of Language L.3.2 Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).</p> <p>L.3.3 Recognize and observe differences between the conventions of spoken and written standard English.</p> <p>Vocabulary Acquisition and Use L.3.4 Use sentence-level context as a clue to the meaning of a word or phrase.</p>



	<p>RI.3.6 Distinguish their own point of view from that of the author of a text.</p> <p>Integration of Knowledge and Ideas RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).</p> <p>RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.</p>			
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p> <p>Craft and Structure RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language. RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</p> <p>RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.</p> <p>RI.3.6 Distinguish their own point of view from that of the narrator or those of the characters.</p> <p>Integration of Knowledge and Ideas RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).</p> <p>RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).</p>	<p>Text Types and Purposes W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ol style="list-style-type: none"> Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. Develop the topic with facts, definitions, and details. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. Provide a concluding statement or section. <p>Production and Distribution of Writing W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 3 on pages 28 and 29.)</p>	<p>Presentation of Knowledge and Ideas SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p>	<p>Conventions of Standard English L.3.1 Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.</p> <p>L.3.1 Produce simple, compound, and complex sentences.</p> <p>Knowledge of Language L.3.2 Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.</p> <p>Vocabulary Acquisition and Use L.3.4 Use sentence-level context as a clue to the meaning of a word or phrase.</p>



	<p>RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).</p>			
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Objectives Assessed Throughout the Year

- RI.3.4** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
- RL.3.10** By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.
- RI.3.10** By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.
- RF.3.3** Know and apply grade-level phonics and word analysis skills in decoding words.
- a. Identify and know the meaning of the most common prefixes and derivational suffixes.
 - b. Decode words with common Latin suffixes.
 - c. Decode multisyllable words.
 - d. Read grade-appropriate irregularly spelled words.
- RF.3.4** Read with sufficient accuracy and fluency to support comprehension.
- a. Read on-level text with purpose and understanding.
 - b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
- W.3.10** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text</p> <p>RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).</p> <p>Craft and Structure RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.</p> <p>RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. Integration of Knowledge and Ideas</p>	<p>Text Types and Purposes W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use dialogue and description to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words and phrases to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events. <p>Production and Distribution of Writing W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Comprehension and Collaboration SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. Follow agreed-upon rules for discussions and carry out assigned roles. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. <p>SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p>	<p>Conventions of Standard English L.4.1 Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).</p> <p>L.4.1 Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.</p> <p>L.4.2 Use correct capitalization.</p> <p>Knowledge of Language L.4.3 Choose words and phrases to convey ideas precisely.</p> <p>Vocabulary Acquisition and Use L.4.4 Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.</p> <p>L.4.5 Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.</p>



		<p>W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4.)</p> <p>W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in one sitting.</p> <p>Research to Build and Present Knowledge</p> <p>W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.</p>		
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p> <p>RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.</p> <p>Craft and Structure RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.</p> <p>RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.</p> <p>Integration of Knowledge and Ideas RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.</p>	<p>Text Types and Purposes W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ol style="list-style-type: none"> Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because). Use precise language and domain-specific vocabulary to inform about or explain the topic. Provide a concluding statement or section related to the information or explanation presented. <p>Production and Distribution of Writing W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Comprehension and Collaboration SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.</p>	<p>Conventions of Standard English L.4.1 Use modal auxiliaries (e.g., can, may, must) to convey various conditions.</p> <p>L.4.1 Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).</p> <p>L.4.2 Use commas and quotation marks to mark direct speech and quotations from a text.</p> <p>Knowledge of Language L.4.3 Choose punctuation for effect.</p> <p>Vocabulary Acquisition and Use L.4.4 Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).</p> <p>L.4.5 Recognize and explain the meaning of common idioms, adages, and proverbs.</p>



		<p>W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4.)</p> <p>W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in one sitting.</p> <p>Research to Build and Present Knowledge</p> <p>W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</p>		
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text</p> <p>RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).</p> <p>Craft and Structure RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.</p> <p>Integration of Knowledge and Ideas RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.</p> <p>RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.</p>	<p>Text Types and Purposes W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ol style="list-style-type: none"> Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because). Use precise language and domain-specific vocabulary to inform about or explain the topic. Provide a concluding statement or section related to the information or explanation presented. <p>Production and Distribution of Writing W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Presentation of Knowledge and Ideas SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p> <p>SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</p>	<p>Conventions of Standard English L.4.1 Form and use prepositional phrases.</p> <p>L.4.1 Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.</p> <p>L.4.1 Correctly use frequently confused words (e.g., to, too, two; there, their).</p> <p>L.4.2 Use a comma before a coordinating conjunction in a compound sentence.</p> <p>Knowledge of Language L.4.3 Choose punctuation for effect.</p> <p>Vocabulary Acquisition and Use L.4.4 Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.</p> <p>L.4.5 Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).</p>



	<p>W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4.)</p> <p>W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in one sitting.</p> <p>Research to Build and Present Knowledge</p> <p>W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”).</p>		
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p> <p>RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.</p> <p>Craft and Structure RL.4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).</p> <p>RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.</p> <p>RL.4.6 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.</p>	<p>Text Types and Purposes W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <ol style="list-style-type: none"> Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. Provide reasons that are supported by facts and details. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). Provide a concluding statement or section related to the opinion presented. <p>W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use dialogue and description to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words and phrases to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events. 	<p>Presentation of Knowledge and Ideas SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.</p>	<p>Conventions of Standard English L.4.1. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.</p> <p>L.4.1 Form and use prepositional phrases.</p> <p>L.4.1 Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.</p> <p>L.4.2 Use correct capitalization.</p> <p>L.4.2 Spell grade-appropriate words correctly, consulting references as needed.</p> <p>Knowledge of Language L.4.4 Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.</p> <p>Vocabulary Acquisition and Use L.4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are based on a particular topic (e.g., <i>wildlife</i>, <i>conservation</i>, and <i>endangered</i> when discussing animal preservation).</p>

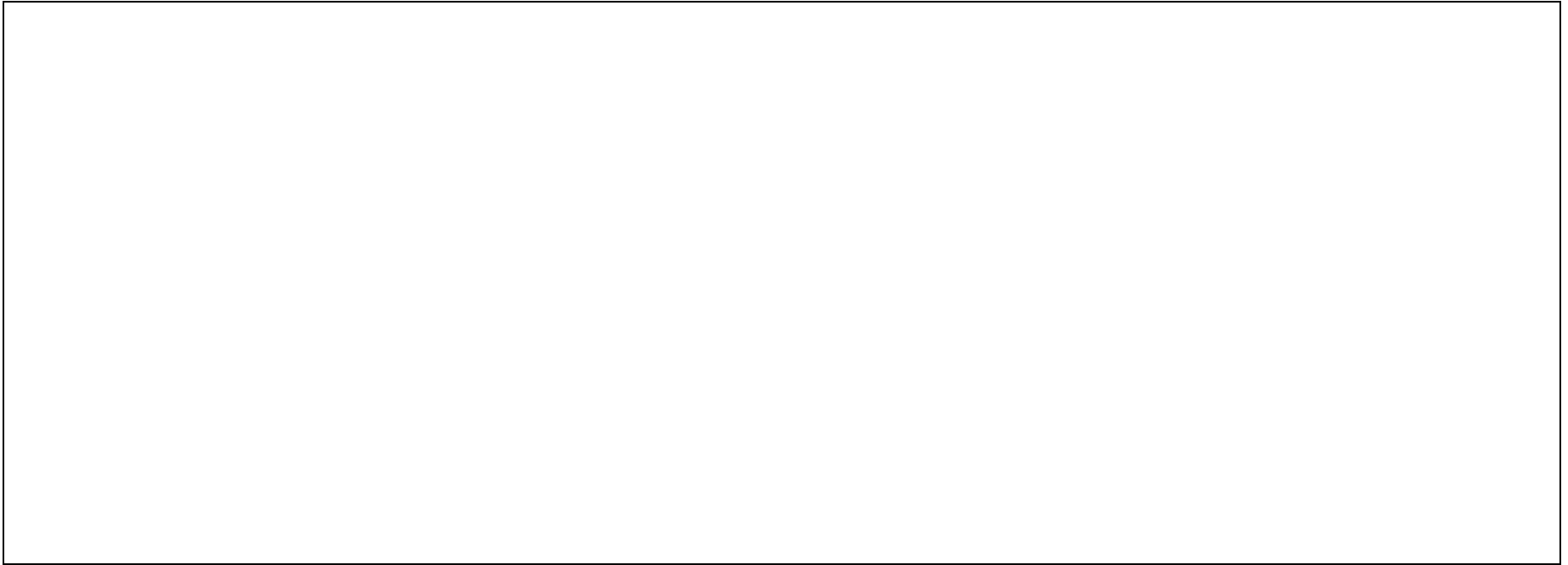


	<p>Integration of Knowledge and Ideas RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.</p> <p>RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.</p> <p>RL.4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.</p>	<p>Production and Distribution of Writing W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p> <p>W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4.)</p> <p>W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in one sitting.</p> <p>Research to Build and Present Knowledge W.4.9. Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).</p>		
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Objectives Assessed Throughout the Year

- RL.4.10** By the end of the year, read and comprehend literature, including stories dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- RI.4.10** By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- RF.4.3** Know and apply grade-level phonics and word analysis skills in decoding words.
a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
- RF.4.4** Read with sufficient accuracy and fluency to support comprehension.
a. Read on-level text with purpose and understanding.
b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
- W.4.10** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.



QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p> <p>RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).</p> <p>Craft and Structure RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.</p> <p>Integration of Knowledge and Ideas RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</p> <p>RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).</p>	<p>Text Types and Purposes W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events. <p>Production and Distribution of Writing W.5.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Comprehension and Collaboration SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. Follow agreed-upon rules for discussions and carry out assigned roles. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. <p>SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.</p>	<p>Conventions of Standard English L.5.1 Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.</p> <p>L.5.1 Use verb tense to convey various times, sequences, states, and conditions.</p> <p>L.5.2 Spell grade-appropriate words correctly, consulting references as needed.</p> <p>Knowledge of Language L.5.3 Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p> <p>Vocabulary Acquisition and Use L.5.4 Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.</p> <p>L.5.5 Interpret figurative language, including similes and metaphors, in context.</p> <p>L.5.5 Recognize and explain the meaning of common idioms, adages, and proverbs.</p>



		<p>W.5.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 5.)</p> <p>W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p>		
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.</p> <p>RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.</p> <p>Craft and Structure RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.</p> <p>RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.</p> <p>Integration of Knowledge and Ideas RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</p>	<p>Text Types and Purposes W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <ul style="list-style-type: none"> a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented. <p>W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. 	<p>Presentation of Knowledge and Ideas SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p>	<p>Conventions of Standard English L.5.1 Form and use the perfect (e.g., I had walked; I have walked; I will have walked) verb tenses.</p> <p>L.5.1 Recognize and correct inappropriate shifts in verb tense.</p> <p>L.5.1 Use correlative conjunctions (e.g., either/or, neither/nor).</p> <p>L.5.2 Use punctuation to separate items in a series.</p> <p>Vocabulary Acquisition and Use L.5.5 Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.</p>



		<ul style="list-style-type: none"> c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented. <p>Research to Build and Present Knowledge W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</p>		
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p> <p>RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).</p> <p>Craft and Structure RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.</p> <p>RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.</p> <p>RI.5.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts</p> <p>RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.</p>	<p>Text Types and Purposes W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events. <p>Research to Build and Present Knowledge W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.</p>	<p>Presentation of Knowledge and Ideas SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p>	<p>Conventions of Standard English L.5.2 Use a comma to set off the words yes and no (e.g., Yes, thank you), to set off a tag question from the rest of the sentence (e.g., It's true, isn't it?), and to indicate direct address (e.g., Is that you, Steve?).</p> <p>L.5.2 Use underlining, quotation marks, or italics to indicate titles of works.</p> <p>Knowledge of Language L.5.3 Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p> <p>Vocabulary Acquisition and Use L.5.4 Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).</p> <p>L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., <i>however, although, nevertheless, similarly, moreover, in addition</i>).</p>



	<p>Integration of Knowledge and Ideas RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).</p> <p>RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</p>			
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	<p>Key Ideas and Details RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.</p> <p>RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.</p> <p>Craft and Structure RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.</p> <p>RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.</p> <p>Integration of Knowledge and Ideas RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).</p> <p>RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.</p>	<p>Text Types and Purposes W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ol style="list-style-type: none"> Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). Use precise language and domain-specific vocabulary to inform about or explain the topic. Provide a concluding statement or section related to the information or explanation presented. 	<p>Presentation of Knowledge and Ideas SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p>	<p>Conventions of Standard English L.5.2 Use a comma to separate an introductory element from the rest of the sentence.</p> <p>Knowledge of Language L.5.3 Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p> <p>L.5.3 Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.</p> <p>Vocabulary Acquisition and Use L.5.4 Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.</p>



		<p>Research to Build and Present Knowledge W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> a. Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”). b. Apply grade 5 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”). 		
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Objectives Assessed Throughout the Year

- RL.5.10** By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.
- RI.5.10** By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently
- RF.5.3** Know and apply grade-level phonics and word analysis skills in decoding words.
- a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
- RF.5.4** Read with sufficient accuracy and fluency to support comprehension.
- a. Read on-level text with purpose and understanding.
 - b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
- W.5.10** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 1			
	Key Ideas and Details RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	Text Types and Purposes W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	Comprehension and Collaboration SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Use intensive pronouns (e.g., myself, ourselves). L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly. Knowledge of Language L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Vary sentence patterns for meaning, reader/listener interest, and style.* Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.



		<p>Production and Distribution of Writing</p> <p>W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p> <p>W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.</p>		<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., personification) in context.</p> <p>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwhasteful, thrifty).</p> <p>L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
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Unit 2			
<p>Key Ideas and Details</p> <p>RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</p> <p>Craft and Structure</p> <p>RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.</p> <p>RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.</p>	<p>Research to Build and Present Knowledge</p> <p>W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>b. Apply grade 6 Reading standards to literary nonfiction (e.g., “Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.”).</p>	<p>Comprehension and Collaboration</p> <p>SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.</p> <p>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.</p> <p>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.</p>	<p>Conventions of Standard English</p> <p>L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Ensure that pronouns are in the proper case (subjective, objective, possessive).</p> <p>b. Use intensive pronouns (e.g., myself, ourselves).</p> <p>L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*</p> <p>b. Spell correctly.</p> <p>Knowledge of Language</p> <p>L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Vary sentence patterns for meaning, reader/listener interest, and style.*</p> <p>Vocabulary Acquisition and Use</p> <p>L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>



				<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> a. Interpret figures of speech (e.g., personification) in context. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty). <p>L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 3			
	Key Ideas and Details RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. Craft and Structure RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone. Integration of Knowledge and Ideas RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they see and hear when reading the text to what they perceive when they listen or watch.	Research to Build and Present Knowledge W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 6 Reading standards to literature (e.g., "Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.").	Comprehension and Collaboration SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. c. Recognize and correct inappropriate shifts in pronoun number and person.* L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly. Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., personification) in context.



Unit 4				
	<p>Key Ideas and Details</p> <p>RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).</p> <p>Craft and Structure</p> <p>RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.</p> <p>Integration of Knowledge and Ideas</p> <p>RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.</p>	<p>Text Types and Purposes</p> <p>W.6.1 Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> Introduce claim(s) and organize the reasons and evidence clearly. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. Establish and maintain a formal style. Provide a concluding statement or section that follows from the argument presented. <p>Production and Distribution of Writing</p> <p>W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p> <p>W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.</p>	<p>Comprehension and Collaboration</p> <p>SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.</p>	<p>Conventions of Standard English</p> <p>L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> Recognize and correct inappropriate shifts in pronoun number and person.* <p>L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* Spell correctly. <p>Vocabulary Acquisition and Use</p> <p>L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. <p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> Interpret figures of speech (e.g., personification) in context.



		Research to Build and Present Knowledge W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.		
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 5			
	Key Ideas and Details RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Research to Build and Present Knowledge W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 6 Reading standards to literature (e.g., "Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.").	Comprehension and Collaboration SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.	Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. c. Recognize and correct inappropriate shifts in pronoun number and person.* L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly.
	Craft and Structure RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.		a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.	Knowledge of Language L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. b. Maintain consistency in style and tone.*
	RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.		b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).



				<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.</p>
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Unit 6			
<p>Key Ideas and Details RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>Craft and Structure RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.</p> <p>Integration of Knowledge and Ideas RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).</p>	<p>Text Types and Purposes W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ul style="list-style-type: none"> a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented. 	<p>Presentation of Knowledge and Ideas SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p>SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.</p> <p>SL.6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p>Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> c. Recognize and correct inappropriate shifts in pronoun number and person.* <p>L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly. <p>Knowledge of Language L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ul style="list-style-type: none"> b. Maintain consistency in style and tone.* <p>Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.</p> <ul style="list-style-type: none"> b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).



		<p>Production and Distribution of Writing</p> <p>W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p> <p>W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.</p>		<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.</p>
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 7			
	Key Ideas and Details RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Production and Distribution of Writing W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	Presentation of Knowledge and Ideas SL.6.3 Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*
	Craft and Structure RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.	W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.		L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*
	RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	Research to Build and Present Knowledge W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.		Knowledge of Language L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. b. Maintain consistency in style and tone.*
	Integration of Knowledge and Ideas RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.		Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).



				<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty).</p>
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Unit 8			
<p>Key Ideas and Details RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>Craft and Structure RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.</p> <p>Integration of Knowledge and Ideas RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text. RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.</p>	<p>Research to Build and Present Knowledge W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. b. Apply grade 6 Reading standards to literary nonfiction (e.g., “Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.”).</p>	<p>Comprehension and Collaboration SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.</p>	<p>Conventions of Standard English L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).* L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly.</p> <p>Knowledge of Language L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. b. Maintain consistency in style and tone.*</p> <p>Vocabulary Acquisition and Use L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).</p>



				<p>L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, un wasteful, thrifty).</p>
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Objectives Assessed Throughout the Year

Range of Reading and Text Complexity

RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Production and Distribution of Writing

W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Range of Writing

W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Conventions of Standard English

L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 1			
	Key Ideas and Details RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. Craft and Structure RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	Research to Build and Present Knowledge W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 7 Reading standards to literature (e.g., “Determine a theme or central idea of a text and analyze its development over the course of the text”).	Comprehension and Collaboration SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	Conventions of Standard English L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. b. Spell correctly. Vocabulary Acquisition and Use L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).



Unit 2

Key Ideas and Details

RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

RI.7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.

Craft and Structure

RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.

Research to Build and Present Knowledge

W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

Comprehension and Collaboration

SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

Conventions of Standard English

L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.

L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

b. Spell correctly.

Vocabulary Acquisition and Use

L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.

a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.

b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).



QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 3			
	Key Ideas and Details RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Text Types and Purposes W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.		Conventions of Standard English L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
	Craft and Structure RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.		a. Explain the function of phrases and clauses in general and their function in specific sentences.
	RL.7.5 Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.	b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.		L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
	Integration of Knowledge and Ideas RL.7.7 Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.		b. Spell correctly.
		d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.		Vocabulary Acquisition and Use L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
		e. Provide a conclusion that follows from and reflects on the narrated experiences or events.		b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).
				c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.



				<p>L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.</p> <p>b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.</p>
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Unit 4

<p>Key Ideas and Details RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>Craft and Structure RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.</p> <p>RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.</p> <p>Integration of Knowledge and Ideas RL.7.9 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.</p>	<p>W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>b. Apply grade 7 Reading standards to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</p>	<p>Comprehension and Collaboration SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.</p> <p>c. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.</p> <p>d. Acknowledge new information expressed by others and, when warranted, modify their own views.</p>	<p>Conventions of Standard English L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of phrases and clauses in general and their function in specific sentences.</p> <p>L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>b. Spell correctly.</p> <p>Vocabulary Acquisition and Use L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.</p> <p>b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).</p> <p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p> <p>L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.</p>
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				<p>b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.</p>
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 5			
	Key Ideas and Details RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot). Craft and Structure RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	Research to Build and Present Knowledge W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 7 Reading standards to literature (e.g., “Analyze how particular elements of a story or drama interact”).	Comprehension and Collaboration SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	Conventions of Standard English L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.* L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt). b. Spell correctly Vocabulary Acquisition and Use L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).



Unit 6

<p>Key Ideas and Details RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>Craft and Structure RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.</p> <p>Integration of Knowledge and Ideas RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others. RI.7.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.</p>	<p>Text Types and Purposes W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ol style="list-style-type: none"> Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. Use precise language and domain-specific vocabulary to inform about or explain the topic. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the information or explanation presented. 	<p>Presentation of Knowledge and Ideas SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. SL.7.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p>Conventions of Standard English L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.* L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt). Spell correctly <p>Vocabulary Acquisition and Use L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. <ol style="list-style-type: none"> Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending). </p> </p>
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		<p>Production and Distribution of Writing</p> <p>W.7.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.</p>		
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 7			
	Key Ideas and Details RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Text Types and Purposes W.7.1 Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented. 	Comprehension and Collaboration SL.7.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	Conventions of Standard English L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt). Spell correctly
	Craft and Structure RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.			Knowledge of Language L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ol style="list-style-type: none"> Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*
	Integration of Knowledge and Ideas RI.7.7 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).	Research to Build and Present Knowledge W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.		Vocabulary Acquisition and Use L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. <ol style="list-style-type: none"> Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
	RI.7.9 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.			L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. <ol style="list-style-type: none"> Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.



		<p>W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p>		<p>b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.</p>
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Unit 8

<p>Key Ideas and Details</p> <p>RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.</p> <p>Craft and Structure</p> <p>RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.</p> <p>RL.7.6 Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.</p>	<p>Research to Build and Present Knowledge</p> <p>W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply grade 7 Reading standards to literature (e.g., “Determine a theme or central idea of a text and analyze its development over the course of the text “or Analyze how an author develops and contrasts the points of view of different characters or narrators in a text”).</p>	<p>Conventions of Standard English</p> <p>L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt).</p> <p>b. Spell correctly</p> <p>Knowledge of Language</p> <p>L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*</p> <p>Vocabulary Acquisition and Use</p> <p>L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.</p> <p>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</p> <p>L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.</p>
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				b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.
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Objectives Assessed Throughout the Year

Range of Reading and Text Complexity

RL.7.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

RI.7.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Production and Distribution of Writing

W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Range of Writing

W.7.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Vocabulary Acquisition and Use

L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

QUARTER 1				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 1			
	Key Ideas and Details RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text. Craft and Structure RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	Research to Build and Present Knowledge W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 8 Reading standards to literature (e.g., "Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text."):	Comprehension and Collaboration SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	Conventions of Standard English L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Form and use verbs in the active and passive voice. L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. c. Spell correctly. Knowledge of Language L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact). Vocabulary Acquisition and Use L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.



				<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p> <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g. verbal irony, puns) in context.</p>
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Unit 2

Key Ideas and Details

RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

RI.8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

Craft and Structure

RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

Integration of Knowledge and Ideas

RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

Text Types and Purposes

W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.

d. Use precise language and domain-specific vocabulary to inform about or explain the topic.

e. Establish and maintain a formal style.

d. Provide a concluding statement or section that follows from and supports the information or explanation presented.

Comprehension and Collaboration

SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

Conventions of Standard English

L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

b. Form and use verbs in the active and passive voice.

L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.

c. Spell correctly.

Knowledge of Language

L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.

a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

Vocabulary Acquisition and Use

L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.



	<p>Research to Build and Present Knowledge</p> <p>W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p> <p>Production and Distribution of Writing</p> <p>W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>		<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p> <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g. verbal irony, puns) in context.</p>
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QUARTER 2				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 3			
	Key Ideas and Details RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. Craft and Structure RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	Text Types and Purposes W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.		Conventions of Standard English L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. c. Spell correctly. Vocabulary Acquisition and Use L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. b. Use the relationship between particular words to better understand each of the words.



		<p>Production and Distribution of Writing</p> <p>W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>		
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Unit 4

<p>Key Ideas and Details</p> <p>RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>RI.8.3 Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).</p> <p>Craft and Structure</p> <p>RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</p> <p>RI.8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.</p>	<p>Research to Build and Present Knowledge</p> <p>W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>b. Apply grade 8 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).</p>	<p>Comprehension and Collaboration</p> <p>SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.</p> <p>c. Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas.</p> <p>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.</p>	<p>Conventions of Standard English</p> <p>L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.</p> <p>L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.</p> <p>c. Spell correctly.</p> <p>Vocabulary Acquisition and Use</p> <p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p> <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>b. Use the relationship between particular words to better understand each of the words.</p>
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QUARTER 3				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 5			
	<p>Key Ideas and Details RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>Craft and Structure RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</p> <p>Integration of Knowledge and Ideas RL.8.7 Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.</p>	<p>Text Types and Purposes W.8.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</p> <p>b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</p> <p>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</p> <p>d. Establish and maintain a formal style.</p> <p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p>Presentation of Knowledge and Ideas SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p>SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.</p> <p>SL.8.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p>Conventions of Standard English L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.</p> <p>L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>b. Use an ellipsis to indicate an omission.</p> <p>c. Spell correctly.</p> <p>Knowledge of Language L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).</p>



		<p>Production and Distribution of Writing</p> <p>W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>		<p>Vocabulary Acquisition and Use</p> <p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.</p> <p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p> <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).</p>
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Unit 6

Key Ideas and Details

RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

Craft and Structure

RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Integration of Knowledge and Ideas

RI.8.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Text Types and Purposes

W.8.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.

b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.

c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.

d. Establish and maintain a formal style.

e. Provide a concluding statement or section that follows from and supports the argument presented.

Conventions of Standard English

L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.

L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

b. Use an ellipsis to indicate an omission.

c. Spell correctly.

Knowledge of Language

L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.

a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).



		<p>Production and Distribution of Writing</p> <p>W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p> <p>W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>		<p>Vocabulary Acquisition and Use</p> <p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.</p> <p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p> <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute). resolute).</p>
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QUARTER 4				
Year Long Curriculum Plan by Quarter	Reading	Writing	Speaking and Listening	Language
	Unit 7			
	Key Ideas and Details RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	Production and Distribution of Writing W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	Comprehension and Collaboration SL.8.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.	Conventions of Standard English L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. d. Recognize and correct inappropriate shifts in verb voice and mood.*
	Craft and Structure RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	Presentation of Knowledge and Ideas SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. b. Use an ellipsis to indicate an omission. c. Spell correctly.
	RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	Research to Build and Present Knowledge W.8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	SL.8.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	Vocabulary Acquisition and Use L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
	Integration of Knowledge and Ideas RI.8.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.			a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).



		<p>W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p>		
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Unit 8			
<p>Key Ideas and Details</p> <p>RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p> <p>RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</p> <p>RL.8.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.</p> <p>RL.8.9 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new</p>	<p>Research to Build and Present Knowledge</p> <p>W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply grade 8 Reading standards to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).</p>	<p>Comprehension and Collaboration</p> <p>SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p> <p>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.</p> <p>c. Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas.</p> <p>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.</p>	<p>Conventions of Standard English</p> <p>L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>d. Recognize and correct inappropriate shifts in verb voice and mood.*</p> <p>L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>b. Use an ellipsis to indicate an omission.</p> <p>c. Spell correctly.</p> <p>Vocabulary Acquisition and Use</p> <p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p> <p>b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).</p>



Objectives Assessed Throughout the Year

Range of Reading and Text Complexity

RL.8.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.

RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.

Production and Distribution of Writing

W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Range of Writing

W.8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Vocabulary Acquisition and Use

L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Common Core State Standards: Kindergarten ELA Scoring Scales

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.K.1 With prompting and support, ask and answer questions about key details in a text. RL.K.2 With prompting and support, retell familiar stories, including key details. RL.K.3 With prompting and support, identify characters, settings, and major events in a story. RI.K.1 With prompting and support, ask and answer questions about key details in a text. RI.K.2 With prompting and support, identify the main topic and retell key details of a text. RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

0	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Key detail RI.K.1 Retell RL.K.2 Character, setting, event RL.K.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize who, what, where, when, why and how. RL.K.1, RI.K.1 and RI.K.2 Ask and answer questions before, during, and after reading a text. RL.K.1 and RI.K.1 Listen to a story and recognize the key details. RL.K.2 Recognize characters, settings, and major events in a story. RL.K.3 Recognize the main topic of a text (who or what the text is about). RI.K.2 Recognize the connection between two individuals in a text. RI.K.3 Recognize the connection between two events in a text. RI.K. 3 Recognize the connection between two ideas or pieces of information in a text. RI.K.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.K.4 Ask and answer questions about unknown words in a text RL.K.5 Recognize common types of texts (e.g., storybooks, poems). RL.K.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story. RI.K.4 With prompting and support, ask and answer questions about unknown words in a text. RI.K.5 Identify the front cover, back cover, and title page of a book. RI.K.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Text RL.K.4 Storybook RL.K.5 Poem RL.K.5 Play RL.K.5 Author and Illustrator RL.K.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify words unfamiliar in a text. RL.K.4 and RI.K.4 Identify different types of texts (storybooks, poems, etc.). RL.K.5 Recognize a title page and front and back of a book. RI.K.5 Identify the author and illustrator. RL.K.6 and RI.K.6 Explain that authors write texts and illustrators create the pictures for the texts. RI.K.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>RL.K.7 With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).</p> <p>RL.K.8 (Not applicable to literature)</p> <p>RL.K.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</p> <p>RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).</p> <p>RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.</p> <p>RI.K.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Illustration RL.K.7, Character RL.K.9 Adventure RL.K.9 Experience RL.K.9 Compare RL.K.9 Contrast RL.K.9 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify the part of a text shown by the illustrations. RI.K.7 and RL.K.7 Recognize why an author wrote a text. RI.K.8 Identify the points an author makes in a text (Everyone should recycle). RI.K.8 Identify the author's reasons to support main points (<i>Everyone should recycle because landfills are becoming full.</i>). RI.K.8 Recognize how two texts on the same topic are alike. RI.K.9 and RL.K.9 Recognize how two texts on the same topic are different. RI.K.9 and RL.K.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading

Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.K.10 Actively engage in group reading activities with purpose and understanding. RI.K.10 Actively engage in group reading activities with purpose and understanding.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Eye contact RL.K.10 and RI.K.10 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Ask and answer questions about what is being read .RL. K. 10 and RI.K.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Print Concepts

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>RF.K.1 Demonstrate understanding of the organization and basic features of print.</p> <ol style="list-style-type: none"> Follow words from left to right, top to bottom, and page by page. Recognize that spoken words are represented in written language by specific sequences of letters. Understand that words are separated by spaces in print. Recognize and name all upper- and lowercase letters of the alphabet.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Right side-up RF.K.1 Uppercase letter RF.K.1 Lowercase letter RF.K.1 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify text on a page. RF.K.1 Recognize that words are created by putting letters together in a specific order. RF.K.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonological Awareness

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>RF.K.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes)</p> <ul style="list-style-type: none"> Recognize and produce rhyming words. Count, pronounce, blend, and segment syllables in spoken words. Blend and segment onsets and rimes of single-syllables in spoken words. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three phoneme (consonant-vowel-consonant, or CVC) words* (This does not include CVCs ending with /l/, /r/, or /x/.) Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. <p><i>*Words, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, / CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.</i></p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> End sound RF.K.2 Rhyme RF.K.2 Syllable RF.K.2 Vowel and Vowel Sound RF.K.2 Blend RF.K.2 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize that some words make the same end sound. RF.K.2 Recognize that a syllable has one vowel sound. RF.K.2 Say each syllable sound in a word. RF.K.2 Recognize and understand the spoken words, syllables, and sounds (phonemes). RF.K.2 Identify the beginning sound, vowel sound, and end sound of words (three-phoneme words). RF.K.2 Recognize that you can add or change beginning, middle, or end sounds to create new words. RF.K.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.K.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. Read common high-frequency words by sight (e.g., <i>the, of, to, you, she, my, is, are, do, does</i>). Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Consonant, Vowel RF.K.3 Long vowel and short vowel sound RF.K.3 Similar, Different RF.K.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize long and short vowel sounds. RF.K.3 Identify the five major vowels. RF.K.3 Identify the most common sound of each consonant. RF.K.3 Recognize common words without having to sound them out. RF.K.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.K.4 Read emergent-reader texts with purpose and understanding.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Sight word RF.K.4 Retell RF.K.4 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Read a text with common sight words. RF.K.4 Recognize common sight words in a text. RF.K.4 Identify pictures in a text to help understand the text. RF.K.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...) W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Opinion (personal view, attitude, or appraisal). W.K.1 Tone (the attitude of the author towards its readers). W.K.1 Topic W.K.1 First, Next, Last W.K.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify words to share opinion or preference about a topic or book. W.K.1 Identify the topic or name of a book. W.K.1 Recognize an opinion or preference about a topic or book. W.K.1 Recognize information about a topic. W.K.2 Tell what happened first, next, last in the story. W.K.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.K.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. W.K.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Topic W.K.5 Detail W.K.5 Digital tool W.K.6 Publish W.K.6 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Answer questions about writing. W.K.5 Add details that will help the reader understand my writing. W.K.5 Recognize digital tools that produce and publish writing. W.K.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Research W.K.7 Topic W.K.7 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Explain how research is different from other types of writing. W.K.7 Demonstrating an ability to research and organize information W.K.7 Find information from teacher-provided sources (books, charts, pictures). W.K.7 Answer questions using information recalled or gathered. W.K.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.K.1 Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups. <ol style="list-style-type: none"> Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). Continue a conversation through multiple exchanges. SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood. SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Discussion SL.K.1 Idea SL.K.1 Media SL.K.2 Presentation SL.K.2 Perform basic processes and recognize and recall the accuracy of basic solutions. <ul style="list-style-type: none"> Identify key information presented in different formats. SL.K.2 Identify areas where understanding is limited. SL.K.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail. SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail. SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> People, Place, Thing SL.K.4 Event SL.K.4 Detail SL.K.4, Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify relevant details about familiar people, places, things, and events. SL.K.4 Recognize details to be added an existing drawing. SL.K.5 Identify thoughts, feelings, and ideas clearly from the speaker. SL.K.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> Print many upper- and lowercase letters. Use frequently occurring nouns and verbs. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>). Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>). Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>). Produce and expand complete sentences in shared language activities. <p>L.K.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> Capitalize the first word in a sentence and the pronoun <i>I</i>. Recognize and name end punctuation. Write a letter or letters for most consonant and short-vowel sounds (phonemes). Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Upper Case, Lower Case Letter L.K.1 Noun, Verb L.K.1 Plural L.K.1 Question Word L.K.1 Preposition L.K.1 Complete Sentence L.K.1 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify the differences between printing upper and lowercase letters. L.K.1 Recognize common nouns. L.K.1 Identify plural nouns when writing or speaking by adding –s or –es. L.K.1 Identify question words when writing or speaking. L.K.1 Identify common prepositions correctly when writing or speaking. L.K.1 Respond to questions using complete sentences. L.K.1 Recognize the first word in the sentence is capitalized. L.K.2 Recognize the pronoun <i>I</i> is capitalized. L.K.2 Identify question mark, exclamation point, and period. L.K.2 Recognize the letters for consonant and vowel sounds. L.K.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.</p> <ol style="list-style-type: none"> Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb to <i>duck</i>). Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i>, <i>-s</i>, <i>re-</i>, <i>un-</i>, <i>pre-</i>, <i>-ful</i>, <i>-less</i>) as a clue to the meaning of an unknown word. <p>L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <ol style="list-style-type: none"> Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). Identify real-life connections between words and their use (e.g., note places at school that are colorful). Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk</i>, <i>march</i>, <i>strut</i>, <i>prance</i>) by acting out the meanings. <p>L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Prefix, Suffix, Affix L.K.4 Category L.K.5 Similar L.K.5 Perform basic processes and recognize and recall the accuracy of basic solution; <ul style="list-style-type: none"> Identify words that have more than one meaning. L.K.4 Use a word that has more than one meaning correctly. L.K.4 Identify the affixes to help define unknown words. L.K.4 Recognize that common objects can go into categories. L.K. 5 Recognize opposite of a word (verb, or adjective). L.K.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Common Core State Standards: 1st Grade ELA Scoring Scales

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.1.1 Ask and answer questions about key details in a text. RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL.1.3 Describe characters, settings, and major events in a story, using key details RI.1.1 Ask and answer questions about key details in a text. RI.1.2 Identify the main topic and retell key details of a text RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Key details RL.1.1 and RI.1.1 Retell RL.1.2 and RI.1.2 Central Message RL.1.2 Character and Setting RL.1.3 Major Event RL.1.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize a key detail in a text. RL.1.1 and RI.1.1 Identify central message in a text and key details. RL.1.2 Recognize the key details about the characters in a text. RL.1.3 Recognize the key details about the setting in the text. RL.1.3 Recognize the key details about a major event in a text. RL.1.3 Identify the main topic of a text. RI.1.2 Identify individuals, events, ideas, or pieces of information in a text. RI.1.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types. RL.1.6 Identify who is telling the story at various points in a text. RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Five senses. RL.1.4 Story RL.1.5 Information RL.1.5 Character RL.1.6 Text feature RI.1.5 Illustration RI.1.6 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize words that describe how something looks, sounds, tastes, feels and smells. RL.1.4 Identify texts that tell stories. RL.1.5 Identify texts that give information. RL.1.5 Recognize what character is telling the story in the text. RL.1.6 Identify the unclear words or phrases in a text RI.1.4 Recognize the strategy of asking questions to clear up misconceptions RI.1.4 Explain how text features help locate key facts or information. RI.1.5 Explain what is learned about the text by looking at its pictures. RI.1.6 Explain what is learned about the text by reading the words. RI.1.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events RL.1.8 (Not applicable to literature) RL.1.9 Compare and contrast the adventures and experiences of characters in stories. RI.1.7 Use the illustrations and details in a text to describe its key ideas. RI.1.8 Identify the reasons an author gives to support points in a text. RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Illustration RI.1.7 and RL.1.7 Adventure (an undertaking usually involving unknown risks and danger) RL.1.9 Compare RL.1.9 and RI.1.9 Contrast RL.1.9 and RI.1.9 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify details in a story that tell about the characters, setting, or events. RL.1.7 and RI.1.7 Identify illustrations in a story that tell about the text RI.1.7 Identify the adventures and experiences of characters by telling how they are alike. RL.1.9 Identify the adventures and experiences of characters by telling how they are different RL.1.9 Identify why an author wrote a text RI.1.8 Recognize the points an author makes in a text to support ideas. RI.1.8 Compare two texts on the same topic by telling how they are alike. RI.1.9 Contrast two texts on the same topic by telling how they are different. RI.1.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Sight words RL.1.10 Informational text RI.1.10 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize the difference between a poem and informational text. RL.1.10 Recognize first grade sight words. RL.1.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading Foundational Skills
Topic: Print Concepts

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.1.1 Demonstrate understanding of the organization and basic features of print. <ol style="list-style-type: none"> Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Capitalize RF.1.1 Punctuation Mark RF.1.1 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify the organization and basic features of print (first word, capitalization, ending punctuation). RF.1.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonological Awareness

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). <ol style="list-style-type: none"> Distinguish long from short vowel sounds in spoken single-syllable words. Orally produce single-syllable words by blending sounds (phonemes) including consonant blends. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Short vowel RF.1.2 Long vowel RF.1.2 Syllable RF.1.2 Letter RF.1.2 Blend RF.1.2 Segment (one of the parts to which 1 of the parts is divided or naturally separated) RF.1.2 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize the difference between spoken words, syllables, and sounds (phonemes). RF.1.2 Identify long and short vowel sounds. RF.1.2 Identify the sound each letter makes. RF.1.2 Recognize that blending letters can create new sounds. RF.1.2 Blend letter sounds to make a word. RF.1.2 Separate words into beginning, middle, and ending sound segments. RF.1.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Know the spelling-sound correspondences for common consonant digraphs. Decode regularly spelled one-syllable words. Know final -e and common vowel team conventions for representing long vowel sounds. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. Decode two-syllable words following basic patterns by breaking the words into syllables. Read words with inflectional endings. Recognize and read grade-appropriate irregularly spelled words.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Syllable RF.1.3 Vowel Sound RF.1.3 Vowel Team RF.1.3 Segment RF.1.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify grade-level phonics and word analysis skills in decoding words. RF.1.3 Recognize the spelling-sound correspondences for common consonant digraphs. RF.1.3 Recognize context cues in isolation. RF.1.3 Identify final -e and common vowel team conventions for representing long vowel sounds. RF.1.3 Identify the vowel sound. In syllables. RF.1.3 Identify words with common inflectional endings. RF.1.3 Recognize irregularly spelled words. RF.1.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.1.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Fluent RF.1.4 Voice RF.1.4 Timing RF.1.4 Expression RF.1.4 Context clue (examining the parts of a sentence to determine the meaning of a word) RF.1.4 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize that reading fluently means my reading is easy, smooth, and automatic. RF.1.4 Understand what purpose and understanding is when reading a text. RF.1.4 Demonstrate comprehension with meaningful voice, timing, and expression with grade-level text. RF.1.4 Recognize misread or misunderstood words using context clues. RF.1.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Opinion W.1.1 Reason W.1.1 Conclusion W.1.1 Topic W.1.2 Narrative W.1.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognizing written compositions that express basic opinions. W.1.1 Identify Informational topic and facts. W.1.2 Place story events in the correct order using words (before, during, after). W.1.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed. W.1.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Topic W.1.5 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify a topic and answer questions about your writing W.1.5 Recognize digital tools help with a writing W.1.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.1.7 Participate in shared research and writing projects (e.g., explore a number of —how-to books on a given topic and use them to write a sequence of instructions). W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Research W.1.7 Recall W.1.8 Source W.1.8 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Explain research and it is different from other types of writing. W.1.7 Answer questions using information that is recalled or gathered from texts. W.1.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.1.1 Participate in collaborative conversations with diverse partners about <i>grade 1 topics and texts</i> with peers and adults in small and larger groups. <ol style="list-style-type: none"> Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). Build on others' talk in conversations by responding to the comments of others through multiple exchanges. Ask questions to clear up any confusion about the topics and texts under discussion. SL.1.2 Ask and answer questions about key details in a text read aloud or presented orally or through other media. SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Discussion SL.1.1 Idea SL.1.1 Presentation SL.1.2 and SL.1.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify unfamiliar topics and texts. SL.1.1 Identify key details in a text read aloud or information presented orally or through other media. SL.1.2 Identify information from the speaker in the text. SL.1.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly. SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. SL.1.6 Produce complete sentences when appropriate to task and situation.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Visual display SL.1.5 Complete Sentences SL.1.6 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify people, places, things, and events with relevant details. SL.1.4 Identify appropriate drawings or other visual displays to descriptions as desired to provide additional detail. SL.1.5 Determine a complete sentence (a group of words that expresses a complete thought). SL.1.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by: L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> Print all upper- and lowercase letters. Use common, proper, and possessive nouns. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop). Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything). Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home). Use frequently occurring adjectives. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>). Use determiners (e.g., articles, demonstratives). Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>). Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Conjunction L.1.1 Preposition L.1.1 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize common, proper, and possessive nouns. L.1.1 Recognize verbs past, present, and future. L.1.1 Recognize frequently occurring adjectives, conjunctions, determiners, and prepositions. L.1.1 Recognize complete, simple, and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ul style="list-style-type: none"> a. Capitalize dates and names of people. b. Use end punctuation for sentences. c. Use commas in dates and to separate single words in a series. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Punctuation L.1.2 ○ Spelling patterns (patterns of letters or sounds in words that constitute a word family, for example, -an as in can, man, fan). L.1.2 • Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> ○ Recognize command of the conventions of standard English capitalization, punctuation, and spelling when writing. L.1.2 ○ Identify dates and names of people that need capitalization. L.1.2 ○ Recognize end punctuation. L.1.2 ○ Spell new words by sounding out letters and using known spelling rules. L.1.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i>, choosing flexibly from an array of strategies.</p> <ol style="list-style-type: none"> Use sentence-level context as a clue to the meaning of a word or phrase. Use frequently occurring affixes as a clue to the meaning of a word. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks, looked, looking</i>). <p>L.1.5 With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <ol style="list-style-type: none"> Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes). Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>). Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings. <p>L.1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> affix L.1.4 root word L.1.4 trait L.1.5 phrase L.1.6 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibility from an array of strategies. L.1.4 Identify sentence-level context clue. L.1.4 Identify affixes as a clue to the meaning of a word L.1.4 Recognize figurative language, word relationships and nuances in word meanings. L.1.5 Recognize words can be put into categories L.1.5 Recognize the difference between similar verbs and adjectives meanings. L.1.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Common Core State Standards: 2nd Grade ELA Scoring Scales

Strand: Reading Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RL.2.3 Describe how characters in a story respond to major events and challenges. RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI.2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Central message, moral. RL.2.2 Character, event, challenge (obstacles). RL.2.3 Main idea, focus (central point) RI.2.2 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify who, what, where, when, why, and how to answer questions about a text. RL.2.1, and RI.2.1 Define central message, lesson, and / or moral of the story (overall idea an author is trying to share). RL.2.2 Identify characters in a story. RL.2.3 Identify how characters interact in events and challenges in a story. RL.2.3 Define topic or main idea (who, or what the text is mostly about). RI.2.2 Explain the focus (big idea) of each paragraph in a text. RI.2.2 Identify how historical events connect. RI.2.3 Identify how scientific ideas or concepts connect. RI.2.3 Identify how the steps in a process connect. RI.2.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. RL.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. RL.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud. RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area. RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rhythm, beat, alliteration, rhyme RL.2.4 Setting, character RL.2.5 Topic RI.2.4 Text feature (captions, bold print, headings, glossaries, indexes etc..) RI.2.5 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify words and phrases that create rhymes in a story, poem, or song. RL.2.4 Identify words and phrases that create alliteration (repeated beginning consonant sound) in a story, poem, or song. RL.2.4 Identify words and phrases that create a beat in a poem or song. RL.2.4 Recognize that a story has a beginning, middle, and end. RL.2.5 Describe how the characters, setting, and action are introduced in a story. RL.2.5 Describe how the events at the end of a story let me know what happened to the characters. RL.2.5 Define point of view (character's attitude or feelings about events in a story). RL.2.6 Recognize different points of view by changing voice when reading dialogue for each character. RL.2.6 and RI.2.6 Identify words and phrases that are specific to the topic/subject of a text (e.g, habitat, vapor, ecosystem). RI.2.4 Identify and give examples of text features. RI.2.5 Locate key facts or information about a topic using text features. RI.2.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot. RL.2.8 (Not applicable to literature) RL.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures. RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text. RI.2.8 Describe how reasons support specific points the author makes in a text. RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Illustrations RL.2.7 Character, setting, plot RL.2.7 Compare, contrast RL.2.9 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Explain how illustrations and words in a story to help describe the characters, setting, or plot. RL.2.7 Identify the similarities of two or more versions of the same story. RL.2.9 Identify the differences of two or more versions of the same story. RL.2.9 Recognize that images in text add meaning to the words. RI.2.7 Identify images and words in a text to help clarify text. RI.2.7 Recognize the reasons the author uses to support each point. RI.2.8 Identify specific points the author makes in a text. RI.2.8 Compare the most important points found in two texts on the same topic. RI.2.9 Contrast the most important points found in two texts on the same topic. RI.2.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI.2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Reading strategy (re-read, asking questions, take notes, making connections etc.). RL.2.10 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize text that is too easy or too difficult to read. RL.2.10 and RI.2.10 Recognize reading strategies (ask questions, make connections, take notes, make inferences, visualize, re-read) that help understand difficult complex text. RL.2.10 and RI.2.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.2.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Distinguish long and short vowels when reading regularly spelled one-syllable words. Know spelling-sound correspondences for additional common vowel teams. Decode regularly spelled two-syllable words with long vowels. Decode words with common prefixes and suffixes. Identify words with inconsistent but common spelling-sound correspondences. Recognize and read grade-appropriate irregularly spelled words.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Short vowel and long vowel pattern, vowel team RF.2.3 Syllable RF.2.3 Prefix, suffix RF.2.3 Spelling pattern RF.2.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify short vowel and long vowel patterns. RF.2.3 Identify vowel teams (ea,oi,oo). RF.2.3 Identify two-syllable words with and without long vowels. RF.2.3 Recognize words with common prefixes and suffixes. RF.2.3 Recognize irregularly spelled words (rule breakers). RF.2.3 Recognize words with similar patterns that create different sounds (bead/head, doll/roll, hint, pint). RF.2.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RF.2.4 Read with sufficient accuracy and fluency to support comprehension. <ol style="list-style-type: none"> Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Fluent, voice, timing, expression RL.2.4 Context clue RF.2.4 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize when a word does not make sense within the text. RF.2.4 Read grade level texts with purpose and understanding. RF.2.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Introduction, concluding statement/section W.2.1 Topic W.2.2 Create a pre-writing piece that: <ul style="list-style-type: none"> Introduces a topic or text clearly, states an opinion, and provides reasons that are supported by facts and details. W.2.1 Introduces a topic clearly and develops the topic with facts, definitions and details. W.2.2 Establishes a character and identifies an event or short sequence of events. W.2.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing. W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Draft, revise, edit, publish W.2.5 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize that a good piece of writing requires more than one draft. W.2.5 Identify changes that could be made to strengthen the writing piece. W.2.5 Use a pre-writing strategy to plan and organize writing. W.2.5 Revise writing by adding and deleting details. W.2.5 Use technology to produce and publish writing. W.2.5 Edit writing by correcting conventional errors. W.2.5 Identify digital tools that help produce and publish writing. W.2.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as:: <ul style="list-style-type: none"> Research W.2.7 Topic W.2.7 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Explain research as a type of writing. W.2.7 Identify a topic to research. W.2.7 Answer questions using information recalled or gathered from texts. W.2.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.2.1 Participate in collaborative conversations with diverse partners about <i>grade 2 topics and texts</i> with peers and adults in small and larger groups. <ol style="list-style-type: none"> Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). Build on others' talk in conversations by linking their comments to the remarks of others. Ask for clarification and further explanation as needed about the topics and texts under discussion. SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Connection SL.2.1 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Read or study materials to be discussed. SL.2.1 Recognize important information about the topic to be discussed. SL.2.1 Identify information from a text being read aloud. SL.2.2 Recognize different formats that information can be presented (media, charts, graphs, websites, speeches). SL.2.2 Identify key ideas or details from a text or discussion. SL.2.2 Identify information from a speaker. SL.2.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as; <ul style="list-style-type: none"> Descriptive detail SL.2.4 Pace SL.2.4 Visual SL.2.5 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify an experience with facts and relevant (appropriate), descriptive details. SL.2.4 Read aloud stories or poems and use voice to make them come to life (adjust volume of voice, change pace). SL.2.5 Add drawings or visual displays (photos, illustrations, graphs) to make ideas, thoughts and feelings clear. SL.2.5 Recognize a complete sentence (group of words that expresses a complete thought). SL.2.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
	Mastered grade level expectations by:
Score 3.0	L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ul style="list-style-type: none"> a. Use collective nouns (e.g., <i>group</i>). b. Form and use frequently occurring irregular plural nouns (e.g., <i>feet, children, teeth, mice, fish</i>). c. Use reflexive pronouns (e.g., <i>myself, ourselves</i>). d. Form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat, hid, told</i>). e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy</i>).
	L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ul style="list-style-type: none"> a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., <i>cage</i> → <i>badge; boy</i> → <i>boil</i>). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> ○ Identify nouns (collective and irregular plural) in a text. L.2.1 ○ Identify reflexive pronouns in text. L.2.1 ○ Identify adjectives and adverbs in text. L.2.1 ○ Identify simple and compound sentences. L.2.1 ○ Identify when capitalization and commas are needed in writing. L.2.2 ○ Recognize correctly used possessive nouns in text. L.2.2 ○ Recognize common spelling when writing words. L.2.2 ○ Identify misspelled words in text. L.2.2 ○ Recognize the purpose of reference materials. L.2.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Compare formal and informal uses of English.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Formal English, Informal English L.2.3 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Recognize conventions of formal English. L.2.3 Recognize conventions of informal English. L.2.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.</p> <ol style="list-style-type: none"> Use sentence-level context as a clue to the meaning of a word or phrase. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy</i>, <i>tell/retell</i>). Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition</i>, <i>additional</i>). Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse</i>, <i>lighthouse</i>, <i>housefly</i>; <i>bookshelf</i>, <i>notebook</i>, <i>bookmark</i>). Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases. <p>L.2.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <ol style="list-style-type: none"> Identify real-life connections between words and their use (e.g., <i>describe foods that are spicy or juicy</i>). Distinguish shades of meaning among closely related verbs (e.g., <i>toss</i>, <i>throw</i>, <i>hurl</i>) and closely related adjectives (e.g., <i>thin</i>, <i>slender</i>, <i>skinny</i>, <i>scrawny</i>). <p>L.2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids are happy that makes me happy</i>).</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Context clues L.2.4 Root word, compound word L.2.4 Glossary ,dictionary L.2.4 Perform basic processes and recognize and recall the accuracy of basic solution: <ul style="list-style-type: none"> Identify the meaning of unknown words using context clues. L.2.4 Recognize a new word can be formed when a prefix is added to a known word (happy/unhappy). L.2.4 Recognize a root word as a clue to the meaning of an unknown word with the same root (addition/additional). L.2.4 Recognize the purpose of glossaries and dictionaries. L.2.4 Recognize verbs that have similar meanings. L.2.4 Recognize adjectives that have similar meaning. L.2.4 <p>Identify new words or phrases through reading, listening, and conversation. L.2.6</p>
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text. RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events. RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea. RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Fable, Folktale, Myth RL.3.2 Physical traits, emotional traits RL.3.3 Sequence RL.3.3 and RI.3.3 Cause/effect RI.3.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Locate words and details to answer questions in a text. RL.3.1 and RI.3.1 Identify the central message, lesson and/or moral in the text. RL.3.2 Explain how key details in a text support the main idea. RL.3.2 and RI.3.2 Describe a character's traits, motivations, feelings, etc. RL.3.3 Describe the sequence of events in a story. RL.3.3 Identify events, procedures, ideas, and/or concepts in different types of informational text. RI.3.3 Identify a text that shows time (before, now, later, etc.), sequence (first, next, last, etc.), and cause/effect (because, then, if, etc.). RI.3.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language. RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections. RL.3.6 Distinguish their own point of view from that of the narrator or those of the characters. RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area. RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. RI.3.6 Distinguish their own point of view from that of the author of a text.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Literal language, nonliteral language, context clues RL.3.4 Drama, chapter, scene, stanza RL.3.5 Text feature, search tool (e.g., key words, sidebars, hyperlinks) RI.3.5 Point of View RL.3.6 and RI.3.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify literal and nonliteral language in a text. RL.3.4 Identify general academic vocabulary words and phrases in an informational text relevant to a grade 3 topic or subject area. RI.3.4 Identify words and phrases in an informational text relevant to a grade 3 topic or subject area. RI.3.4 Describe how each successive chapter, scene, and stanza help to develop the text. RL.3.5 Explain how text features and search tools help locate information quickly. RI.3.5 Determine the point of view of a narrator or character or a story. RL.3.6 Determine the point of view of an author. RI.3.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting). RL.3.8 (Not applicable to literature) RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series). RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence). RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Informational Text RI.3.7 Compare/ contrast, cause/effect, sequence RI.3.8 Theme, plot RL.3.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify illustrations that support the text. RL.3.7 and RI.3.7 Explain how illustrations contribute to the words in the text. RL.3.7 and RI.3.7 Describe common text structures (e.g. compare/contrast, cause/effect, and sequence). RI.3.8 Identify words authors use to help make logical connections between sentences and paragraphs (e.g. similar, different, because, if, first, last). RI.3.8 Compare theme, setting, and plot of stories written by the same author with the same or similar characters (e.g. books from a series). RL.3.9 Contrast theme, setting, and plot of stories written by the same author with the same or similar characters (e.g. books from a series). RL.3.9 Compare the most important points and key details found in two texts on the same topic. RI.3.9 Contrast the most important points and key details found in two texts on the same topic. RI.3.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.3.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently. RI.3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize text that is too difficult or too easy to read. RL.3.10 and RI.3.10 Recognize reading strategies (e.g., ask questions, make connections, take notes, make inferences, visualize, re-read) to understand difficult complex text. RL.3.10 and RI.3.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.3.3 Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> Identify and know the meaning of the most common prefixes and derivational suffixes. Decode words with common Latin suffixes. Decode multisyllable words. Read grade-appropriate irregularly spelled words.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Prefix, suffix, root word, syllable RF.3.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain how prefixes and suffixes change the meaning of the root word. RF.3.3 Break apart words into syllable segments. RF.3.3 Identify irregularly spelled words (rule breakers). RF.3.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.3.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize when a word that has been read does not make sense within the text. RF.3.4 Self-correct misread or misunderstood words. RF.3.4 Reread with corrections when necessary. RF.3.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. <ol style="list-style-type: none"> Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. Provide reasons that support the opinion. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. Provide a concluding statement or section.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Opinion W.3.1 Organizational structure W.3.1 Linking words (e.g., because, therefore, since, for example) W.3.1 Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic or text clearly. W.3.1 States an opinion. W.3.1 Provides reasons that are supported by facts and details. W.3.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. <ol style="list-style-type: none"> Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. Develop the topic with facts, definitions, and details. Use linking words and phrases (e.g., <i>also</i>, <i>another</i>, <i>and</i>, <i>more</i>, <i>but</i>) to connect ideas within categories of information. Provide a concluding statement or section.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Concluding statement W.3.2 Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic clearly W.3.2 Develops the topic with facts, definitions, and details. W.3.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. <ol style="list-style-type: none"> Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. Use temporal words and phrases to signal event order. Provide a sense of closure.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a prewriting piece that: <ul style="list-style-type: none"> Establishes a character with thoughts, words, feelings, etc. W.3.3 Identifies real or imagine experiences. W.3.3 Develops a plot sequence. W.3.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. W.3.6 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Graphic organizer W.3.4 Draft, revise, edit, publish W.3.5 and W.3.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify an appropriate organization and style that best fits the writing task, purpose, and audience. W.3.4 Use a prewriting strategy to plan and organize writing. W.3.4 and W.3.5 Revise writing by adding or deleting details. W.3.5 Edit writing by correcting conventional error(s). W.3.5 Use technology to produce and publish writing. W.3.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.7 Conduct short research projects that build knowledge about a topic. W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Research W.3.7 ○ Print source, digital source W.3.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain how research is different from other types of writing. W.3.7 ○ Identify a topic to answer questions and/or gain information. W.3.7 ○ Identify sources that can be used to answer a specific research question. W.3.8 ○ Answer questions using information recalled or gathered from texts. W.3.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize that different tasks require varied time frames to complete. W.3.10 Determine a writing format/style to fit the task, purpose, and/or audience. W.3.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion. SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Discussion SL.3.1 Main Idea, details SL.3.2 Elaborate SL.3.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Read or study materials to be discussed. SL.3.1 List important information about the topic to be discussed. SL.3.1 Ask questions to better understand what was said. SL.3.1 Identify information from a text being read aloud. SL.3.2 Identify information that is presented in different formats (e.g. media, charts, graphs, websites, and speeches). SL.3.2 Identify information from a speaker. SL.3.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details. SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Relevant SL.3.4 Descriptive Detail SL.3.4 Pace SL.3.4 Visual Display SL.3.5 Clarification SL.3.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Report on a topic or text, tell a story, or recount an experience. SL.3.4 Add drawings or visual displays (photos, illustrations, graphs) to make ideas, thoughts and feelings clear. SL.3.5 Recognize a complete sentence. SL.3.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>L.3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. Form and use regular and irregular plural nouns. Use abstract nouns (e.g., <i>childhood</i>). Form and use regular and irregular verbs. Form and use the simple (e.g., <i>I walked</i>; <i>I walk</i>; <i>I will walk</i>) verb tenses. Ensure subject-verb and pronoun-antecedent agreement.* Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. Use coordinating and subordinating conjunctions. Produce simple, compound, and complex sentences. <p>L.3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> Capitalize appropriate words in titles. Use commas in addresses. Use commas and quotation marks in dialogue. Form and use possessives. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., <i>sitting</i>, <i>smiled</i>, <i>cries</i>, <i>happiness</i>). Use spelling patterns and generalizations (e.g., <i>word families</i>, <i>position-based spellings</i>, <i>syllable patterns</i>, <i>ending rules</i>, <i>meaningful word parts</i>) in writing words. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify abstract nouns in a text. L.3.1 Identify regular and irregular verbs. L.3.1 Identify correct examples of subject-verb agreement. L.3.1 Identify correct examples of pronoun-antecedent agreement. L.3.1 Identify comparative and superlative adjectives. L.3.1 Identify comparative and superlative adverbs. L.3.1 Identify coordinating and subordinating conjunctions. L.3.1 Identify simple, compound, and complex sentences. L.3.1 Recognize correctly used capitals in titles. L.3.2 Recognize correctly used commas. L.3.2 Recognize correctly used possessives. L.3.2 Identify conventional spelling for high-frequency and other studied words. L.3.2 Identify spelling patterns and generalizations. L.3.2 Recognize the purpose of reference materials. L.3.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.3.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ol style="list-style-type: none"> Choose words and phrases for effect. Recognize and observe differences between the conventions of spoken and written standard English.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify words and phrases in a story that bring it to life or create effect or interest. L.3.3 Recognize conventions of spoken English. L.3.3 Recognize conventions of written standard English. L.3.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., <i>agreeable/disagreeable</i> , <i>comfortable/uncomfortable</i> , <i>care/careless</i> , <i>heat/preheat</i>). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company</i> , <i>companion</i>). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases. L.3.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., <i>take steps</i>). b. Identify real-life connections between words and their use (e.g., describe people who are <i>friendly</i> or <i>helpful</i>). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew</i> , <i>believed</i> , <i>suspected</i> , <i>heard</i> , <i>wondered</i>). L.3.6 Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i>).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Affix, root L.3.4 Reference material L.3.4 Literal meaning, nonliteral meaning, mood, state of mind L.3.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Define common affixes (e.g., <i>un-</i>, <i>dis-</i>, <i>-able</i>, <i>-less</i>). L.3.4 Recognize the purpose of glossaries and dictionaries. L.3.4 Identify literal and nonliteral meanings of words and phrases. L.3.5 Identify words that describe states of mind or degrees of certainty. L.3.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target	
4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text. RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions). RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text. RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Evidence shows misunderstanding, misconceptions, or omissions	
2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Inference, explicit RL.4.1 and RI.4.1 Theme RL.4.2 Summary RL.4.2 and RI.4.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify details and examples in a story when explaining what is written explicitly. RL.4.1 and RI.4.1 Determine the main idea of a text, or theme of a story, drama, or poem. RL.4.2 and RI.4.2 Identify specific details in a story or drama that describe a character, setting, or event in a story or drama. RL.4.3 Identify events, procedures, ideas, and/or concepts in different types of text. RI.4.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text. RL.4.6 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations. RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area. RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Drama, prose, structural element RL.4.5 Text structure RI.4.5 Firsthand account, secondhand account RI.4.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describe the characteristics of significant characters referenced by particular vocabulary, using strategies and reference materials. RL.4.4 Identify words and phrases in an informational text relevant to a grade 4 topic or subject area. RI.4.4 Identify the different structural elements that poems, drama, and prose use when speaking or writing. RL.4.5 Explain different structures used in informational text (e.g., chronology, compare/contrast, cause/effect, problem/solution). RI.4.5 Analyze the various points of view in stories, dramas, and poems. RL.4.6 Explain how a firsthand or secondhand account affects the information provided. RI.4.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text. RL.4.8 (Not applicable to literature) RL.4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures. RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text. RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Visual presentation, oral presentation RL.4.7 Evidence RI.4.7 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify where a text gives specific descriptions and directions that a visual or oral presentation uses. RL.4.7 Identify information presented in formats (e.g., graphs, pictures, diagrams, charts, media clips) other than words. RI.4.7 Locate reasons and evidence used to support particular points in a text. RI.4.8 Describe the development of two themes, topics, or patterns of events in a story, myth, or piece of traditional literature. RL.4.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading

Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI.4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize text that is too difficult or too easy to read. RL.4.10 and RI.4.10 Recognize reading strategies (e.g., ask questions, make connections, take notes, make inferences, visualize, re-read) to understand difficult complex text. RL.4.10 and RI.4.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.4.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Morphology (roots and affixes) RF.4.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the most common prefixes and derivational suffixes. RF.4.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.4.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize when a word that has been read does not make sense within the text. RF.4.4 Self-correct misread or misunderstood words. RF.4.4 Reread with corrections when necessary. RF.4.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. <ol style="list-style-type: none"> Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. Provide reasons that are supported by facts and details. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). Provide a concluding statement or section related to the opinion presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Point of View W.4.1 Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic or text clearly. W.4.1 States an opinion. W.4.1 Provides reasons that are supported by facts and details. W.4.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. <ol style="list-style-type: none"> Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Link ideas within categories of information using words and phrases (e.g., <i>another</i>, <i>for example</i>, <i>also</i>, <i>because</i>). Use precise language and domain-specific vocabulary to inform about or explain the topic. Provide a concluding statement or section related to the information or explanation presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic clearly W.4.2 Develops the topic with facts, definitions, and details. W.4.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Sensory detail W.4.3 Transition W.4.3 Create a prewriting piece that: <ul style="list-style-type: none"> Establishes a character with thoughts, words, feelings, etc. W.4.3 Identifies real or imagine experiences. W.4.3 Develops a plot sequence. W.4.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Credible website W.4.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identify the writing style that best fits my task, purpose, and audience. W.4.4 ◦ Use a pre-writing strategy to plan and organize writing. W.4.4 and W.4.5 ◦ Revise writing by adding or deleting details. W.4.5 ◦ Edit writing by correcting conventional errors. W.4.5 ◦ Use technology to produce and publish writing. W.4.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic. W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply <i>grade 4 Reading standards</i> to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply <i>grade 4 Reading standards</i> to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Print source, digital source W.4.7 Textual evidence ("word for word" support) W.4.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Develop a central question around a research topic (e.g., Why do birds migrate?). W.4.7 Gather information from experience or print and digital sources to answer the central question. W.4.7 and W.4.8 Take brief notes on sources and sort evidence into provided categories. W.4.8 Determine textual evidence that supports the analysis, reflection, and/or research. W.4.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize that different tasks require varied time frames to complete. W.4.10 Determine a writing format/style to fit the task, purpose, and/or audience. W.4.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Paraphrase SL.4.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Read or study materials to be discussed. SL.4.1 List important information about the topic to be discussed SL.4.1 Identify agreed upon rules for discussion. SL.4.1 Ask questions to better understand what was said. SL.4.1 Explain his/her own ideas and tell what has been learned from the discussion. SL.4.1 Paraphrase information from a text being read aloud. SL.4.2 Paraphrase information that is being presented in different formats (e.g., media, charts, graphs, websites, and speeches). SL.4.2 Identify information from a speaker. SL.4.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Enhance SL.4.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Present on a topic, text, story, or experience with facts and relevant, descriptive details that support the main idea or theme. SL.4.4 Identify main ideas or themes in a presentation that could be enhanced. SL.4.5 Determine an appropriate audio recording or visual display to enhance a main idea or theme. SL.4.5 Determine speaking tasks or situations that require a formal structure. SL.4.6 Determine speaking tasks or situations that require an informal structure. SL.4.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>). Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses. Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>). Form and use prepositional phrases. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>). L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use correct capitalization. Use commas and quotation marks to mark direct speech and quotations from a text. Use a comma before a coordinating conjunction in a compound sentence. Spell grade-appropriate words correctly, consulting references as needed.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify relative pronouns and relative adverbs. L.4.1 Identify the progressive verb tenses. L.4.1 Identify modal auxiliaries that convey various conditions. L.4.1 Recognize that multiple adjectives describing the same noun should be placed in a particular order (e.g., article + size + shape + age + color). L.4.1 Identify prepositional phrases. L.4.1 Identify the difference between a complete sentence and a fragment. Identify a run-on sentence. L.4.1 Identify correctly used capitals. L.4.2 Identify correctly used quotation marks in direct speech. L.4.2 Identify correctly used commas in quotations and coordinating conjunctions. L.4.2 Identify misspelled words. L.4.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ol style="list-style-type: none"> Choose words and phrases to convey ideas precisely. Choose punctuation for effect. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify differences between the conventions of spoken and written standard English. L.4.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph</i>, <i>photograph</i>, <i>autograph</i>). Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. <p>L.4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context. Recognize and explain the meaning of common idioms, adages, and proverbs. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms). <p>L.4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed</i>, <i>whined</i>, <i>stammered</i>) and that are basic to a particular topic (e.g., <i>wildlife</i>, <i>conservation</i>, and <i>endangered</i> when discussing animal preservation).</p>

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Simile, metaphor L.4.5 Idiom, adage, proverb L.4.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain how to use context clues to determine the meaning of unknown words. L.4.4 Define common, grade-appropriate Greek and Latin affixes and roots. L.4.4 Recognize the purpose of reference materials. L.4.4 Identify similes and metaphors in text. L.4.5 Identify idioms, adages, and proverbs in text. L.4.5 Identify relationships between particular words (e.g., synonyms, antonyms). L.4.5 Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew</i>, <i>believed</i>, <i>suspected</i>, <i>heard</i>, <i>wondered</i>). L.4.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CCSS GRADE FIVE ELA SCORING SCALES

Strand: Reading Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text. RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact). RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Quote RL.5.1 and RI.5.1 Explicit RL.5.1 and RI.5.1 Relationship, interaction RI.5.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain how a reader uses direct quotes from a text to explain what a text says explicitly and to reach a logical conclusion ("based on what I've read, it's most likely true that..."). RL.5.1 and RI.5.1 Analyze details in a text to determine a theme or main idea. RL.5.2 and RI.5.2 Identify relationships or interactions between individuals, events, ideas, or concepts in a historical, scientific, or technical text. RI.5.3 Cite specific information in the text to support relationship or interaction between individuals, events, ideas, or concepts identified in a historical, scientific, or technical text. RI.5.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem. RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described. RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area. RI.5.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts. RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Figurative language, literal language, simile, metaphor, personification, alliteration, onomatopoeia RL.5.4 Scene, stanza RL.5.5 First person, second person, third person RL.5.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Distinguish between literal language and figurative language. RL.5.4 Identify words and phrases in an informational text relevant to a grade 5 topic or subject area. RI.5.4 Identify specific structural elements of a story – character, setting, description, dialogue, and plot. RL.5.5 Identify specific structural elements of poetry – verse, rhythm, meter, description. RL.5.5 Identify specific structural elements of drama – cast, setting, dialogue, stage directions. RL.5.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. RI.5.5 Identify different character and/or narrator's points of view. RL.5.6 Describe the main ideas of firsthand and secondhand accounts of the same event or topic. RI.5.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem). RL.5.8 (Not applicable to literature) RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics. RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Multimedia RL.5.7 Tone RL.5.7 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify visual elements in a text (e.g., photographs, drawing, and cartoons). RL.5.7 Identify information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) that contributes to an understanding of the text in which it appears. RI.5.7 Explain how an author uses reasons and evidence to support particular points in a text. RI.5.8 Describe how the development of two or more stories in the same genre can communicate the same theme or topic. RL.5.9 Identify key information from two texts on the same topic. RI.5.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize text that is too difficult or too easy to read. RL.5.10 and RI.5.10 Recognize reading strategies (e.g., ask questions, make connections, take notes, make inferences, visualize, re-read) to understand difficult complex text. RL.5.10 and RI.5.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Phonics and Word Recognition

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Morphology (roots and affixes) RF.5.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify and know the meaning of the most common prefixes and derivational suffixes. RF.5.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading Foundational Skills
Topic: Fluency

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RF.5.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize when a word that has been read does not make sense within the text. RF.5.4 Self-correct misread or misunderstood words. RF.5.4 Reread with corrections when necessary. RF.5.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic or text clearly. W.5.1 States an opinion. W.5.1 Provides reasons that are supported by facts and details. W.5.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. <ol style="list-style-type: none"> Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Link ideas within and across categories of information using words, phrases, and clauses (e.g., <i>in contrast</i>, <i>especially</i>). Use precise language and domain-specific vocabulary to inform about or explain the topic. Provide a concluding statement or section related to the information or explanation presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a prewriting piece that: <ul style="list-style-type: none"> Introduces a topic clearly. W.5.2 Develops the topic with facts, definitions, and details. W.5.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. <ol style="list-style-type: none"> Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. Use concrete words and phrases and sensory details to convey experiences and events precisely. Provide a conclusion that follows from the narrated experiences or events.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a prewriting piece that: <ul style="list-style-type: none"> Establishes a character with thoughts, words, feelings, etc. W.5.3 Identifies real or imagine experiences. W.5.3 Develops a plot sequence. W.5.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.5.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify an appropriate organization and style that best fits the writing task, purpose, and audience. W.5.4 Explain the writing process. W.5.5 Use a pre-writing strategy to plan and organize writing. W.5.5 Revise writing by adding or deleting details. W.5.5 Edit writing by correcting conventional errors. W.5.5 Type a minimum of one page in a single sitting. W.5.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply <i>grade 5 Reading standards</i> to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply <i>grade 5 Reading standards</i> to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Central question W.5.7 Paraphrase W.5.8 Analysis W.5.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Develop a central question around a research topic (e.g., Why do birds migrate?). W.5.7 Gather information to answer the central question. W.5.7 Summarize and/or paraphrase information when taking notes. W.5.8 Record a list of sources. W.5.8 Determine textual evidence that supports the analysis, reflection, and/or research. W.5.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize that different tasks require varied time frames to complete. W.5.10 Determine a writing format/style to fit the task, purpose, and/or audience. W.5.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. SL.5.2 Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Elaborate SL.5.1 Claim, reason, evidence SL.5.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Read or study materials to be discussed. SL.5.1 List important information about the topic to be discussed SL.5.1 Ask and answer questions and link to the remarks of others. SL.5.1 Summarize information that is being presented in different formats (e.g., media, charts, graphs, websites, and speeches). SL.5.2 Paraphrase information from a speaker. SL.5.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Logical sequence SL.5.4 Multimedia component SL.5.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Determine a logical sequence for presenting ideas and facts. SL.5.4 Present ideas and/or an opinion with facts and relevant details. SL.5.4 Determine an appropriate multimedia component or visual display to enhance a main idea or theme. SL.5.5 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). SL.5.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.5.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. Form and use the perfect (e.g., <i>I had walked</i>; <i>I have walked</i>; <i>I will have walked</i>) verb tenses. Use verb tense to convey various times, sequences, states, and conditions. Recognize and correct inappropriate shifts in verb tense. Use correlative conjunctions (e.g., <i>either/or</i>, <i>neither/nor</i>). L.5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use punctuation to separate items in a series. Use a comma to separate an introductory element from the rest of the sentence. Use a comma to set off the words <i>yes</i> and <i>no</i> (e.g., <i>Yes, thank you</i>), to set off a tag question from the rest of the sentence (e.g., <i>It's true, isn't it?</i>), and to indicate direct address (e.g., <i>Is that you, Steve?</i>). Use underlining, quotation marks, or italics to indicate titles of works. Spell grade-appropriate words correctly, consulting references as needed.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify conjunctions (words that connect words, phrases, clauses or sentences). L.5.1 Identify common correlative conjunctions (e.g., <i>either/or</i>, <i>neither/nor</i>). L.5.1 Form prepositional phrases. L.5.1 Identify interjections (exclamations or attention getters that express strong feelings and usually come at the beginning of a sentence). L.5.1 Identify the past perfect, present perfect, and future perfect verb tenses (e.g., <i>I had walked</i>; <i>I have walked</i>; <i>I will have walked</i>). L.5.1 Identify the correct verb tense to show time, sequence, state, and condition. L.5.1 Identify items in a series that are punctuated correctly. L.5.2 Identify introductory elements in a sentence. L.5.2 Identify questions that should be set off from the rest of the sentence and nouns of direct address. L.5.2 Identify titles of works that are correctly written. L.5.2 Identify a spelling pattern in a group of words, along with outliers from the pattern. L.5.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.5.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. b. Compare and contrast the varieties of English (e.g., <i>dialects</i> , <i>registers</i>) used in stories, dramas, or poems.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify simple, compound, and complex sentence structures. L.5.3 Identify when an author uses dialect and/or varied registers in stories, dramas, or poems. L.5.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>photograph</i> , <i>photosynthesis</i>). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. L.5.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words. L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., <i>however</i> , <i>although</i> , <i>nevertheless</i> , <i>similarly</i> , <i>moreover</i> , <i>in addition</i>).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify unknown words in at text. L.5.4 Define common, grade-appropriate Greek and Latin affixes and roots. L.5.4 Identify various forms of figurative language (e.g., simile, metaphor, hyperbole, personification, alliteration, onomatopoeia). L.5.5 Identify idioms, adages, and proverbs in text. L.5.5 Identify relationships between particular words (e.g., synonyms, antonyms, homographs). L.5.5
	1.5 Basic understanding, with some assistance
	1.0 Basic understanding, only with assistance
	0.5 Some basic understanding, only with assistance

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectation: RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution. RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> textual evidence (word for word support) RL.6.1 and RI.6.1 explicit (right there answers), inference (based on what I've read, it's most likely true that...) RL.6.1 and RI.6.1 analysis (inferences made to answer a question and textual evidence to support the answer) RL.6.1 and RI.6.1 objective (not influenced by personal feelings), opinion (personal view) RL.6.2 and RI.6.2 story/drama elements (characters, setting, plot, episodes, resolution) RL.6.3 expository elements (individual, event, idea) RI.6.3 example, anecdote (an especially interesting or amusing, short account of an incident or event) RI.6.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Locate explicit answers in text and answers that require inferences. RL.6.1 and RI.6.1 Identify key events in a text that contribute to the theme. RL.6.2 and RI.6.2 Identify the characters and summarize the main events in the plot of a story. RL.6.3 Identify key individuals, events, and/or ideas in a text. RI.6.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone. RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text. RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas. RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ figurative language, literal language RL.6.4 and RI.6.4 ○ denotative (dictionary meaning), connotative (carries feeling or association) RL.6.4 and RI.6.4 ○ tone RL.6.4 ○ first and third person, third person limited and omniscient RL.6.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify literal and figurative language in a text. RL.6.4 and RI.6.4 ○ Explain the difference between denotative and connotative meanings. RL.6.4 and RI.6.4 ○ Identify words that have technical meanings in a specific text. RI.6.4 ○ Explain why authors choose words and phrases (tone) to create an overall meaning and mood for the reader. RI.6.4 ○ Explain the differences between the form and structure of narrative stories and the form and structure of dramas and poems. RL.6.5 ○ Describe the overall structure of an informational text. RI.6.5 ○ Identify the point view of a narrator or speaker in a text. RL.6.6 ○ Identify an author's purpose for writing and point of view in a text. RI.6.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they see and hear when reading the text to what they perceive when they listen or watch. RL.6.8 (Not applicable to literature) RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics. RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not. RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ multimedia (combination of sound, images, video, etc.) RL.6.7 and RI.6.7 ○ argument (composition intended to persuade) RI.6.8 ○ trace (follow the development of the argument) RI.6.8 ○ claim (assertion of something as a fact) RI.6.8 ○ credibility (believability based on the use of facts v. opinions) RI.6.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Describe the mental images that occur while reading. RL.6.7 ○ Identify key details in informational text presented in different formats (audio, video, multimedia). RI.6.7 ○ Identify techniques used in a multimedia or staged/live version of a text. RL.6.7 and RI.6.7 ○ Identify claims that are supported by facts and those that are opinions. RI.6.8 ○ Identify qualities and characteristics of a particular genre in a text. RL.6.9 ○ Identify key events presented in two texts on the same topic by different authors. RI.6.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> reading strategy RL.6.10 and RI.6.10 comprehension RL.6.10 and RI.6.10 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize when a text is too easy or too difficult. RL.6.10 and RI.6.10 Choose a reading strategy (i.e., ask questions, make connections, take notes, make inferences, visualize, re-read) that will help comprehend difficult texts. RL.6.10 and RI.6.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.6.1 Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> Introduce claim(s) and organize the reasons and evidence clearly. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. Establish and maintain a formal style. Provide a concluding statement or section that follows from the argument presented.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> argument, claim, evidence credible source transition formal style Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic that causes debate states a claim identifies reasons and evidence that support the claim
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. <ol style="list-style-type: none"> Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. Use appropriate transitions to clarify the relationships among ideas and concepts. Use precise language and domain-specific vocabulary to inform about or explain the topic. Establish and maintain a formal style. Provide a concluding statement or section that follows from the information or explanation presented.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic on which to inform/explain identify facts, definitions, details, or quotations to support explanation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. <ol style="list-style-type: none"> Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. Provide a conclusion that follows from the narrated experiences or events.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> sensory language Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a real or imagined experience identifies characters, setting, and events develops a plot sequence
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify an appropriate organization and style that best fits the writing task, purpose, and audience. W.6.4 ○ Explain the writing process. W.6.5 ○ Use a pre-writing strategy to plan and organize writing. W.6.5 ○ Revise writing by adding or deleting details. W.6.5 ○ Edit writing by correcting conventional errors. W.6.5 ○ Type a minimum of two pages in a single sitting. W.6.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.</p> <p>W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.</p> <p>W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 6 Reading standards</i> to literature (e.g., “Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics”).</p> <p>b. Apply <i>grade 6 Reading standards</i> to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not”).</p>

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ central question W.6.7 ○ credibility W.6.8 ○ quote, paraphrase W.6.8 ○ plagiarism, bibliographic information W.6.8 ○ evidence, analysis W.6.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Develop a central question about a research topic. W.6.7 ○ Gather information from print and digital sources to answer the central question. W.6.7 and W.6.8 ○ Explain how and why one must assess the credibility and accuracy of a source. W.6.8 ○ Quote or paraphrase information when taking notes. W.6.8 ○ Record basic bibliographic information from sources. W.6.8 ○ Determine textual evidence that supports an analysis, reflection, and/or research. W.6.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ purpose ○ audience • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize that different tasks require varied time frames to complete. ○ Determine a writing format/style to fit the task, purpose, and/or audience.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. SL.6.3 Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> o collegial SL.6.1 o elaborate SL.6.1 o delineate SL.6.3 o claim SL.6.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> o Outline required material in preparation for a class discussion. SL.6.1 o Formulate questions to contribute to a discussion on a topic, text, or issue. SL.6.1 o Identify the main ideas and supporting details presented in a variety of media and formats. SL.6.2 o Outline a speaker's argument, claims, and evidence used to support them. SL.6.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information. SL.6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ pertinent SL.6.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Develop a claim and findings supported by descriptions, facts, or details organized in a logical sequence. SL.6.4 ○ Determine appropriate multimedia components or visual displays to support a presentation. SL.6.5 ○ Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). SL.6.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Ensure that pronouns are in the proper case (subjective, objective, possessive). Use intensive pronouns (e.g., <i>myself</i>, <i>ourselves</i>). Recognize and correct inappropriate shifts in pronoun number and person.* Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).* Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.* L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* Spell correctly.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify subjective, objective, possessive, and intensive pronouns in text. L.6.1 Identify pronouns and their antecedents in text. L.6.1 Identify non-restrictive and parenthetical elements in a sentence. L.6.2 Identify a spelling pattern in a group of words, along with outliers from the pattern. L.6.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Vary sentence patterns for meaning, reader/listener interest, and style.* b. Maintain consistency in style and tone.*

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: • Identify simple, compound, and complex sentence structures as well as parts of speech in a variety of sentence patterns (i.e., introductory adverb). • Identify inconsistencies in style and tone.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience</i> , <i>auditory</i> , <i>audible</i>). L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., personification) in context. b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>stingy</i> , <i>scrimping</i> , <i>economical</i> , <i>unwasteful</i> , <i>thrifty</i>). L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ nuance L.6.5 ○ connotation, denotation L.6.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify unknown words in at text. L.6.4 ○ Define common, grade-appropriate Greek and Latin affixes and roots. L.6.4 ○ Identify figures of speech in text. L.6.5 ○ Identify the relationship (cause/effect, part/whole, item/category) between words in text. L.6.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectation: RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot). RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RI.7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text. RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ textual evidence (word for word support) RL.7.1 and RI.7.1 ○ explicit (right there answers), inference (based on what I've read, it's most likely true that...) RL.7.1 and RI.7.1 ○ analysis (inferences made to answer a question and textual evidence to support the answer) RL.7.1 and RI.7.1 ○ objective (not influenced by personal feelings) RL.7.2 and RI.7.2 ○ opinion (personal view) RL.7.2 and RI.7.2 ○ story/drama elements (characters, setting, plot) RL.7.3 ○ expository elements (individual, event, idea) RI.7.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Locate explicit answers in text and answers that require inferences. RL.7.1 and RI.7.1 ○ Identify key events in a text that contribute to the theme. RL.7.2 and RI.7.2 ○ Explain how making a change to one element of a story or drama could affect the other elements. RL.7.3 ○ Identify key individuals, events, and/or ideas in a text. RI.7.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. RL.7.5 Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning. RL.7.6 Analyze how an author develops and contrasts the points of view of different characters or narrators in a text. RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone. RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas. RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ figurative language, literal language RL.7.4 and RI.7.4 ○ denotative (dictionary meaning), connotative (carries feeling or association) RL.7.4 and RI.7.4 ○ tone (author's attitude toward audience or subject matter), mood RI.7.4 ○ first and third person, third person limited and omniscient RL.7.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify literal and figurative language in a text. RL.7.4 and RI.7.4 ○ Explain the difference between denotative and connotative meanings. RL.7.4 and RI.7.4 ○ Explain why authors use rhyme and repetition of words to impact the reader and draw attention to a particular section of the text. RL.7.4 ○ Identify words that have technical meanings in a specific text. RI.7.4 ○ Explain why authors choose words and phrases (tone) to create an overall meaning and mood for the reader. RI.7.4 ○ Explain the differences between the form and structure of narrative stories and the form and structure of dramas and poems. RL.7.5 ○ Describe the overall structure of an informational text. RI.7.5 ○ Identify the point view of a narrator or speaker in a text. RL.7.6 ○ Identify an author's purpose for writing and point of view in a text. RI.7.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.7.7 Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film). RL.7.8 (Not applicable to literature) RL.7.9 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history. RI.7.7 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words). RI.7.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims. RI.7.9 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ multimedia (combination of sound, images, video, etc.) RL.7.7 and RI.7.7 ○ medium (lighting, sound, color, camera focus, angles) RL.7.7 ○ argument (composition intended to persuade) RI.7.8 ○ trace (follow the development of the argument) RI.7.8 ○ claim (assertion of something as a fact) RI.7.8 ○ credibility (believability based on the use of facts v. opinions) RI.7.8 ○ relevant (connected to the topic), sufficient (adequate amount, enough) RI.7.8 ○ historical fiction RL.7.9 ○ alter RL.7.9 ○ interpretation (construe or understand in a particular way) RI.7.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Describe the mental images that occur while reading. RL.7.7 ○ Identify key details in informational text presented in different formats (audio, video, multimedia). RI.7.7 ○ Identify techniques used in a multimedia or staged/live version of a text. RL.7.7 and RI.7.7 ○ Identify claims that are supported by facts and those that are opinions. RI.7.8 ○ Identify a key character, time, or place in a historical fiction text and a historical account of the same period. RL.7.9 ○ Identify key information, evidence, and facts in two texts on the same topic by different authors. RI.7.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.7.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI.7.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ reading strategy RL.7.10 and RI.7.10 ○ comprehension RL.7.10 and RI.7.10 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize when a text is too easy or too difficult. RL.7.10 and RI.7.10 ○ Choose a reading strategy (i.e., ask questions, make connections, take notes, make inferences, visualize, re-read) that will help me comprehend difficult texts. RL.7.10 and RI.7.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.7.1 Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> argument, claim, evidence credible source transition formal style Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic that causes debate states a claim identifies reasons and evidence that support the claim
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. <ol style="list-style-type: none"> Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. Use precise language and domain-specific vocabulary to inform about or explain the topic. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the information or explanation presented.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic on which to inform/explain identify facts, definitions, details, or quotations to support explanation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. <ol style="list-style-type: none"> Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. Provide a conclusion that follows from and reflects on the narrated experiences or events.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> sensory language Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a real or imagined experience identifies characters, setting, and events develops a plot sequence
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.7.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> cite W.7.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify an appropriate organization and style that best fits the writing task, purpose, and audience. W.7.4 Explain the writing process. W.7.5 Use a pre-writing strategy to plan and organize writing. W.7.5 Revise writing by adding or deleting details. W.7.5 Edit writing by correcting conventional errors. W.7.5 Use technology to publish writing. W.7.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.</p> <p>W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p> <p>W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 7 Reading standards</i> to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).</p> <p>b. Apply <i>grade 7 Reading standards</i> to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</p>

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ central question W.7.7 ○ credibility W.7.8 ○ quote, paraphrase W.7.8 ○ plagiarism, citation W.7.8 ○ evidence, analysis W.7.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Develop a central question about a research topic. W.7.7 ○ Gather information from print and digital sources to answer the central question. W.7.7 and W.7.8 ○ Explain how and why one must assess the credibility and accuracy of a source. W.7.8 ○ Quote or paraphrase information when taking notes. W.7.8 ○ Record bibliographic information from sources. W.7.8 ○ Determine textual evidence that supports an analysis, reflection, and/or research. W.7.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.7.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ purpose ○ audience • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize that different tasks require varied time frames to complete. ○ Determine a writing format/style to fit the task, purpose, and/or audience.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. Acknowledge new information expressed by others and, when warranted, modify their own views. <p>SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.</p> <p>SL.7.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.</p>

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> collegial SL.7.1 elaborate SL.7.1 consensus SL.7.1 clarify SL.7.2 delineate SL.7.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Outline required material to determine key points and central ideas. SL.7.1 Formulate questions and record key textual evidence to contribute to a discussion on a topic, text, or issue. SL.7.1 Identify the main ideas and supporting details presented in a variety of media and formats. SL.7.2 Outline a speaker's argument, claims, and evidence used to support them. SL.7.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. SL.7.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ salient SL.7.4 and SL.7.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Develop a claim and findings supported by descriptions, facts, or details organized in a logical sequence. SL.7.4 ◦ Determine appropriate multimedia components or visual displays to support a presentation. SL.7.5 ◦ Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). SL.7.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Explain the function of phrases and clauses in general and their function in specific sentences. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.* L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i> but not <i>He wore an old[,] green shirt</i>). Spell correctly.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify phrases, independent clauses, and dependent clauses. L.7.1 Identify coordinate adjectives in a sentence. L.7.2 Identify a spelling pattern in a group of words, along with outliers from the pattern. L.7.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify precise vocabulary for a given topic. ○ Identify wordiness or redundancy in writing.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i>, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i>, <i>bellicose</i>, <i>rebel</i>). Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). <p>L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>refined</i>, <i>respectful</i>, <i>polite</i>, <i>diplomatic</i>, <i>condescending</i>). <p>L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> nuance L.7.5 allusion L.7.5 connotation, denotation L.7.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify unknown words in at text. L.7.4 Define common, grade-appropriate Greek and Latin affixes and roots. L.7.4 Identify figures of speech in text. L.7.5 Determine the synonym or antonym of a given word. L.7.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Key Ideas and Details

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectation: RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text. RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. RI.8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text. RI.8.3 Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ textual evidence (word for word support) RL.8.1 and RI.8.1 ○ explicit (right there answers), inference (based on what I've read, it's most likely true that...) RL.8.1 and RI.8.1 ○ analysis (inferences made to answer a question and textual evidence to support the answer) RL.8.1 and RI.8.1 ○ objective (not influenced by personal feelings) RL.8.2 and RI.8.2 ○ analogy RI.8.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Locate explicit answers in text and answers that require inferences. RL.8.1 and RI.8.1 ○ Identify key events in a text that contribute to the theme. RL.8.2 and RI.8.2 ○ Identify key lines of dialogue or incidents in a story or drama. RL.8.3 ○ Identify connections between individuals, ideas, or events in a text. RI.8.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Craft and Structure

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. RL.8.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style. RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor. RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. RI.8.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept. RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ figurative language, literal language RL.8.4 and RI.8.4 ○ denotative (dictionary meaning), connotative (carries feeling or association) RL.8.4 and RI.8.4 ○ tone (<i>author's</i> attitude toward audience or subject matter) RL.8.4 and RI.8.4 ○ analogy, allusion RL.8.4 and RI.8.4 ○ dramatic irony RL.8.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify figurative, connotative, and technical meanings in text, including analogies and allusions to other text. RL.8.4 and RI.8.4 ○ Explain why authors choose words and phrases (tone) to create an overall meaning and mood for the reader. RL.8.4 and RI.8.4 ○ Describe the overall structure of two or more narrative texts. RL.8.5 ○ Identify the key structural elements of a paragraph, including the topic sentence and supporting details. RI.8.5 ○ Identify an instance in which a character has a different point of view than the reader or audience. RL.8.6 ○ Identify an author's point of view and evidence which conflicts with that viewpoint in a text. RI.8.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Reading
Topic: Integration of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.8.7 Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors. RL.8.8 (Not applicable to literature) RL.8.9 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea. RI.8.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced. RI.8.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ text, script, artistic license RL.8.7 ○ medium (print/digital text, video, multimedia) RI.8.7 ○ argument (composition intended to persuade) RI.8.8 ○ delineate (trace the development of the argument) RI.8.8 ○ claim (assertion of something as a fact) RI.8.8 ○ credibility (believability based on the use of facts v. opinions) RI.8.8 ○ relevant (connected to the topic) v. irrelevant, sufficient (adequate amount, enough) RI.8.8 ○ modern v. traditional RL.8.9 ○ interpretation (construe or understand in a particular way) RI.8.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the similarities and differences between a text/script and a filmed/live version of the same story/drama. RL.8.7 ○ Identify the similarities and differences between two forms of the same informational text presented in different formats (audio, video, multimedia). RI.8.7 ○ Identify the claims, reasoning, and evidence used to support an author's argument. RI.8.8 ○ Identify common themes, patterns of events, or character types from traditional stories in modern works of fiction. RL.8.9 ○ Identify key information, evidence, and facts in two texts on the same topic by different authors. RI.8.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Reading
Topic: Range of Reading and Level of Text Complexity

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: RL.8.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently. RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ reading strategy RL.8.10 and RI.8.10 ○ comprehension RL.8.10 and RI.8.10 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize when a text is too easy or too difficult. RL.8.10 and RI.8.10 ○ Choose a reading strategy (i.e., ask questions, make connections, take notes, make inferences, visualize, re-read) that will help me comprehend difficult texts. RL.8.10 and RI.8.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.8.1 Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the argument presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> argument , claim, evidence credible source transition formal style Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic that causes debate states a claim identifies reasons and evidence that support the claim
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. <ol style="list-style-type: none"> Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. Use precise language and domain-specific vocabulary to inform about or explain the topic. Establish and maintain a formal style. Provide a concluding statement or section that follows from and supports the information or explanation presented.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a topic on which to inform/explain identify facts, definitions, details, or quotations to support explanation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Text Types and Purposes

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. <ol style="list-style-type: none"> Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. Provide a conclusion that follows from and reflects on the narrated experiences or events.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> sensory language Create a pre-writing piece that: <ul style="list-style-type: none"> identifies a real or imagined experience identifies characters, setting, and events develops a plot sequence
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Production and Distribution of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ collaborate W.8.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identify an appropriate organization and style that best fits the writing task, purpose, and audience. W.8.4 ◦ Explain the writing process. W.8.5 ◦ Use a pre-writing strategy to plan and organize writing. W.8.5 ◦ Revise writing by adding or deleting details. W.8.5 ◦ Edit writing by correcting conventional errors. W.8.5 ◦ Use technology to publish writing. W.8.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Writing
Topic: Research to Build and Present Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>W.8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p> <p>W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p> <p>W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 8 Reading standards</i> to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).</p> <p>b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).</p>

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ central question W.8.7 ○ credibility, accuracy W.8.8 ○ quote, paraphrase W.8.8 ○ plagiarism, citation W.8.8 ○ evidence, analysis W.8.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Develop a central question about a research topic. W.8.7 ○ Gather information from print and digital sources to answer the central question. W.8.7 and W.8.8 ○ Explain how and why one must assess the credibility and accuracy of a source. W.8.8 ○ Quote or paraphrase information when taking notes. W.8.8 ○ Record bibliographic information from sources. W.8.8 ○ Determine textual evidence that supports an analysis, reflection, and/or research. W.8.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Strand: Writing
Topic: Range of Writing

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: W.8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ purpose ○ audience • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize that different tasks require varied time frames to complete. ○ Determine a writing format/style to fit the task, purpose, and/or audience.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Comprehension and Collaboration

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. <p>SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.</p> <p>SL.8.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> collegial SL.8.1 warranted, qualify, justify SL.8.1 motives, social, commercial, political SL.8.2 delineate SL.8.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Outline required material to determine key points and central ideas. SL.8.1 Formulate questions and responses to others' questions to contribute to a discussion on a topic, text, or issue. SL.8.1 Identify the main ideas, supporting details, and persuasive techniques presented in a variety of media and formats. SL.8.2 Outline a speaker's argument, claims, and evidence used to support them. SL.8.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Speaking and Listening
Topic: Presentation of Knowledge and Ideas

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. SL.8.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ salient SL.8.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Develop a claim and findings supported by descriptions, facts, or details organized in a logical sequence. SL.8.4 ◦ Determine appropriate multimedia components or visual displays to support a presentation. SL.8.5 ◦ Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). SL.8.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Conventions of Standard English

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. Form and use verbs in the active and passive voice. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. Recognize and correct inappropriate shifts in verb voice and mood.* L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> Use punctuation (comma, ellipsis, dash) to indicate a pause or break. Use an ellipsis to indicate an omission. Spell correctly.

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify verbals (gerunds, participles, infinitives) and verbal phrases in sentences. L.8.1 Identify active and passive voice verbs; indicative, imperative, interrogative, conditional, and subjunctive mood in a sentence. L.8.2 Identify correct v. incorrect use of commas, ellipses, and dashes. L.8.2 Identify a spelling pattern in a group of words, along with outliers from the pattern. L.8.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Knowledge of Language

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations: L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Identify active and passive verbs in writing. ○ Identify conditional and subjunctive verbs in a writing.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Strand: Language
Topic: Vocabulary Acquisition and Use

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations:</p> <p>L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on <i>grade 8 reading and content</i>, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>precede</i>, <i>recede</i>, <i>secede</i>). Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). <p>L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> Interpret figures of speech (e.g. verbal irony, puns) in context. Use the relationship between particular words to better understand each of the words. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>bullheaded</i>, <i>willful</i>, <i>firm</i>, <i>persistent</i>, <i>resolute</i>). <p>L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> verbal irony, pun L.8.5 connotation, denotation L.8.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify unknown words in at text. L.8.4 Define common, grade-appropriate Greek and Latin affixes and roots. L.8.4 Identify figures of speech in text. L.8.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Reading Literature				
Key Ideas and Details				
RL.K.1 With prompting and support, ask and answer questions about key details in a text.				
RL.K.2 With prompting and support, retell familiar stories, including key details.				
RL.K.3 With prompting and support, identify characters, settings, and major events in a story.				
Craft and Structure				
RL.K.4 Ask and answer questions about unknown words in a text.				
RL.K.5 Recognize common types of texts (e.g., storybooks, poems).				
RL.K.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.				
Integration of Knowledge and Ideas				
RL.K.7 With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).				
RL.K.8 (Not applicable to literature)				
RL.K.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.				
Range of Reading and Level of Text Complexity				
RL.K.10 Actively engage in group reading activities with purpose and understanding.				
RL.K.11 With prompting and support, make connections between self, text, and the world around them (text, media, social interaction). (NY)				



Reading Informational Text				
Key Ideas and Details				
RI.K.1 With prompting and support, ask and answer questions about key details in a text.				
RI.K.2 With prompting and support, identify the main topic and retell key details of a text.				
RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.				
Craft and Structure				
RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.				
RI.K.5 Identify the front cover, back cover, and title page of a book.				
RI.K.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.				
Integration of Knowledge and Ideas				
RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).				
RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.				
RI.K.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).				
Range of Reading and Level of Text Complexity				
RI.K.10 Actively engage in group reading activities with purpose and understanding.				



Writing				
Text Types and Purposes				
W.K.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...)			
W.K.2	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.			
W.K.3	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.			
Production and Distribution of Writing				
W.K.4	Begins in in grade 3			
W.K.5	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.			
W.K.6	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.			
Research to Build and Present Knowledge				
W.K.7	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).			
W.K.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.			
W.K.9	Begins in grade 4			
W.K.10	Begins in grade 3			



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Speaking and Listening

Comprehension and Collaboration

SL.K.1 Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).

b. Continue a conversation through multiple exchanges.

SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Presentation of Knowledge and Ideas

SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail

SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.



Language

Conventions of Standard English

L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

a. Print many upper- and lowercase letters.

b. Use frequently occurring nouns and verbs.

c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes*).

d. Understand and use question words (interrogatives) (e.g., *who, what, where, when, why, how*).

e. Use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by, with*).

f. Produce and expand complete sentences in shared language activities.

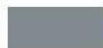
L.K.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

a. Capitalize the first word in a sentence and the pronoun.

b. Recognize and name end punctuation.

c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).

d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.





Knowledge of Language				
L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.				
a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb to <i>duck</i>).				
b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i> , <i>-s</i> , <i>re-</i> , <i>un-</i> , <i>pre-</i> , <i>-ful</i> , <i>-less</i>) as a clue to the meaning of an unknown word.				
Vocabulary Acquisition and Use				
L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings.				
a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.				
b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).				
c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).				
L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.				



Reading Foundational Skills

Print Concepts

RF.K.1 Demonstrate understanding of the organization and basic features of print.

- | | | | | |
|--|--|--|--|--|
| a. Follow words from left to right, top to bottom, and page by page. | | | | |
| b. Recognize that spoken words are represented in written language by specific sequences of letters. | | | | |
| c. Understand that words are separated by spaces in print. | | | | |
| d. Recognize and name all upper- and lowercase letters of the alphabet. | | | | |

Phonological Awareness

RF.K.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes)

- | | | | | |
|--|--|--|--|--|
| a. Recognize and produce rhyming words. | | | | |
| b. Count, pronounce, blend, and segment syllables in spoken words. | | | | |
| c. Blend and segment onsets and rimes of single-syllables in spoken words. | | | | |
| d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three phoneme (consonant-vowel-consonant, or CVC) words* (This does not include CVCs ending with /l/, /r/, or /x/.) | | | | |
| e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. | | | | |

Note: Words, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.



Phonics and Word Recognition				
RF.K.3 Know and apply grade-level phonics and word analysis skills in decoding words.				
a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.				
b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.				
c. Read common high-frequency words by sight (e.g., <i>the, of, to, you, she, my, is, are, do, does</i>).				
d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.				
Fluency				
RF.K.4 Read emergent-reader texts with purpose and understanding.				

Reading Literature				
Key Ideas and Details				
RL.1.1 Ask and answer questions about key details in a text.				
RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.				
RL.1.3 Describe characters, settings, and major events in a story, using key details				
Craft and Structure				
RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.				
RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.				
RL.1.6 Identify who is telling the story at various points in a text.				
Integration of Knowledge and Ideas				
RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events				
RL.1.8 (Not applicable to literature)				
RL.1.9 Compare and contrast the adventures and experiences of characters in stories.				
Range of Reading and Level of Text Complexity				
RL.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1.				



Reading Informational Text				
Key Ideas and Details				
RI.1.1 Ask and answer questions about key details in a text.				
RI.1.2 Identify the main topic and retell key details of a text.				
RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.				
Craft and Structure				
RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.				
RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.				
RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.				
Integration of Knowledge and Ideas				
RI.1.7 Use the illustrations and details in a text to describe its key ideas.				
RI.1.8 Identify the reasons an author gives to support points in a text.				
RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).				
Range of Reading and Level of Text Complexity				
RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.				



Writing				
Text Types and Purposes				
W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.				
W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.				
W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.				
Production and Distribution of Writing				
W.1.4 Begins in in grade 3				
W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.				
W.1.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.				
Research to Build and Present Knowledge				
W.1.7 Participate in shared research and writing projects (e.g., explore a number of —how-to books on a given topic and use them to write a sequence of instructions).				
W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.				
W.1.9 Begins in grade 4				
W.1.10 Begins in grade 3				



Speaking and Listening

Comprehension and Collaboration

SL.1.1 Participate in collaborative conversations with diverse partners about *grade 1 topics and texts* with peers and adults in small and larger groups.

a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).

b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.

c. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.1.2 Ask and answer questions about key details in a text read aloud or presented orally or through other media.

SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Presentation of Knowledge and Ideas

SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

SL.1.6 Produce complete sentences when appropriate to task and situation.



Language				
Conventions of Standard English				
L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Print all upper- and lowercase letters.				
b. Use common, proper, and possessive nouns.				
c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).				
d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).				
e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).				
f. Use frequently occurring adjectives.				
g. Use frequently occurring conjunctions (e.g., <i>and</i> , <i>but</i> , <i>or</i> , <i>so</i> , <i>because</i>).				
h. Use determiners (e.g., articles, demonstratives).				
i. Use frequently occurring prepositions (e.g., <i>during</i> , <i>beyond</i> , <i>toward</i>).				
j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.				



L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Capitalize dates and names of people.				
b. Use end punctuation for sentences.				
c. Use commas in dates and to separate single words in a series.				
d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.				
e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.				
Knowledge of Language				
L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i> , choosing flexibly from an array of strategies.				
a. Use sentence-level context as a clue to the meaning of a word or phrase.				
b. Use frequently occurring affixes as a clue to the meaning of a word.				
c. Identify frequently occurring root words (e.g., <i>look</i>) and their inflectional forms (e.g., <i>looks, looked, looking</i>).				
d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings.				



Vocabulary Acquisition and Use				
L.1.5 With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.				
a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.				
b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes).				
c. Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>).				
d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look</i> , <i>peek</i> , <i>glance</i> , <i>stare</i> , <i>glare</i> , <i>scowl</i>) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.				
L.1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).				



Reading Foundational Skills

Print Concepts

RF.1.1 Demonstrate understanding of the organization and basic features of print.

- a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

Phonological Awareness

RF.1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

- a. Distinguish long from short vowel sounds in spoken single-syllable words.
- b. Orally produce single-syllable words by blending sounds (phonemes) including consonant blends.
- c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.
- d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).



Phonics and Word Recognition				
RF.1.3 Know and apply grade-level phonics and word analysis skills in decoding words.				
a. Know the spelling-sound correspondences for common consonant digraphs.				
b. Decode regularly spelled one-syllable words.				
c. Know final -e and common vowel team conventions for representing long vowel sounds.				
d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.				
e. Decode two-syllable words following basic patterns by breaking the words into syllables.				
f. Read words with inflectional endings.				
g. Recognize and read grade-appropriate irregularly spelled words.				
Fluency				
RF.1.4 Read with sufficient accuracy and fluency to support comprehension.				
a. Read on-level text with purpose and understanding.				
b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.				
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.				

Reading Literature				
Key Ideas and Details				
RL.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.			
RL.2.2	Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.			
RL.2.3	Describe how characters in a story respond to major events and challenges.			
Craft and Structure				
RL.2.4	Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.			
RL.2.5	Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.			
RL.2.6	Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.			
Integration of Knowledge and Ideas				
RL.2.7	Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.			
RL.2.8	(Not applicable to literature)			
RL.2.9	Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.			
Range of Reading and Level of Text Complexity				
RL.2.10	By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.			



Reading Informational Text

Key Ideas and Details

RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.				
RI.2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.				
RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.				

Craft and Structure

RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.				
RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.				
RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.				

Integration of Knowledge and Ideas

RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.				
RI.2.8 Describe how reasons support specific points the author makes in a text.				
RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.				

Range of Reading and Level of Text Complexity

RI.2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.				
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Writing

Text Types and Purposes				
W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.				
W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.				
W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.				
Production and Distribution of Writing				
W.2.4 Begins in in grade 3				
W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.				
W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.				
Research to Build and Present Knowledge				
W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).				
W.2.8 Recall information from experiences or gather information from provided sources to answer a question.				
W.2.9 Begins in grade 4				
W.2.10 Begins in grade 3				

Speaking and Listening



Comprehension and Collaboration				
SL.2.1 Participate in collaborative conversations with diverse partners about <i>grade 2 topics and texts</i> with peers and adults in small and larger groups.				
a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).				
b. Build on others' talk in conversations by linking their comments to the remarks of others.				
c. Ask for clarification and further explanation as needed about the topics and texts under discussion.				
SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.				
SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.				
Presentation of Knowledge and Ideas				
SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.				
SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.				
SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.				



Language

Conventions of Standard English

L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Use collective nouns (e.g., <i>group</i>).				
b. Form and use frequently occurring irregular plural nouns (e.g., <i>feet, children, teeth, mice, fish</i>).				
c. Use reflexive pronouns (e.g., <i>myself, ourselves</i>).				
d. Form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat, hid, told</i>).				
e. Use adjectives and adverbs, and choose between them depending on what is to be modified.				
f. Produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy</i>).				
L.2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Capitalize holidays, product names, and geographic names.				
b. Use commas in greetings and closings of letters.				
c. Use an apostrophe to form contractions and frequently occurring possessives.				
d. Generalize learned spelling patterns when writing words (e.g., <i>cage</i> → <i>badge</i> ; <i>boy</i> → <i>boil</i>).				
e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.				



Knowledge of Language				
L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Compare formal and informal uses of English.				
L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.				
a. Use sentence-level context as a clue to the meaning of a word or phrase.				
b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy</i> , <i>tell/retell</i>).				
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition</i> , <i>additional</i>).				
d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse</i> , <i>lighthouse</i> , <i>housefly</i> ; <i>bookshelf</i> , <i>notebook</i> , <i>bookmark</i>).				
e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.				
Vocabulary Acquisition and Use				
L.2.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.				
a. Identify real-life connections between words and their use (e.g., <i>describe foods that are spicy or juicy</i>).				
b. Distinguish shades of meaning among closely related verbs (e.g., <i>toss</i> , <i>throw</i> , <i>hurl</i>) and closely related adjectives (e.g., <i>thin</i> , <i>slender</i> , <i>skinny</i> , <i>scrawny</i>).				
L.2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids are happy that makes me happy</i>).				



Reading Foundational Skills

Phonics and Word Recognition

RF.2.3 Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Distinguish long and short vowels when reading regularly spelled one-syllable words.
- b. Know spelling-sound correspondences for additional common vowel teams.
- c. Decode regularly spelled two-syllable words with long vowels.
- d. Decode words with common prefixes and suffixes.
- e. Identify words with inconsistent but common spelling-sound correspondences.
- f. Recognize and read grade-appropriate irregularly spelled words.

Fluency

RF.2.4 Read with sufficient accuracy and fluency to support comprehension.

- a. Read on-level text with purpose and understanding.
- b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.
- c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Literature				
Key Ideas and Details				
RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.				
RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.				
RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.				
Craft and Structure				
RL.3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.				
RL.3.5 Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.				
RL.3.6 Distinguish their own point of view from that of the narrator or those of the characters.				
Integration of Knowledge and Ideas				
RL.3.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).				
RL.3.8 Not applicable to literature				
RL.3.9 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).				
Range of Reading and Level of Text Complexity				
RL.3.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.				



Reading Informational Text

Key Ideas and Details				
RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.				
RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.				
RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.				
Craft and Structure				
RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.				
RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.				
RI.3.6 Distinguish their own point of view from that of the author of a text.				
Integration of Knowledge and Ideas				
RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).				
RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).				
RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.				
Range of Reading and Level of Text Complexity				
RI.3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 test complexity band independently and proficiently				



Writing

Text Types and Purposes

W.3.1 Write opinion pieces on familiar topics or texts, supporting a point of view with reasons.				
a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.				
b. Provide reasons that support the opinion.				
c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.				
d. Provide a concluding statement or section.				
W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.				
a. Introduce a topic and group related information together; include illustrations when useful to aid in comprehension.				
b. Develop the topic with facts, definitions, and details.				
c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.				
d. Provide a concluding statement or section.				
W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.				
a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.				
b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.				
c. Use temporal words and phrases to signal event order.				
d. Provide a sense of closure.				



Production and Distribution of Writing				
W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1-3 above)				
W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1-3 and up to and including grade 3 on pages 28 and 29)				
W.3.6 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.				
Research to Build and Present Knowledge				
W.3.7 Conduct short research projects that build knowledge about a topic.				
W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories				
W.3.9 Begins in grade 4				
Range of Writing				
W.3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration				
SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.				
a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.				
b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).				
c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.				
d. Explain their own ideas and understanding in light of the discussion.				
SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.				
SL.3.3 Ask and answer questions about information from a speaker, offer appropriate elaboration and detail.				
Presentation of Knowledge and Ideas				
SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.				
SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.				
SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 on page 26 for specific expectations.)				



Language

Conventions of Standard English

L.3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.				
b. Form and use regular and irregular plural nouns.				
c. Use abstract nouns (e.g., childhood).				
d. Form and use regular and irregular verbs.				
e. Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.				
f. Ensure subject-verb and pronoun-antecedent agreement.*				
g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.				
h. Use coordinating and subordinating conjunctions.				
i. Produce simple, compound, and complex sentences.				
L.3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Capitalize appropriate words in titles.				
b. Use commas in addresses.				
c. Use commas and quotation marks in dialogue.				
d. Form and use possessives.				
e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).				
f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.				
g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.				



Knowledge of Language				
L.3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.				
a. Use sentence-level context as a clue to the meaning of a word or phrase.				
b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).				
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).				
d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.				
Vocabulary Acquisition and Use				
L.3.5 Demonstrate understanding of word relationships and nuances in word meanings.				
a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).				
b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).				
c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).				
L.3.6 Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).				



Reading Foundational Skills

Phonics and Word Recognition

RF.3.3 Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Identify and know the meaning of the most common prefixes and derivational suffixes.
- b. Decode words with common Latin suffixes.
- c. Decode multisyllable words.
- d. Read grade-appropriate irregularly spelled words.

Fluency

RF.3.4 Read with sufficient accuracy and fluency to support comprehension.

- a. Read grade-level text with purpose and understanding.
- b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.
- c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Literature				
Key Ideas and Details				
RL.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.				
RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.				
RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).				
Craft and Structure				
RL.4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).				
RL.4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, setting descriptions, dialogue, stage directions) when writing or speaking about a text.				
RL.4.6 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.				
Integration of Knowledge and Ideas				
RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.				
RL.4.8 Not applicable to literature				
RL.4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.				
Range of Reading and Level of Text Complexity				
RL.4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.				



Reading Informational Text

Key Ideas and Details				
RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.				
RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.				
RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.				
Craft and Structure				
RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.				
RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.				
RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.				
Integration of Knowledge and Ideas				
RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.				
RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.				
RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.				
Range of Reading and Level of Text Complexity				
RI.4.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.				



Writing

Text Types and Purposes

W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.				
a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.				
b. Provide reasons that are supported by facts and details.				
c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).				
d. Provide a concluding statement or section related to the opinion presented.				
W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.				
a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.				
b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.				
c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).				
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.				
e. Provide a concluding statement or section related to the information or explanation presented.				
W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.				
a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.				
b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.				
c. Use a variety of transitional words and phrases to manage the sequence of events.				
d. Use concrete words and phrases and sensory details to convey experiences and events precisely.				
e. Provide a conclusion that follows from the narrated experiences or events.				



Production and Distribution of Writing				
W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are define don standards 1-3 above).				
W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 4 on pages 28-29.)				
W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of key boarding skills to type a minimum of one page on a single sitting.				
Research to Build and Present Knowledge				
W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.				
W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.				
W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.				
a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”).				
b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).				
Range of Writing				
W.4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration

SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.				
a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.				
b. Follow agreed-upon rules for discussions and carry out assigned roles.				
c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.				
d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.				
SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.				
SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.				

Presentation of Knowledge and Ideas

SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.				
SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.				
SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See grade 4 Language standards 1 and 3 on page 28 for specific expectations.)				



Language

Conventions of Standard English

L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).				
b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.				
c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions.				
d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).				
e. Form and use prepositional phrases.				
f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*				
g. Correctly use frequently confused words (e.g., to, too, two; there, their).*				
L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Use correct capitalization.				
b. Use commas and quotation marks to mark direct speech and quotations from a text.				
c. Use a comma before a coordinating conjunction.				
d. Form and use possessives.				
L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Choose words and phrases to convey ideas precisely.*				
b. Choose punctuation for effect.*				
c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informational discourse is appropriate (e.g., small-group discussion).				



Knowledge of Language				
L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.				
a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.				
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).				
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.				
Vocabulary Acquisition and Use				
L.4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.				
a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.				
b. Recognize and explain the meaning of common idioms, adages, and proverbs.				
c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).				
L.4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).				



Reading Foundational Skills

Phonics and Word Recognition

RF.4.3 Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

RF.4.4 Read with sufficient accuracy and fluency to support comprehension.

- a. Read grade-level text with purpose and understanding.
- b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.
- c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Literature				
Key Ideas and Details				
RL.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.				
RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.				
RL.5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).				
Craft and Structure				
RL.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.				
RL.5.5 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.				
RL.5.6 Describe how a narrator's or speaker's point of view influences how events are described.				
Integration of Knowledge and Ideas				
RL.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel; multimedia presentation of fiction, folktale, myth, poem).				
RL.5.8 Not applicable to literature				
RL.5.9 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.				
Range of Reading and Level of Text Complexity				
RL.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.				



Reading Informational Text

Key Ideas and Details				
RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.				
RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.				
RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.				
Craft and Structure				
RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.				
RI.5.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.				
RI.5.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.				
Integration of Knowledge and Ideas				
RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.				
RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).				
RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.				
Range of Reading and Level of Text Complexity				
RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.				



Writing

Text Types and Purposes

W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.				
a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.				
b. Provide logically ordered reasons that are supported by facts and details.				
c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).				
d. Provide a concluding statement or section related to the opinion presented.				
W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.				
a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.				
b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.				
c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially).				
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.				
e. Provide a concluding statement or section related to the information or explanation presented.				
W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.				
a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.				
b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.				
c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events.				
d. Use concrete words and phrases and sensory details to convey experiences and events precisely.				
e. Provide a conclusion that follows from the narrated experiences or events.				



Production and Distribution of Writing				
W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)				
W.5.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 5 on pages 28 and 29.)				
W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.				
Research to Build and Present Knowledge				
W.5.7 Conduct short research projects that use several sources to build knowledge through investigation or different aspects of a topic.				
W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.				
W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.				
a. Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”).				
b. Apply grade 5 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”).				
Range of Writing				
W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration

SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.				
a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.				
b. Follow agreed-upon rules for discussions and carry out assigned roles.				
c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.				
d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.				
SL.5.2 Summarize written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.				
SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.				

Presentation of Knowledge and Ideas

SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.				
SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.				
SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 on page 28 for specific expectations.)				



Language				
Conventions of Standard English				
L.5.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.				
a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.				
b. Form and use the perfect (e.g., I had walked; I have walked; I will have walked) verb tenses.				
c. Use verb tense to convey various times, sequences, states, and conditions.				
d. Recognize and correct inappropriate shifts in verb tense.*				
e. Use correlative conjunctions (e.g., either/or, neither/nor).				
L.5.2 Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.				
a. Use punctuation to separate items in a series.*				
b. Use a comma to separate an introductory element from the rest of the sentence.				
c. Use a comma to set off the words yes and no (e.g., Yes, thank you), to set off a tag question from the rest of the sentence (e.g., It's true, isn't it?), and to indicate direct address (e.g., Is that you, Steve?).				
d. Use underlining, quotation marks, or italics to indicate titles of works.				
e. Spell grade-appropriate words correctly, consulting references as needed.				
L.5.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.				
b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.				



Knowledge of Language				
L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.				
a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.				
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).				
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.				
Vocabulary Acquisition and Use				
L.5.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.				
a. Interpret figurative language, including similes and metaphors, in context.				
b. Recognize and explain the meaning of common idioms, adages, and proverbs.				
c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.				
L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).				



Reading Foundational Skills

Phonics and Word Recognition

RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words.

- a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

RF.5.4 Read with sufficient accuracy and fluency to support comprehension.

- a. Read grade-level text with purpose and understanding.
- b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.
- c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Literature				
Key Ideas and Details				
RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.				
RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.				
RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.				
Craft and Structure				
RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.				
RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.				
RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text.				
Integration of Knowledge and Ideas				
RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.				
RL.6.8 Not applicable to literature				
RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.				
Range of Reading and Level of Text Complexity				
RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.				



Reading Informational Text

Key Ideas and Details				
RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.				
RI.6.2 Determine a central idea of a text and how it is conveyed through particular details, provide a summary of the text distinct from personal opinions or judgments.				
RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text.				
Craft and Structure				
RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.				
RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.				
RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.				
Integration of Knowledge and Ideas				
RI.6.7 Integrate information presented in different media or formats as well as in words to develop a coherent understanding of a topic or issue.				
RI.6.8 Trace and evaluate an argument and specific claims in a text, distinguishing from claims that are supported by reasons and evidence from claims that are not.				
RI.6.9 Compare and contrast one author's presentation of events with that of another.				
Range of Reading and Level of Text Complexity				
RI.6.10 By the end of the year, read and comprehend literary non-fiction, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.				



Writing

Text Types and Purposes

W.6.1 Write arguments to support claims with clear reasons and relevant evidence.				
a. Introduce claim(s) and organize the reasons and evidence clearly.				
b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.				
c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.				
d. Establish and maintain a formal style.				
e. Provide a concluding statement or section that follows from the argument presented.				
W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.				
a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.				
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.				
c. Use appropriate transitions to clarify the relationships among ideas and concepts.				
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.				
e. Establish and maintain a formal style.				
f. Provide a concluding statement or section that follows from the information or explanation presented.				
W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.				
a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.				
b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.				
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.				
d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.				
e. Provide a conclusion that follows from the narrated experiences or events.				



Production and Distribution of Writing				
W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)				
W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach				
W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.				
Research to Build and Present Knowledge				
W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.				
W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.				
W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.				
a. Apply <i>grade 6 Reading standards</i> to literature (e.g., “Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics”).				
b. Apply <i>grade 6 Reading standards</i> to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not”).				
Range of Writing				
W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration

SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.

c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.

d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.

SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

SL.6.3 Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

Presentation of Knowledge and Ideas

SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.

SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

SL.6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.



Language				
Conventions of Standard English				
L.6.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.				
a. Ensure that pronouns are in the proper case (subjective, objective, possessive).				
b. Use intensive pronouns (e.g., <i>myself</i> , <i>ourselves</i>).				
c. Recognize and correct inappropriate shifts in pronoun number and person.*				
d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*				
e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language				
L.6.2 Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.				
a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*				
b. Spell correctly.				
L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Vary sentence patterns for meaning, reader/listener interest, and style.*				
b. Maintain consistency in style and tone.				
Knowledge of Language				
L.6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.				
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.				
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience</i> , <i>auditory</i> , <i>audible</i>).				
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.				
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).				



Vocabulary Acquisition and Use				
L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.				
a. Interpret figures of speech (e.g., personification) in context.				
b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.				
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>stingy</i> , <i>scrimping</i> , <i>economical</i> , <i>unwasteful</i> , <i>thrifty</i>).				
L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.				

Reading Literature				
Key Ideas and Details				
RL.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.				
RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.				
RL.7.3 Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).				
Craft and Structure				
RL.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.				
RL.7.5 Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.				
RL.7.6 Analyze how an author develops and contrasts the points of view of different.				
Integration of Knowledge and Ideas				
RL.7.7 Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).				
RL.7.8 (Not applicable to literature)				
RL.7.9 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.				
Range of Reading and Level of Text Complexity				
RL.7.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.				



Reading Informational Text

Key Ideas and Details

RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.				
RI.7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.				
RI.7.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).				

Craft and Structure

RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.				
RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.				
RI.7.6 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.				

Integration of Knowledge and Ideas

RI.7.7 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).				
RI.7.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.				
RI.7.9 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.				

Range of Reading and Level of Text Complexity

RI.7.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.				
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Writing

Text Types and Purposes

W.7.1 Write arguments to support claims with clear reasons and relevant evidence.				
a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.				
b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.				
c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.				
d. Establish and maintain a formal style.				
e. Provide a concluding statement or section that follows from and supports the argument presented.				
W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.				
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.				
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.				
c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.				
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.				
e. Establish and maintain a formal style.				
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.				



W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.				
a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.				
b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.				
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.				
d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.				
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.				
Production and Distribution of Writing				
W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)				
W.7.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.				
W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.				
Research to Build and Present Knowledge				
W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.				
W.7.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.				



W.7.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.				
a. Apply <i>grade 7 Reading standards</i> to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).				
b. Apply <i>grade 7 Reading standards</i> to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).				
Range of Writing				
W.7.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration

SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.				
a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.				
b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.				
c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.				
d. Acknowledge new information expressed by others and, when warranted, modify their own views.				
SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.				
SL.7.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.				

Presentation of Knowledge and Ideas

SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.				
SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.				
SL.7.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.				



Language				
Conventions of Standard English				
L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Explain the function of phrases and clauses in general and their function in specific sentences.				
b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.				
c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.*				
L.7.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i> but not <i>He wore an old[,] green shirt</i>).				
b. Spell correctly.				
L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*				
Knowledge of Language				
L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i> , choosing flexibly from a range of strategies.				
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.				
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i> , <i>bellicose</i> , <i>rebel</i>).				
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.				
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).				



Vocabulary Acquisition and Use				
L.7.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.				
a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.				
b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.				
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>refined</i> , <i>respectful</i> , <i>polite</i> , <i>diplomatic</i> , <i>condescending</i>).				
L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.				

Reading Literature				
Key Ideas and Details				
RL.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.				
RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.				
RL.8.3 Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.				
Craft and Structure				
RL.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.				
RL.8.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.				
RL.8.6 Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.				
Integration of Knowledge and Ideas				
RL.8.7 Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.				
RL.8.8 (Not applicable to literature)				
RL.8.9 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new				
Range of Reading and Level of Text Complexity				
RL.8.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.				



Reading Informational Text

Key Ideas and Details				
RI.8.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.			
RI.8.2	Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.			
RI.8.3	Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).			
Craft and Structure				
RI.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.			
RI.8.5	Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.			
RI.8.6	Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.			
Integration of Knowledge and Ideas				
RI.8.7	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.			
RI.8.8	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.			
RI.8.9	Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.			
Range of Reading and Level of Text Complexity				
RI.8.10	By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.			



Writing

Text Types and Purposes

W.8.1 Write arguments to support claims with clear reasons and relevant evidence.				
a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.				
b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.				
c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.				
d. Establish and maintain a formal style.				
e. Provide a concluding statement or section that follows from and supports the argument presented.				
W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.				
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.				
b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.				
c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.				
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.				
e. Establish and maintain a formal style.				
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.				



W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.				
a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.				
b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.				
c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.				
d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.				
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.				
Production and Distribution of Writing				
W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)				
W.8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.				
W.8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.				
Research to Build and Present Knowledge				
W.8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.				
W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.				



W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.				
a. Apply <i>grade 8 Reading standards</i> to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).				
b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).				
Range of Writing				
W.8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.				



Speaking and Listening

Comprehension and Collaboration				
SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.				
a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.				
b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.				
c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.				
d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.				
SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.				
SL.8.3 Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.				
Presentation of Knowledge and Ideas				
SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.				
SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.				
SL.8.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.				



Language				
Conventions of Standard English				
L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.				
a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.				
b. Form and use verbs in the active and passive voice.				
c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.				
d. Recognize and correct inappropriate shifts in verb voice and mood.*				
L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.				
a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.				
b. Use an ellipsis to indicate an omission.				
c. Spell correctly.				
L.8.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.				
a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).				
Knowledge of Language				
L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on <i>grade 8 reading and content</i> , choosing flexibly from a range of strategies.				
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.				
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>precede</i> , <i>recede</i> , <i>secede</i>).				
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.				
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).				



Vocabulary Acquisition and Use				
L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.				
a. Interpret figures of speech (e.g. verbal irony, puns) in context.				
b. Use the relationship between particular words to better understand each of the words.				
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>bullheaded</i> , <i>willful</i> , <i>firm</i> , <i>persistent</i> , <i>resolute</i>).				
L.8.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.				



Math Common Core State Standards

Domains									
K	1	2	3	4	5	6	7	8	HS
Counting & Cardinality									
Number & Operations in Base Ten						Ratios & Proportional Relationships			Number & Quantity
			Number & Operations-- Fractions			The Number System			
Operations & Algebraic Thinking						Expressions & Equations			Algebra
								Functions	Functions
Geometry									Geometry
Measurement & Data						Statistics & Probability			Statistics & Probability



Domain: Counting & Cardinality (K)

Grade	Common Core State Standards
K	<p>Know number names and the count sequence.</p> <p>K.CC.1. Count to 100 by ones and by tens.</p> <p>K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>K.CC.3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).</p> <p>Count to tell the number of objects.</p> <p>K.CC.4. Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>K.CC.5. Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p> <p>Compare numbers.</p> <p>K.CC.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.¹</p> <p>K.CC.7. Compare two numbers between 1 and 10 presented as written numerals.</p>



Domain: Number and Operations in Base Ten (K-5)

Grade	Common Core State Standard
K	<p>Work with numbers 11-19 to gain foundations for place value.</p> <p>K.NBT.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>
1	<p>Extend the counting sequence.</p> <p>1.NBT.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value.</p> <p>1.NBT.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <p>1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>1.NBT.4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>1.NBT.6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>



2	<p>Understand place value.</p> <p>2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <p>2.NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.¹</p>
3	<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.¹</p> <p>3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.</p> <p>3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.</p>
4	<p>Generalize place value understanding for multi-digit whole numbers.</p> <p>4.NBT.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</i></p> <p>4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>4.NBT.4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>

	<p>4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
5	<p>Understand the place value system.</p> <p>5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3. Read, write, and compare decimals to thousandths.</p> <p>5.NBT.4. Use place value understanding to round decimals to any place.</p> <p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p> <p>5.NBT.5. Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <p>5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>



Domain: Ratios and Proportional Relationships (6-7)

Grade	Common Core State Standard
6	<p>Understand ratio concepts and use ratio reasoning to solve problems.</p> <p>6.RP.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p>6.RP.2. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”¹</i></p> <p>6.RP.3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p>
7	<p>Analyze proportional relationships and use them to solve real-world and mathematical problems.</p> <p>7.RP.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $1/2$ mile in each $1/4$ hour, compute the unit rate as the complex fraction $^{1/2}/_{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.2. Recognize and represent proportional relationships between quantities.</p> <p>7.RP.3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</p>

Domain: Number and Operations- Fractions (3-5)

Grade	Common Core State Standard
3	<p>Develop understanding of fractions as numbers.</p> <p>3.NF.1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.</p> <p>3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p>
4	<p>Extend understanding of fraction equivalence and ordering.</p> <p>4.NF.1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>4.NF.2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>4.NF.3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <p>4.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>Understand decimal notation for fractions, and compare decimal fractions.</p> <p>4.NF.5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.² For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.</p> <p>4.NF.6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</p> <p>4.NF.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p>
5	<p>Use equivalent fractions as a strategy to add and subtract fractions.</p> <p>5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</p> <p>5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</p>

	<p>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</p> <p>5.NF.3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p> <p>5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>5.NF.5. Interpret multiplication as scaling (resizing), by:</p> <p>5.NF.6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹</p>
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Domain: The Number System (6-8)

Grade	Common Core State Standard
6	<p>Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</p> <p>6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.</i></p> <p>Compute fluently with multi-digit numbers and find common factors and multiples.</p> <p>6.NS.2. Fluently divide multi-digit numbers using the standard algorithm.</p> <p>6.NS.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p> <p>6.NS.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$. Apply and extend previous understandings of numbers to the system of rational numbers.</i></p> <p>Apply and extend previous understandings of numbers to the system of rational numbers.</p> <p>6.NS.5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p>6.NS.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>6.NS.7. Understand ordering and absolute value of rational numbers.</p> <p>6.NS.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>
7	<p>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</p> <p>7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <p>7.NS.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <p>7.NS.3. Solve real-world and mathematical problems involving the four operations with</p>



	rational numbers.
8	<p>Know that there are numbers that are not rational, and approximate them by rational numbers.</p> <p>8.NS.1. Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.</p> <p>8.NS.2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i></p>



Domain: Number & Quantity (HS)

Sub Domain: The Real Number System

Grade	Common Core State Standards
HS	<p>Extend the properties of exponents to rational exponents.</p> <p>N-RN.1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.</i></p> <p>N-RN.2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.</p> <p>Use properties of rational and irrational numbers.</p> <p>N-RN.3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.</p>

Domain: Number & Quantity (HS)

Sub Domain: Quantities

Grade	Common Core State Standards
HS	<p>Reason quantitatively and use units to solve problems.</p> <p>N-Q.1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.</p> <p>N-Q.2. Define appropriate quantities for the purpose of descriptive modeling.</p> <p>N-Q.3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p>



Domain: Number & Quantity (HS)

Sub Domain: The Complex Number System

Grade	Common Core State Standards
HS	<p>Perform arithmetic operations with complex numbers.</p> <p>N-CN.1. Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.</p> <p>N-CN.2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.</p> <p>N-CN.3. (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers.</p> <p>Represent complex numbers and their operations on the complex plane.</p> <p>N-CN.4. (+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number.</p> <p>N-CN.5. (+) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. <i>For example, $(-1 + \sqrt{3}i)^3 = 8$ because $(-1 + \sqrt{3}i)$ has modulus 2 and argument 120°.</i></p> <p>N-CN.6. (+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.</p> <p>Use complex numbers in polynomial identities and equations.</p> <p>N-CN.7. Solve quadratic equations with real coefficients that have complex solutions.</p> <p>N-CN.8. (+) Extend polynomial identities to the complex numbers. <i>For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$.</i></p> <p>N-CN.9. (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.</p>



Domain: Number & Quantity (HS)

Sub Domain: Vector & Matrix Quantities

Grade	Common Core State Standards
HS	<p>Represent and model with vector quantities.</p> <p>N-VM.1. (+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., \mathbf{v}, \mathbf{v}, $\ \mathbf{v}\$, v).</p> <p>N-VM.2. (+) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.</p> <p>N-VM.3. (+) Solve problems involving velocity and other quantities that can be represented by vectors.</p> <p>Perform operations on vectors.</p> <p>N-VM.4. (+) Add and subtract vectors.</p> <p>N-VM.5. (+) Multiply a vector by a scalar.</p> <p>Perform operations on matrices and use matrices in applications.</p> <p>N-VM.6. (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.</p> <p>N-VM.7. (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled.</p> <p>N-VM.8. (+) Add, subtract, and multiply matrices of appropriate dimensions.</p> <p>N-VM.9. (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.</p> <p>N-VM.10. (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.</p> <p>N-VM.11. (+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors.</p> <p>N-VM.12. (+) Work with 2×2 matrices as a transformations of the plane, and interpret the absolute value of the determinant in terms of area.</p>

Domain: Operations and Algebraic Thinking (K-5)

Grade	Common Core State Standard
K	<p>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <p>K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings¹, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p> <p>K.OA.2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p> <p>K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p> <p>K.OA.5. Fluently add and subtract within 5.</p>
1	<p>Represent and solve problems involving addition and subtraction.</p> <p>1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹</p> <p>1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction.</p> <p>1.OA.3. Apply properties of operations as strategies to add and subtract.² <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i></p> <p>1.OA.4. Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. Add and subtract within 20.</i></p> <p>Add and subtract within 20.</p> <p>1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p> <p>Work with addition and subtraction equations.</p> <p>1.OA.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</p> <p>1.OA.8. Determine the unknown whole number in an addition or subtraction equation relating</p>

	three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i>
2	<p>Represent and solve problems involving addition and subtraction.</p> <p>2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>Add and subtract within 20.</p> <p>2.OA.2. Fluently add and subtract within 20 using mental strategies.² By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Work with equal groups of objects to gain foundations for multiplication.</p> <p>2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>
3	<p>Represent and solve problems involving multiplication and division.</p> <p>3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i></p> <p>3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i></p> <p>3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$</i></p> <p>Understand properties of multiplication and the relationship between multiplication and division.</p> <p>3.OA.5. Apply properties of operations as strategies to multiply and divide.² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i></p> <p>3.OA.6. Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i></p> <p>Multiply and divide within 100.</p> <p>3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-</p>



	<p>digit numbers.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <p>3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.³</p> <p>3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p>
4	<p>Use the four operations with whole numbers to solve problems.</p> <p>4.OA.1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.¹</p> <p>4.OA.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Gain familiarity with factors and multiples.</p> <p>4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p> <p>Generate and analyze patterns.</p> <p>4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></p>
5	<p>Write and interpret numerical expressions.</p> <p>5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p>5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>Analyze patterns and relationships.</p> <p>5.OA.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one</i></p>



	<i>sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i>
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Domain: Expressions and Equations (6-8)

Grade	Common Core State Standard
6	<p>Apply and extend previous understandings of arithmetic to algebraic expressions.</p> <p>6.EE.1. Write and evaluate numerical expressions involving whole-number exponents.</p> <p>6.EE.2. Write, read, and evaluate expressions in which letters stand for numbers.</p> <p>6.EE.3. Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i></p> <p>6.EE.4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for. Reason about and solve one-variable equations and inequalities.</i></p> <p>Reason about and solve one-variable equations and inequalities.</p> <p>6.EE.5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p>6.EE.6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p>6.EE.7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.</p> <p>6.EE.8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p> <p>Represent and analyze quantitative relationships between dependent and independent variables.</p> <p>6.EE.9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</p>
7	<p>Use properties of operations to generate equivalent expressions.</p> <p>7.EE.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p>7.EE.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a =$</i></p>

	<p>1.05a means that “increase by 5%” is the same as “multiply by 1.05.”</p> <p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</p> <p>7.EE.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>7.EE.4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p>
8	<p>Expressions and EquationsWork with radicals and integer exponents.</p> <p>8.EE.1. Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.</p> <p>8.EE.2. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.</p> <p>8.EE.3. Use numbers expressed in the form of a single digit times a whole-number power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3 times 10^8 and the population of the world as 7 times 10^9, and determine that the world population is more than 20 times larger.</i></p> <p>8.EE.4. Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.</p> <p>Understand the connections between proportional relationships, lines, and linear equations.</p> <p>8.EE.5. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</p> <p>8.EE.6. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.</p> <p>Analyze and solve linear equations and pairs of simultaneous linear equations.</p> <p>8.EE.7. Solve linear equations in one variable.</p> <p>8.EE.8. Analyze and solve pairs of simultaneous linear equations.</p>

Domain: Algebra (HS)
Sub Domain: Seeing Structure in Expressions

Grade	Common Core State Standard
HS	<p>Interpret the structure of expressions.</p> <p>A-SSE.1. Interpret expressions that represent a quantity in terms of its context.★</p> <p>A-SSE.3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.★</p> <p>A-SSE.4. Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. <i>For example, calculate mortgage payments.</i>★</p>



Domain: Algebra (HS)

Sub Domain: Arithmetic with Polynomials & Rational Expressions

Grade	Common Core State Standard
HS	<p>Perform arithmetic operations on polynomials. A-APR.1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.</p> <p>Understand the relationship between zeros and factors of polynomials. A-APR.2. Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a, the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$.</p> <p>A-APR.3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.</p> <p>Use polynomial identities to solve problems. A-APR.4. Prove polynomial identities and use them to describe numerical relationships. <i>For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.</i></p> <p>A-APR.5. (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.¹</p> <p>Rewrite rational expressions. A-APR.6. Rewrite simple rational expressions in different forms; write $\frac{a(x)}{b(x)}$ in the form $q(x) + \frac{r(x)}{b(x)}$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system.</p> <p>A-APR.7. (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.</p>

Domain: Algebra (HS)

Sub Domain: Creating Equations

Grade	Common Core State Standard
HS	<p>Create equations that describe numbers or relationships.</p> <p>A-CED.1. Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i></p> <p>A-CED.2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p> <p>A-CED.3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i></p> <p>A-CED.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. <i>For example, rearrange Ohm's law $V = IR$ to highlight resistance R.</i></p>



Domain: Algebra (HS)

Sub Domain: Reasoning with Equations and Inequalities

Grade	Common Core State Standard
HS	<p>Understand solving equations as a process of reasoning and explain the reasoning.</p> <p>A-REI.1. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.</p> <p>A-REI.2. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.</p> <p>Solve equations and inequalities in one variable.</p> <p>A-REI.3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</p> <p>A-REI.4. Solve quadratic equations in one variable.</p> <p>Solve systems of equations.</p> <p>A-REI.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.</p> <p>A-REI.6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.</p> <p>A-REI.7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.</p> <p>A-REI.8. (+) Represent a system of linear equations as a single matrix equation in a vector variable.</p> <p>A-REI.9. (+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater).</p> <p>Represent and solve equations and inequalities graphically.</p> <p>A-REI.10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).</p> <p>A-REI.11. Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.★</p> <p>A-REI.12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.</p>



Domain: Functions (8)

Grade	Common Core State Standard
8	<p>Define, evaluate, and compare functions.</p> <p>8.F.1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.¹</p> <p>8.F.2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i></p> <p>8.F.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i></p> <p>Use functions to model relationships between quantities.</p> <p>8.F.4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p> <p>8.F.5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p>



Domain: Functions (HS)
Sub Domain: Interpreting Functions

Grade	Common Core State Standard
HS	<p>Understand the concept of a function and use function notation.</p> <p>F-IF.1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.</p> <p>F-IF.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p> <p>F-IF.3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. <i>For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.</i></p> <p>Interpret functions that arise in applications in terms of the context.</p> <p>F-IF.4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i></p> <p>F-IF.5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.*</i></p> <p>F-IF.6. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.*</p> <p>Analyze functions using different representations.</p> <p>F-IF.7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.*</p> <p>F-IF.8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>F-IF.9. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i></p>

Domain: Functions (HS)

Sub Domain: Building Functions

Grade	Common Core State Standard
HS	<p>Build a function that models a relationship between two quantities.</p> <p>F-BF.1. Write a function that describes a relationship between two quantities.★</p> <p>F-BF.2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.★</p> <p>Build new functions from existing functions.</p> <p>F-BF.3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.</p> <p>F-BF.4. Find inverse functions.</p> <p>F-BF.5. (+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.</p>

Domain: Functions (HS)

Sub Domain: Linear, Quadratic, & Exponential Models

Grade	Common Core State Standard
HS	<p>Construct and compare linear, quadratic, and exponential models and solve problems.</p> <p>F-LE.1. Distinguish between situations that can be modeled with linear functions and with exponential functions.</p> <p>F-LE.2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).</p> <p>F-LE.3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.</p> <p>F-LE.4. For exponential models, express as a logarithm the solution to $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.</p> <p>Interpret expressions for functions in terms of the situation they model.</p> <p>F-LE.5. Interpret the parameters in a linear or exponential function in terms of a context.</p>



Domain: Functions (HS)

Sub Domain: Trigonometric Functions

Grade	Common Core State Standard
HS	<p>Extend the domain of trigonometric functions using the unit circle.</p> <p>F-TF.1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.</p> <p>F-TF.2. Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.</p> <p>F-TF.3. (+) Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosines, and tangent for x, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.</p> <p>F-TF.4. (+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.</p> <p>Model periodic phenomena with trigonometric functions.</p> <p>F-TF.5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.★</p> <p>F-TF.6. (+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed.</p> <p>F-TF.7. (+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.★</p> <p>Prove and apply trigonometric identities.</p> <p>F-TF.8. Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to find $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ given $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ and the quadrant of the angle.</p> <p>F-TF.9. (+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.</p>



Domain: Geometry (K-8)

Grade	Common Core State Standard
K	<p>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</p> <p>K.G.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p>K.G.2. Correctly name shapes regardless of their orientations or overall size.</p> <p>K.G.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p> <p>Analyze, compare, create, and compose shapes.</p> <p>K.G.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).</p> <p>K.G.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p> <p>K.G.6. Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p>
1	<p>Reason with shapes and their attributes.</p> <p>1.G.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes.</p> <p>1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.¹</p> <p>1.G.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>
2	<p>Reason with shapes and their attributes.</p> <p>2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p> <p>2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>



3	<p>Reason with shapes and their attributes.</p> <p>3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p> <p>3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.</i></p>
4	<p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p> <p>4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>
5	<p>problems.</p> <p>5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).</p> <p>5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p> <p>Classify two-dimensional figures into categories based on their properties.</p> <p>5.G.3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</p> <p>5.G.4. Classify two-dimensional figures in a hierarchy based on properties.</p>
6	<p>Solve real-world and mathematical problems involving area, surface area, and volume.</p> <p>6.G.1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.</p> <p>6.G.2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p> <p>6.G.3. Draw polygons in the coordinate plane given coordinates for the vertices; use</p>



	<p>coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p> <p>6.G.4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
7	<p>Draw construct, and describe geometrical figures and describe the relationships between them.</p> <p>7.G.1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p> <p>7.G.2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.</p> <p>7.G.3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p> <p>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.</p> <p>7.G.4. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</p> <p>7.G.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
8	<p>Understand congruence and similarity using physical models, transparencies, or geometry software.</p> <p>8.G.1. Verify experimentally the properties of rotations, reflections, and translations:</p> <p>8.G.2. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p> <p>8.G.3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>8.G.4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p> <p>8.G.5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p>



	<p>Understand and apply the Pythagorean Theorem.</p> <p>8.G.6. Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p> <p>8.G.8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p> <p>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</p> <p>8.G.9. Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>
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Domain: Geometry (HS)

Sub Domain: Congruence

Grade	Common Core State Standard
HS	<p>Experiment with transformations in the plane</p> <p>G.CO.1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.</p> <p>G-CO.2. Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).</p> <p>G-CO.3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.</p> <p>G-CO.4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.</p> <p>G-CO.5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.</p> <p>Understand congruence in terms of rigid motions</p> <p>G-CO.6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.</p> <p>G-CO.7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.</p> <p>G-CO.8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.</p> <p>Prove geometric theorems</p> <p>G-CO.9. Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i></p> <p>G-CO.10. Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i></p> <p>G-CO.11. Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i></p>



	<p>Make geometric constructions</p> <p>G-CO.12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). <i>Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</i></p> <p>G-CO.13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.</p>
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Sub Domain: Similarity, Right Triangles, & Trigonometry

Grade	Common Core State Standard
HS	<p>Understand similarity in terms of similarity transformations</p> <p>G-SRT.1. Verify experimentally the properties of dilations given by a center and a scale factor:</p> <p>G-SRT.2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.</p> <p>G-SRT.3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</p> <p>Prove theorems involving similarity</p> <p>G-SRT.4. Prove theorems about triangles. <i>Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</i></p> <p>G-SRT.5. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.</p> <p>Define trigonometric ratios and solve problems involving right triangles</p> <p>G-SRT.6. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</p> <p>G-SRT.7. Explain and use the relationship between the sine and cosine of complementary angles.</p> <p>G-SRT.8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.★</p> <p>Apply trigonometry to general triangles</p> <p>G-SRT.9. (+) Derive the formula $A = \frac{1}{2} ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.</p> <p>G-SRT.10. (+) Prove the Laws of Sines and Cosines and use them to solve problems.</p> <p>G-SRT.11. (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).</p>

Domain: Geometry (HS)



Sub Domain: Circles

Grade	Common Core State Standard
HS	<p>Understand and apply theorems about circles</p> <p>G-C.1. Prove that all circles are similar.</p> <p>G-C.2. Identify and describe relationships among inscribed angles, radii, and chords. <i>Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</i></p> <p>G-C.3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</p> <p>G-C.4. (+) Construct a tangent line from a point outside a given circle to the circle.</p> <p>Find arc lengths and areas of sectors of circles</p> <p>G-C.5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.</p>

Domain: Geometry (HS)



Sub Domain: Expressing Geometric Properties with Equations

Grade	Common Core State Standard
HS	<p>Translate between the geometric description and the equation for a conic section</p> <p>G-GPE.1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.</p> <p>G-GPE.2. Derive the equation of a parabola given a focus and directrix.</p> <p>G-GPE.3. (+) Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant.</p> <p>Use coordinates to prove simple geometric theorems algebraically</p> <p>G-GPE.4. Use coordinates to prove simple geometric theorems algebraically. <i>For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.</i></p> <p>G-GPE.5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).</p> <p>G-GPE.6. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.</p> <p>G-GPE.7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.★</p>

Domain: Geometry (HS)

Sub Domain: Geometric Measurement & Dimensions

Grade	Common Core State Standard
HS	<p>Explain volume formulas and use them to solve problems</p> <p>G-GMD.1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i></p> <p>G-GMD.2. (+) Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.</p> <p>G-GMD.3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.★</p> <p>Visualize relationships between two-dimensional and three-dimensional objects</p> <p>G-GMD.4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.</p>

Domain: Geometry (HS)

Sub Domain: Modeling with Geometry

Grade	Common Core State Standard
HS	<p>Apply geometric concepts in modeling situations</p> <p>G-MG.1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).★</p> <p>G-MG.2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).★</p> <p>G-MG.3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).★</p>

Domain: Measurement and Data (K-5)

Grade	Common Core State Standard
K	<p>Describe and compare measurable attributes.</p> <p>K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p> <p>Classify objects and count the number of objects in each category.</p> <p>K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10)</p>
1	<p>Measure lengths indirectly and by iterating length units.</p> <p>1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>1.MD.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p> <p>Tell and write time.</p> <p>1.MD.3. Tell and write time in hours and half-hours using analog and digital clocks.</p> <p>Represent and interpret data.</p> <p>1.MD.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p>
2	<p>Measure and estimate lengths in standard units.</p> <p>2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Relate addition and subtraction to length.</p> <p>2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p> <p>Work with time and money.</p> <p>2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using</p>

	<p>a.m. and p.m.</p> <p>2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p> <p>Represent and interpret data.</p> <p>2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p>2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.</p>
3	<p>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</p> <p>3.MD.1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p> <p>3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes compound units such as cm³ and finding the geometric volume of a container. Excludes multiplicative comparison problems (problems involving notions of “times as much”)</p> <p>Represent and interpret data.</p> <p>3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p> <p>3.MD.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.</p> <p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</p> <p>3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <p>3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p>3.MD.7. Relate area to the operations of multiplication and addition.</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p> <p>3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>

4	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>4.MD.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> <p>4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p> <p>4.MD.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p> <p>Represent and interpret data.</p> <p>4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></p> <p>Geometric measurement: understand concepts of angle and measure angles.</p> <p>4.MD.5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <p>4.MD.6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p>
5	<p>Convert like measurement units within a given measurement system.</p> <p>5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p> <p>Represent and interpret data.</p> <p>5.MD.2. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p> <p>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</p> <p>5.MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume</p>



	<p>measurement.</p> <p>5.MD.4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p>5.MD.5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p>
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Domain: Statistics and Probability (6-8)

Grade	Common Core State Standard
6	<p>Develop understanding of statistical variability.</p> <p>6.SP.1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p>6.SP.2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>6.SP.3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p> <p>Summarize and describe distributions.</p> <p>6.SP.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>6.SP.5. Summarize numerical data sets in relation to their context.</p>
7	<p>Use random sampling to draw inferences about a population.</p> <p>7.SP.1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>7.SP.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i></p> <p>Draw informal comparative inferences about two populations.</p> <p>7.SP.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i></p> <p>7.SP.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i></p> <p>Investigate chance processes and develop, use, and evaluate probability models.</p> <p>7.SP.5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p>



	<p>7.SP.6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i></p> <p>7.SP.7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p> <p>7.SP.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p>
8	<p>Investigate patterns of association in bivariate data.</p> <p>8.SP.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p>8.SP.3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></p> <p>8.SP.4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p>



Domain: Statistics & Probability (HS)

Sub Domain: Interpreting Categorical & Quantitative Data

Grade	Common Core State Standard
HS	<p>Summarize, represent, and interpret data on a single count or measurement variable</p> <p>S-ID.1. Represent data with plots on the real number line (dot plots, histograms, and box plots).</p> <p>S-ID.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.</p> <p>S-ID.3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</p> <p>S-ID.4. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.</p> <p>Summarize, represent, and interpret data on two categorical and quantitative variables</p> <p>S-ID.5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.</p> <p>S-ID.6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.</p> <p>Interpret linear models</p> <p>S-ID.7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.</p> <p>S-ID.8. Compute (using technology) and interpret the correlation coefficient of a linear fit.</p> <p>S-ID.9. Distinguish between correlation and causation.</p>

Domain: Statistics & Probability (HS)



Sub Domain: Making Inferences & Justifying Conclusions

Grade	Common Core State Standard
HS	<p>Understand and evaluate random processes underlying statistical experiments</p> <p>S-IC.1. Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</p> <p>S-IC.2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. <i>For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?</i></p> <p>Make inferences and justify conclusions from sample surveys, experiments, and observational studies</p> <p>S-IC.3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.</p> <p>S-IC.4. Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.</p> <p>S-IC.5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.</p> <p>S-IC.6. Evaluate reports based on data.</p>

Domain: Statistics & Probability (HS)

Sub Domain: Conditional Probability & the Rules of Probability

Grade	Common Core State Standard
HS	<p>Understand independence and conditional probability and use them to interpret data</p> <p>S-CP.1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).</p> <p>S-CP.2. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</p> <p>S-CP.3. Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.</p> <p>S-CP.4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</i></p> <p>S-CP.5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i></p> <p>Use the rules of probability to compute probabilities of compound events in a uniform probability model</p> <p>S-CP.6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.</p> <p>S-CP.7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.</p> <p>S-CP.8. (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model.</p> <p>S-CP.9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems.</p>

Domain: Statistics & Probability (HS)



Sub Domain: Using Probability to Make Decisions

Grade	Common Core State Standard
HS	<p>Calculate expected values and use them to solve problems</p> <p>S-MD.1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.</p> <p>S-MD.2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.</p> <p>S-MD.3. (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. <i>For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.</i></p> <p>S-MD.4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. <i>For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?</i></p> <p>Use probability to evaluate outcomes of decisions</p> <p>S-MD.5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.</p> <p>S-MD.6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).</p> <p>S-MD.7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).</p>

KINDERGARTEN MATH

COUNTING AND CARDINALITY

Count K.CC.1, K.CC.4a

Forward K.CC.2

Numeral K.CC.3

Total K.CC.4b

One More K.CC.4c

One Less K.CC.4c

Group K.CC.5

Greater Than K.CC.6

Less Than K.CC.6

Equal K.CC.6

OPERATIONS AND ALGEBRAIC THINKING

Add K.OA.1, K.OA.2

Subtract K.OA.1, K.OA.2

Equation K.OA.1, K.OA.3

Addend K.OA.4

Subtraction K.OA.1, K.OA.2, K.OA.5

NUMBER AND OPERATIONS IN BASE TEN

Compose K.NBT.1

Decompose K.NBT.1

MEASUREMENT AND DATA

Length K.MD.1

Weight K.MD.1

Category K.MD.3

GEOMETRY

Shapes K.G.1

Above K.G.2

Below K.G.2

Solid K.G.3

Two-dimensional K.G.4

Three-dimensional K.G.4

Corner K.G.4

FIRST GRADE MATH

OPERATIONS AND ALGEBRAIC THINKING

Compare 1.OA.1

Sum 1.OA.2

Commutative Property 1.OA.3

Associative Property 1.OA.3

Count On 1.OA.5

Count Back 1.OA.5

Subtraction 1.OA.6

True Equation 1.OA.7

False Equation 1.OA.7

NUMBER AND OPERATIONS IN BASE TEN

One Hundred 1.NBT.1

Value 1.NBT.2a, 1.NBT.2b, 1.NBT.2c

Greater Than 1.NBT.3

Less Than 1.NBT.3

Multiple 1.NBT.4

Place Value 1.NBT.4

MEASUREMENT AND DATA

Length 1.MD.1

Unit 1.MD.2

Hour 1.MD.3

Analog 1.MD.3

Digital 1.MD.3

Data Points 1.MD.4

GEOMETRY

Attributes 1.G.1

Composite 1.G.2

Half 1.G.3

SECOND GRADE MATH

OPERATIONS AND ALGEBRAIC THINKING

Symbol 2.OA.1	Even 2.OA.3
Mental Strategies 2.OA.2	Array 2.OA.4
Odd 2.OA.3	

NUMBER AND OPERATIONS IN BASE TEN

Place Value 2.NBT.1, 2.NBT.1a, 2.NBT.1b	Identity Property 2.NBT.5
Skip Count 2.NBT.2	Properties 2.NBT.6, 2.NBT.7
Expanded Form 2.NBT.3	Operations 2.NBT.6, 2.NBT.7
Comparison 2.NBT.4	

MEASUREMENT AND DATA

Yardstick 2.MD.1	Quarters 2.MD.8
Meterstick 2.MD.1	Dimes 2.MD.8
Meter 2.MD.3	Nickels 2.MD.8
Centimeter 2.MD.3	Pennies 2.MD.8
Length 2.MD.5	Line Plot 2.MD.9
Number Line Diagram 2.MD.6	Scale 2.MD.9
A.M./P.M. 2.MD.7	Picture Graph 2.MD.10
Dollars 2.MD.8	Bar Graph 2.MD.10
Cents 2.MD.8	

GEOMETRY

Angles 2.G.1	Columns 2.G.2
Faces 2.G.1	Halves 2.G.3
Quadrilaterals 2.G.1	Thirds 2.G.3
Pentagons 2.G.1	Fourths 2.G.3
Hexagons 2.G.1	

THIRD GRADE

OPERATIONS AND ALGEBRAIC THINKING

Factor 3.OA.1, 3.OA.6	Division 3.OA.2, 3.OA.3, 3.OA.4, 3.OA.7
Product 3.OA.1	Distributive Property 3.OA.5
Multiplication 3.OA.1, 3.OA.3, 3.OA.4, 3.OA.7	Order of operations 3.OA.8
Quotient 3.OA.2	Estimation 3.OA.8
Dividend 3.OA.2	Rounding* 3.OA.8
Divisor 3.OA.2	Arithmetic Pattern 3.OA.9

NUMBER AND OPERATIONS IN BASE TEN

Rounding* 3.NBT.1	Multiply 3.NBT.3
Algorithm 3.NBT.2	

NUMBER AND OPERATIONS - FRACTIONS

Numerator 3.NF.1	Number line 3.NF.2b
Denominator 3.NF.1	Equivalent 3.NF.3a, 3.NF.3b
Unit Fraction* 3.NF.1, 3.NF.2a	

MEASUREMENT AND DATA

Minute 3.MD.1	Unit Square 3.MD.5a, 3.MD.6
Volume 3.MD.2	Plane Figure 3.MD.5b
Mass 3.MD.2	Area Model 3.MD.7
Scaled Pictographs 3.MD.3	Perimeter 3.MD.8
Scaled Bar Graphs 3.MD.3	

GEOMETRY

Attribute 3.G.1	Unit Fraction* 3.G.2
Trapezoid 3.G.1	

Words found in multiple domains are indicated by a star symbol (*).

FOURTH GRADE

OPERATIONS AND ALGEBRAIC THINKING

Multiplicative Comparison 4.OA.1
Additive Comparison 4.OA.2
Remainder 4.OA.3

Composite 4.OA.4
Rule 4.OA.5

NUMBER AND OPERATIONS IN BASE TEN

Expanded form 4.NBT.2
Round 4.NBT.3

Standard Algorithm 4.NBT.4
Array Model 4.NBT.5, 4.NBT.6

NUMBER AND OPERATIONS - FRACTIONS

Equivalent Fraction 4.NF.1, 4.NF.5
Denominator 4.NF.1
Numerator 4.NF.1
Benchmark Fraction 4.NF.2
Common Denominator 4.NF.2

Mixed Number 4.NF.3
Factor 4.NF.4
Multiple 4.NF.4
Decimal Notation 4.NF.6
Decimal 4.NF.7

MEASUREMENT AND DATA

Metric 4.MD.1
Standard Units 4.MD.1
Scale 4.MD.2
Formula 4.MD.3
Line Plot 4.MD.4

Ray* 4.MD.5a
Endpoint 4.MD.5a
Arc 4.MD.5a
Angle 4.MD.5b, 4.MD.7
Protractor 4.MD.6

GEOMETRY

Line Segment 4.G.1
Ray* 4.G.1
Right Angle 4.G.1, 4.G.2
Acute Angle 4.G.1, 4.G.2

Obtuse Angle 4.G.1, 4.G.2
Parallel 4.G.1, 4.G.2
Perpendicular 4.G.1, 4.G.2
Symmetry 4.G.3

Words found in multiple domains are indicated by a star symbol (*).



FIFTH GRADE

OPERATIONS AND ALGEBRAIC THINKING

Parentheses 5.OA.1
Brackets 5.OA.1
Braces 5.OA.1
Evaluate 5.OA.1

Numerical Expression 5.OA.1, 5.OA.2
Corresponding Term 5.OA.3
Ordered Pair* 5.OA.3
Coordinate Plane* 5.OA.3

NUMBER AND OPERATIONS IN BASE TEN

Powers of Ten 5.NBT.2
Exponent 5.NBT.2
Decimal 5.NBT.2, 5.NBT.3a, 5.NBT.7

Decimal Place 5.NBT.3b, 5.NBT.4
Standard Algorithm 5.NBT.5
Array Model 5.NBT.6

NUMBER AND OPERATIONS - FRACTIONS

Equivalent Fraction 5.NF.1
Mixed Number 5.NF.1, 5.NF.3
Benchmark Fraction 5.NF.2
Factor 5.NF.5

Scaling 5.NF.5
Mixed Numbers 5.NF.6
Unit Fraction 5.NF.7

MEASUREMENT AND DATA

Convert 5.MD.1
Conversion 5.MD.1
Line Plot 5.MD.2, 5.MD.4
Unit Fraction 5.MD.2
Unit Cube 5.MD.3a, 5.MD.4

Volume 5.MD.3a, 5.MD.3b, 5.MD.4, 5.MD.5a
Cubic Unit 5.MD.3b
Right Rectangular Prism 5.MD.5b
Additive 5.MD.5c

GEOMETRY

Axis/Axes 5.G.1
Intersect 5.G.1
Coordinate System 5.G.1
Origin 5.G.1
Coordinates 5.G.1
x-axis 5.G.1
y-axis 5.G.1

x-coordinate 5.G.1
y-coordinate 5.G.1
Ordered Pair* 5.G.1, 5.G.2
Quadrant 5.G.2
Coordinate Plane* 5.G.2
Attribute 5.G.3
Hierarchy 5.G.4

Words found in multiple domains are indicated by a star symbol (*).



SIXTH GRADE

RATIOS AND PROPORTIONAL RELATIONSHIPS

Ratio 6.RP.1, 6.RP.2, 6.RP.3

Rate 6.RP.2, 6.RP.3

Unit Rate 6.RP.2, 6.RP.3

Equivalent Ratio 6.RP.3

Percent 6.RP.3

Coordinate Plane* 6.RP.3

THE NUMBER SYSTEM

Quotient 6.NS.1

Factor 6.NS.4

Multiple 6.NS.4

Greatest common factor 6.NS.4

Least common multiple 6.NS.4

Distributive property* 6.NS.4

Rational Number 6.NS.6, 6.NS.7

Integer 6.NS.6

Coordinate Plane* 6.NS.6, 6.NS.8

Ordered Pair 6.NS.6

Quadrant 6.NS.6, 6.NS.8

Reflection 6.NS.6

Absolute Value 6.NS.7, 6.NS.8

Coordinates 6.NS.8

EXPRESSIONS AND EQUATIONS

Exponent 6.EE.1

Evaluate 6.EE.1, 6.EE.2

Difference 6.EE.2

Algebraic Expression 6.EE.2, 6.EE.6

Substitute 6.EE.2

Equivalent Expressions 6.EE.3, 6.EE.4

Commutative Property 6.EE.3

Associative Property 6.EE.3

Distributive Property* 6.EE.3

Inequality 6.EE.5, 6.EE.8

Solution 6.EE.5

Variable 6.EE.6

Constant 6.EE.6

Independent variable 6.EE.9

Dependent Variable 6.EE.9

Coordinate Plane* 6.EE.9

GEOMETRY

Polygon 6.G.1, 6.G.2

Right Triangle 6.G.1

Quadrilateral 6.G.1

Parallelogram 6.G.1

Right Rectangular Prism 6.G.2, 6.G.4

Volume 6.G.2

Vertex/Vertices 6.G.3

Right Triangular Prism 6.G.4

Surface Area 6.G.4

STATISTICS AND PROBABILITY

Variability 6.SP.1

Distribution 6.SP.2

Measure of Center 6.SP.3

Measure of Variation 6.SP.3

Outlier 6.SP.3

Histogram 6.SP.4

Box Plot 6.SP.4

Range 6.SP.5

Interquartile Range 6.SP.5

Mean Absolute Deviation 6.SP.5

Words found in multiple domains are indicated by a star symbol (*).



SEVENTH GRADE

RATIOS AND PROPORTIONAL RELATIONSHIPS

Ratio 7.RP.1, 7.RP.2

Rate 7.RP.1

Unit Rate 7.RP.1, 7.RP.2

Proportional Relationship 7.RP.2, 7.RP.2

Constant of Proportionality 7.RP.2

Equivalent Ratios 7.RP.2

Percent 7.RP.2

THE NUMBER SYSTEM

Additive Inverse 7.NS.1, 7.NS.1

Absolute Value 7.NS.1

Rational Number* 7.NS.2, 7.NS.3

Terminating Decimal 7.NS.2

Repeating Decimal 7.NS.2

Complex Fraction 7.NS.3

EXPRESSIONS AND EQUATIONS

Linear Expression 7.EE.1

Coefficient 7.EE.1

Like Terms 7.EE.1

Rational Number* 7.EE.3

GEOMETRY

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Diameter 7.G.4

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Area 7.G.4

Pi 7.G.4

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Volume 7.G.6

STATISTICS AND PROBABILITY

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Words found in multiple domains are indicated by a star symbol (*).



ACCELERATED SEVENTH GRADE

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Ratio* 7.RP.1, 7.RP.2

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Integer 8.EE.1

Exponent 8.EE.1

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Square 8.EE.2

Cube Root 8.EE.2

Square Root 8.EE.2

Radical 8.EE.2

Perfect Square 8.EE.2

Perfect Cube 8.EE.2

Irrational 8.EE.2

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Ratio* 8.EE.6

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GEOMETRY

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Radius 7.G.4

Diameter 7.G.4

Circumference 7.G.4

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Supplementary and Complementary Angles 7.G.5

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STATISTICS AND PROBABILITY

Sample 7.SP.1, 7.SP.2

Population 7.SP.1, 7.SP.2, 7.SP.4

Random Sample 7.SP.1, 7.SP.2, 7.SP.4

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Measures of Variability 7.SP.3, 7.SP.4

Mean Absolute Deviation 7.SP.3, 7.SP.4

Interquartile Range 7.SP.3, 7.SP.4

Likely 7.SP.6

Unlikely 7.SP.6

Theoretical Probability 7.SP.6, 7.SP.7

Experimental Probability 7.SP.6, 7.SP.7

Relative Frequency 7.SP.6, 7.SP.7

Probability Model 7.SP.7

Frequency 7.SP.7

Compound Events 7.SP.8

Sample Space 7.SP.8

Tree Diagram 7.SP.8

Outcomes 7.SP.8

Simulation 7.SP.8

Words found in multiple domains are indicated by a star symbol (*).



EIGHTH GRADE

THE NUMBER SYSTEM

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Irrational Number 8.NS.1, 8.NS.2

EXPRESSIONS AND EQUATIONS

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Exponent 8.EE.1

Cube 8.EE.2

Square 8.EE.2

Cube Root 8.EE.2

Square Root 8.EE.2

Radical 8.EE.2

Perfect Square 8.EE.2

Perfect Cube 8.EE.2

Irrational 8.EE.2

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Scientific Notation 8.EE.4

Proportional Relationship 8.EE.5, 8.EE.6

Unit Rate 8.EE.5

Slope* 8.EE.5, 8.EE.6

Hypotenuse* 8.EE.6

Ratio 8.EE.6

y-intercept 8.EE.6

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Rotation 8.G.1, 8.G.2, 8.G.3, 8.G.4

Parallel Line 8.G.1, 8.G.5

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Dilation 8.G.3, 8.G.4

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STATISTICS AND PROBABILITY

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Slope* 8.SP.3

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Categorical Data 8.SP.4

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Words found in multiple domains are indicated by a star symbol (*).



ALGEBRA 1

EXPRESSIONS AND EQUATIONS

Linear Equation* 8.EE.8

System of Linear Equations 8.EE.8

Intersection* 8.EE.8

FUNCTIONS

Function* 8.F.1, 8.F.2

Input* 8.F.1

Output* 8.F.1

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Rate of Change* 8.F.2, 8.F.4

Increasing 8.F.5

Decreasing 8.F.5

Linear* 8.F.5

Nonlinear 8.F.5

GEOMETRY

Pythagorean Theorem 8.G.6, 8.G.7, 8.G.8

Leg 8.G.6, 8.G.7, 8.G.8

Hypotenuse 8.G.6, 8.G.7, 8.G.8

Converse 8.G.6

STATISTICS AND PROBABILITY

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Bivariate 8.SP.1, 8.SP.3, 8.SP.4

Clustering 8.SP.1

Outlier* 8.SP.1

Positive & Negative Association 8.SP.1

Linear & Nonlinear Association 8.SP.1, 8.SP.2, 8.SP.3

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Slope* 8.SP.3

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Categorical Data 8.SP.4

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Expression* N-RN.1, N-RN.2

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Rational Number N-RN.3

Irrational Number N-RN.3

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Factor A-SSE.1

Coefficient* A-SSE.1

Equivalent A-SSE.1, A-SSE.2

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Quadratic Expression A-SSE.3

Complete the Square A-SSE.3

Exponential Function* A-SSE.3

Function* A-SSE.3

ARITHMETIC WITH POLYNOMIALS AND RATIONAL EXPRESSIONS

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Integers A-APR.1

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Function* F-IF.1, F-IF.2, F-IF.3, F-IF.5, F-IF.6
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Sequence F-IF.3
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Maximum F-IF.4
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Words found in multiple domains are indicated by a star (*).



GEOMETRY

CONGRUENCE

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Radius* G-GPE.1

Parabola G-GPE.2

Focus G-GPE.2

Directrix G-GPE.2

Distance Formula G-GPE.2

Factor G-GPE.2

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GEOMETRIC MEASURE AND DIMENSION

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Cylinder G-GMD.3

Pyramid G-GMD.3

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MODELING WITH GEOMETRY

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Complement S-CP.1

Independent Events S-CP.2, S-CP.3, S-CP.4, S-CP.5

Probability* S-CP.2, S-CP.3, S-CP.4, S-CP.6, S-CP.7, S-CP.8

Conditional Probability S-CP.3, S-CP.4, S-CP.5, S-CP.6

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Two-way Frequency Table S-CP.4

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General Multiplication Rule S-CP.8

Fundamental Counting Principle S-CP.9

Outcomes S-CP.9

Sample Space* S-CP.9

Permutation S-CP.9

Combination S-CP.9

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USE PROBABILITY TO MAKE DECISIONS

Probability* S-MD.6, S-MD.7

Event* S-MD.6, S-MD.7

Sample Space* S-MD.6, S-MD.7

Simulation S-MD.6

Fair S-MD.6

Words found in multiple domains are indicated by a star symbol (*).

Alignment of Common Core State Standards to Core Curricular Tools

Common Core State Standards	
Think Math Chapter 1 : Numbers to Ten	Counting and Cardinality K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality. <ol style="list-style-type: none"> When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. Understand that each successive number name refers to a quantity that is one larger.
	Operations and Algebraic Thinking K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
	Numbers and Operations in Base Ten K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equations (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
Anticipated Time: 4 weeks	

Think Math Chapter 2: Two-Dimensional Figures and Quantities	Common Core State Standards
	<p>Counting and Cardinality</p> <p>K.CC.6</p> <p>Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (include groups with up to ten objects)</p> <p>Geometry</p> <p>K.G.2</p> <p>Correctly name shapes regardless of their orientations or overall size.</p> <p>K.G.6</p> <p>Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”</p>
Anticipated Time: 4 weeks	

Think Math Chapter 3: Patterns and Sorting	Common Core State Standards
	<p>Measurement and Data</p> <p>K.MD.3</p> <p>Classify objects into categories; count the number of objects in each category and sort the categories by count. (limit category counts to be less than or equal to 10)</p>
Anticipated Time: 3 weeks	

Think Math Chapter 4: Moving on the Number Line	Common Core State Standards
	<p>Counting and Cardinality</p> <p>K.CC.1 Count to 100 by ones and tens.</p> <p>K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin with 1).</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 5: Making and Breaking Numbers	Common Core State Standards
	<p>Counting and Cardinality</p> <p>K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).</p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.</p> <p>Operations and Algebraic Thinking</p> <p>K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings*, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. *Drawings need not show details, but should show the mathematics in the problem</p>
Anticipated Time: 4 weeks	

Think Math Chapter 6: Stories in Numbers, Words, and Pictures	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation</p> <p>K.OA.5 Fluently add and subtract within 5.</p>
Anticipated Time: 4 weeks	

Think Math Chapter 7: Three-Dimensional Geometry	Common Core State Standards
	<p>Geometry</p> <p>K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.</p> <p>K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).</p> <p>K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, and parts (e.g., number of sides and vertices/”corners”) and other attributes (e.g., having sides of equal length).</p> <p>K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes</p>
Anticipated Time: 4 weeks	

Think Math Chapter 8: Measurement	Common Core State Standards
	<p>Measurement and Data</p> <p>K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. <i>For example, directly compare heights of two children and describe one child as taller/shorter.</i></p>
Anticipated Time: 3 weeks	

Think Math Chapter 9: Large Numbers	Common Core State Standards
	<p>Counting and Cardinality</p> <p>K.CC.1 Count to 100 by ones and tens.</p> <p>Numbers and Operations in Base Ten</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equations (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>
Anticipated Time: 3 weeks	



Alignment of Common Core State Standards to Core Curricular Tools

Think Math Chapter 1 : Two-Dimensional Figures and Patterns	Common Core State Standards
	<p>Geometry</p> <p>1.G.1</p> <p>Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 2: Number Lines and Time	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.5</p> <p>Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>Measurement and Data</p> <p>1.MD.3</p> <p>Tell and write time in hours and half-hours using analog and digital clocks.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 3: Skip-Counting and Money	Common Core State Standards
	Teachers should use this chapter to reinforce the Standards for Mathematical Practice.
Anticipated Time: 1.5 weeks	

Think Math Chapter 4: Exploring Addition and Subtraction	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.8</p> <p>Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i></p>
Anticipated Time: 2 weeks	

Think Math Chapter 5: Working with Tens	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.8</p> <p>Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i></p> <p>Number and Operations in Base Ten</p> <p>1.NBT.2a</p> <p>Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 10 can be thought of as bundle of ten ones – called a “ten.”</p> <p>1.NBT.2b</p> <p>Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: The numbers from 11 to 19 are composed of a ten and a one, two, three, four, five, six, seven, eight or nine ones.</p> <p>1.NBT.2c</p> <p>Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>Measurement and Data</p> <p>1.MD.3</p> <p>Tell and write time in hours and half-hours using analog and digital clocks.</p>
	Anticipated Time: 3 weeks

Think Math Chapter 6: Data and Probability	Common Core State Standards
	Measurement and Data 1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
	Anticipated Time: 1.5 weeks

Think Math Chapter 7: Working with Large Numbers	Common Core State Standards
	Number and Operations in Base Ten 1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
	Anticipated Time: 3 weeks

Think Math Chapter 8: Doubling, Halving, and Fractions	Common Core State Standards
	<p>Geometry</p> <p>1.G.3</p> <p>Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i> and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 9: Modeling Addition and Subtraction	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.1</p> <p>Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.4</p> <p>Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</i></p> <p>1.OA.6</p> <p>Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).</p>
Anticipated Time: 3 weeks	

Think Math Chapter 10: Maps, Grids, and Geometric Figures	Common Core State Standards
	<p>Geometry</p> <p>1.G.2</p> <p>Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. *Students do not need to learn formal names such as “right rectangular prism”</p>
Anticipated Time: 2.5 weeks	

Think Math Chapter 11: Comparing Numbers, Temperatures, and Weights	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.7</p> <p>Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</p> <p>Number and Operation in Base Ten</p> <p>1.NBT.3</p> <p>Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 12: Length, Area, and Capacity	Common Core State Standards
	<p>Measurement and Data</p> <p>1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a short object (the length unit) end to end; understand that the length measurement of an object is the number of the same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the objects being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p>
	Anticipated Time: 2.5 weeks

Think Math Chapter 13: Making and Breaking Numbers	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.3 Apply properties of operations as strategies to add and subtract. <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$ (Associative property of addition)</i> *Students need not use formal terms for these properties.</p>
	Anticipated Time: 3 weeks

Think Math Chapter 14: Extending Addition and Subtraction	Common Core State Standards
	Number and Operations in Base Ten 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
	Anticipated Time: 2 weeks

Think Math Chapter 15: Exploring Rules and Patterns	Common Core State Standards
	Teachers should use this chapter to reinforce the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Think Math Chapter 1 : Counting Strategies	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Numbers and Operations in Base Ten</p> <p>2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>Measurement and Data</p> <p>2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, . . . , and represent whole-number sums and differences within 100 on a number line diagram.</p>
Anticipated Time: 3 weeks	
Think Math Chapter 2: Working with 10	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>Numbers and Operations in Base Ten</p> <p>2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 3: Place Value and Sorting	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <p>2.NBT.1a. 100 can be thought of as a bundle of ten tens—called a “hundred.”</p> <p>2.NBT.1b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</p> <p>2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 4: Addition and Subtraction with Place Value	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>Numbers and Operations in Base Ten</p> <p>2.NBT.1a. 100 can be thought of as a bundle of ten tens—called a “hundred.”</p> <p>2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Measurement and Data</p> <p>2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>
Anticipated Time: 2 weeks	

Think Math Chapter 5: Probability and Data	Common Core State Standards
	Measurement and Data 2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. 2.MD.10 Draw a picture graph and a bar graph (with single unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
	Anticipated Time: 4 weeks

Think Math Chapter 6: Measuring Time	Common Core State Standards
	Measurement and Data 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
	Anticipated Time: 2 weeks

Think Math Chapter 7: Doubling, Halving, and Fractions	Common Core State Standards
	<p>Operations and Algebraic Thinking 2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p> <p>Geometry 2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 8: Building Addition and Subtraction Fluency	Common Core State Standards
	<p>Operations and Algebraic Thinking 2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹ 2.OA.2. Fluently add and subtract within 20 using mental strategies.² By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Numbers and Operations in Base 10 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. 2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. 2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.¹</p> <p>Measurement and Data 2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. 2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>
Anticipated Time: 3 weeks	

Think Math Chapter 9: Two-Dimensional Figures and Spatial Sense	Common Core State Standards
	<p>Geometry</p> <p>2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 10: Adding and Subtracting Larger Numbers	Common Core State Standards
	<p>Number and Operations in Base 10</p> <p>2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900</p> <p>Measurement and Data</p> <p>2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>
Anticipated Time: 3 weeks	

Think Math Chapter 11: Skip Counting and Equivalent Sets	Common Core State Standards
	<p>Operations and Algebraic Thinking 2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p> <p>Number and Operations in Base 10 2.NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 12: Measuring Lengths	Common Core State Standards
	<p>Measurement and Data 2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters. 2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 13: Exploring Multiplication and Division	Common Core State Standards
	<p>Operations and Algebraic Thinking 2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p> <p>Measurement and Data 2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>
Anticipated Time: 2 weeks	

Think Math Chapter 14: Comparing and Contrasting Three-Dimensional Figures	Common Core State Standards
	<p>Geometry 2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 15: Capacity, Weight/Mass, and Temperature	Common Core State Standards
	Teachers should use this chapter to reinforce the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Think Math Chapter 16: Multiplying and Dividing	Common Core State Standards
	Teachers should use this chapter to reinforce the Standards for Mathematical Practice.
Anticipated Time: 1 week	

Alignment of Common Core State Standards to Core Curricular Tools

Think Math Chapter 1: Building Strategies	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>
Think Math Chapter 2: Multiplication Situations	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i></p> <p>3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i></p> <p>3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>3.OA.6. Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i></p> <p>3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 3: Using Addition and Subtraction	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Measurement and Data</p> <p>3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p>
Anticipated Time: 2 weeks	

Think Math Chapter 4: Grouping, Regrouping, and Place Value	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 5: Understanding Addition and Subtraction Algorithms	Common Core State Standards
	<p>Operations and Algebraic Thinking 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p> <p>Numbers and Operations in Base 10 3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100. 3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>
	Anticipated Time: 3 weeks

Think Math Chapter 6: Rules and Patterns	Common Core State Standards
	<p>Operations and Algebraic Thinking 3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. 3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.³ 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p> <p>Numbers and Operations – Fraction 3.NF.1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.</p>
	Anticipated Time: 2 weeks

Think Math Chapter 7: Fractions	Common Core State Standards
	<p>Numbers and Operations – Fractions</p> <p>3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>3.NF.2a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.</p> <p>3.NF.2b Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.</p> <p>3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p> <p>3.NF.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</p> <p>3.NF.3b Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.</p> <p>3.NF.3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.</i></p> <p>3.NF.3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Geometry</p> <p>3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as $1/4$ of the area of the shape.</i></p>
Anticipated Time: 3 weeks	

Think Math Chapter 8: Charts and Graphs.	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$</i></p> <p>Measurement and Data</p> <p>3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p>
Anticipated Time: 2 weeks	

Think Math Chapter 9: Exploring Multiplication	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7.</p> <p>3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</p> <p>3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 10: Length, Area, and Volume	Common Core State Standards
	<p>Measurement and Data</p> <p>3.MD.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters</p> <p>3.MD.5. Recognize area as an attribute of plan figures and understand concepts of area measurement.</p> <p>3.MD.5a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.</p> <p>3.MD.5b A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p> <p>3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft., and improvised units).</p> <p>3.MD.7. Relate area to the operations of multiplication and addition.</p> <p>3.MD.7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</p> <p>3.MD.7b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.</p> <p>3.MD.7c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.</p> <p>3.MD.7d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.</p> <p>3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 11: Geometry	Common Core State Standards
	<p>Geometry</p> <p>3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 12: Multiplication Strategies	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹</p> <p>3.OA.5. Apply properties of operations as strategies to multiply and divide.² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i></p> <p>3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 13: Time, Temperature, Weight, and Capacity	Common Core State Standards
	Operations and Algebraic Thinking 3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. ¹ 3.OA.5. Apply properties of operations as strategies to multiply and divide. ² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i> 3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
	Anticipated Time: 2 weeks

Think Math Chapter 14:	Common Core State Standards
	Operations and Algebraic Thinking 3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. ¹ 3.OA.5. Apply properties of operations as strategies to multiply and divide. ² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i> 3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
	Anticipated Time: 2 weeks

Will require additional resources, not addressed in Think Math:

Numbers and Operations in Base Ten

- **3.NBT.3.** Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Measurement and Data

- **3.MD.1.** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
- **3.MD.2.** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 1 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Alignment of Common Core State Standards to Core Curricular Tools

Think Math Chapter 1: Magic Squares	Common Core State Standards
	<p>Numbers and Operations in Base 10</p> <p>4.NBT.4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
Anticipated Time: 2 weeks	
Think Math Chapter 2: Multiplication	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>4.OA.1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.¹</p> <p>Number and Operations in Base 10</p> <p>4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 3: The Eraser Store	Common Core State Standards
	<p>Number and Operations in Base Ten</p> <p>4.NBT.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</p> <p>4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 4: Classifying Angles and Figures	Common Core State Standards
	<p>Measurement and Data</p> <p>4.MD.5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <p>4.MD.5a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $1/360$ of a circle is called a “one-degree angle,” and can be used to measure angles.</p> <p>4.MD.5b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.</p> <p>4.MD.6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>4.MD.7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p> <p>Geometry</p> <p>4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>4.G.2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p> <p>4.G.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 5: Area and Perimeter	Common Core State Standards
	Measurement and Data 4.MD.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i>
Anticipated Time: 2 weeks	

Think Math Chapter 6: Multi-Digit Multiplication	Common Core State Standards
	Operations and Algebraic Thinking 4.OA.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
	Numbers and Operations in Base 10 4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
	Anticipated Time: 2 weeks

Think Math Chapter 7: Fractions	Common Core State Standards
	<p>Numbers and Operations-Fractions</p> <p>4.NF.1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>4.NF.2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>4.NF.3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <p>4.NF.3a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>4.NF.3b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. <i>Examples:</i> $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.</p> <p>4.NF.3c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</p> <p>4.NF.3c. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.</p> <p>4.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>4.NF.4a. Understand a fraction a/b as a multiple of $1/b$. <i>For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.</i></p> <p>4.NF.4b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)</i></p> <p>4.NF.4c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</i></p> <p>4.NF.5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. <i>For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.</i></p> <p>Measurement and Data</p> <p>4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></p>
Anticipated Time: 3 weeks	

Think Math Chapter 8: Decimals	Common Core State Standards
	<p>Numbers and Operations-Fractions</p> <p>4.NF.6. Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</i></p> <p>4.NF.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p> <p>Measurement and Data</p> <p>4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 9: Measurement	Common Core State Standards
	<p>Measurement and Data</p> <p>4.MD.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</p> <p>4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 10: Data and Probability	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 11: Three-Dimensional Geometry	Common Core State Standards
	Measurement and Data 4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
	Anticipated Time: 1 week

Think Math Chapter 12: Extending the Number Line	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
	Anticipated Time: 2 weeks

Think Math Chapter 13: Division	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p> <p>Number and Operations in Base Ten</p> <p>4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place.</p> <p>4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 14: Algebraic Thinking	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></p>
Anticipated Time: 2 weeks	

Think Math Chapter 15: Estimation	Common Core State Standards
	<p>Measurement and Data</p> <p>4.MD.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</p> <p>4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>
Anticipated Time: 2 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Holt Course 1 Chapter 1 : Whole Numbers and Patterns	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p>5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 2: Introduction to Algebra	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>5.OA.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p> <p>Numbers and Operations in Base Ten</p> <p>5.NBT.5. Fluently multiply multi-digit whole numbers using the standard algorithm.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 3: Decimals	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 4: Number Theory and Fractions	Common Core State Standards
	<p>Measurement and Data</p> <p>5.MD.2. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p> <p>Numbers and Operations in Base Ten</p> <p>5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3. Read, write, and compare decimals to thousandths.</p> <p>5.NBT.3a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p> <p>5.NBT.3b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.</p> <p>5.NBT.4. Use place value understanding to round decimals to any place.</p> <p>5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
Anticipated Time: 4 weeks	

Common Core State Standards

Number and Operations-Fractions

5.NF.3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*

5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)*

5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.*

5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

5.NF.4a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)*

5.NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

5.NF.6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

5.NF.7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

5.NF.7a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.*

5.NF.7b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.*

5.NF.7c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share $1/2$ lb. of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?*

Common Core State Standards

Geometry

5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Anticipated Time: 3 weeks

Holt Course 1 Chapter 7: Proportional Relationships	Common Core State Standards
	<p>Numbers and Operations</p> <p>5.NF.5. Interpret multiplication as scaling (resizing), by:</p> <p>5.NF.5a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</p> <p>5.NF.5b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 8: Geometric Relationships	Common Core State Standards
	<p>Geometry</p> <p>5.G.3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</p> <p>5.G.4. Classify two-dimensional figures in a hierarchy based on properties.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 9: Measurement and Geometry	Common Core State Standards
	Measurement and Data 5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
Anticipated Time: 2 weeks	

Holt Course 1 Chapter 10: Area and Volume	Common Core State Standards
	Measurement and Data 5.MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 5.MD.3a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. 5.MD.3b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. 5.MD.4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and improvised units. 5.MD.5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 5.MD.5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. 5.MD.5b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. 5.MD.5c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 11: Integers, Graphs, and Functions	Common Core State Standards
	<p>Geometry</p> <p>5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).</p> <p>5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 12: Probability	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Think Math Chapter 1 : Algebra Machines and Puzzles	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i></p> <p>5.OA.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p>
Anticipated Time: 2 weeks	
Chapter 2: Multiplication and Large	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p>
Anticipated Time: 3 weeks	

Think Math Chapter 3: Factoring and Prime Numbers	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Think Math Chapter 4: Equivalence and Comparison of Fractions	Common Core State Standards
	<p>Number and Operations-Fractions 5.NF.3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p> <p>Measurement and Data 5.MD.2. Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p>
Anticipated Time: 2 weeks	

Think Math Chapter 5: Record Multi-Digit Multiplication	Common Core State Standards
	Operations and Algebraic Thinking 5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
	Numbers and Operations in Base Ten 5.NBT.5. Fluently multiply multi-digit whole numbers using the standard algorithm.
Anticipated Time: 1 week	

Think Math Chapter 6: Grids and Graphs	Common Core State Standards
	Geometry 5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
	5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
Anticipated Time: 3 weeks	

Think Math Chapter 7: Decimals	Common Core State Standards
	<p>Numbers and Operations in Base Ten</p> <p>5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3. Read, write, and compare decimals to thousandths.</p> <p>5.NBT.3a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p> <p>5.NBT.3b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>5.NBT.4. Use place value understanding to round decimals to any place.</p> <p>5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
Anticipated Time: 3 weeks	

Chapter 8: Developing a Division	Common Core State Standards
	<p>Number and Operations in Base 10</p> <p>5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 9: Attributes of Two- Dimensional Figures	Common Core State Standards
	Geometry 5.G.3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. 5.G.4. Classify two-dimensional figures in a hierarchy based on properties.
Anticipated Time: 2 weeks	

Think Math Chapter 10: Area and Perimeter	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Think Math Chapter 11: Fraction Computation	Common Core State Standards
	<p>5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</i></p> <p>5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p> <p>5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>5.NF.4a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)</p> <p>5.NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> <p>5.NF.5. Interpret multiplication as scaling (resizing), by:</p> <p>5.NF.5a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</p> <p>5.NF.5b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.</p> <p>5.NF.6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹</p> <p>5.NF.7a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. <i>For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.</i></p> <p>5.NF.7b. Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.</i></p> <p>5.NF.7c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$-cup servings are in 2 cups of raisins?</i></p>
	Anticipated Time: 3 weeks

Think Math Chapter 12: Three-Dimensional Geometry	Common Core State Standards
	<p>5.MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <p>5.MD.3a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.</p> <p>5.MD.3b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.</p> <p>5.MD.4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p>5.MD.5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <p>5.MD.5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <p>5.MD.5b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> <p>5.MD.5c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p>
	Anticipated Time: 2 weeks

Think Math Chapter 13: Fun with Algebra	Common Core State Standards
	<p>Operations and Algebraic Thinking</p> <p>5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 14: Data and Probability	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Think Math Chapter 15: Graphing	Common Core State Standards
	<p>Measurement and Data 5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p> <p>Geometry 5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). 5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p>
Anticipated Time: 2 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

	Common Core State Standards
Holt Course 1 Chapter 1 : Whole Numbers and Patterns	The Number System 6.NS.2. Fluently divide multi-digit numbers using the standard algorithm.
	Expressions and Equations 6.EE.1. Write and evaluate numerical expressions involving whole-number exponents
Anticipated Time: 2 weeks	
	Common Core State Standards
Holt Course 1 Chapter 2: Introduction to Algebra	Expression and Equations 6.EE.2. Write, read, and evaluate expressions in which letters stand for numbers.
	6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as $5 - y$.</i> 6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i> 6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.</i> 6.EE.3. Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i> 6.EE.4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for. Reason about and solve one-variable equations and</i>

	<p><i>inequalities.</i></p> <p>6.EE.5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p>6.EE.6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p>6.EE.7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.</p> <p>6.EE.8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 3: Decimals	Common Core State Standards
	<p>The Number System</p> <p>6.NS.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p>
Anticipated Time: 2 weeks	

Holt Course 1 Chapter 4: Number Theory and Fractions	Common Core State Standards
	<p>The Number System</p> <p>6.NS.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$. Apply and extend previous understandings of numbers to the system of rational numbers.</i></p>
Anticipated Time: 4 weeks	

Holt Course 1 Chapter 5: Fraction Operations	Common Core State Standards
	<p>The Number System</p> <p>6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.</i></p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 6: Collecting and Displaying Data	Common Core State Standards
	<p>Statistics and Probability</p> <p>6.SP.1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p>6.SP.2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>6.SP.3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p> <p>6.SP.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>6.SP.5a Summarize numerical data sets in relation to their context, such as by: Reporting the number of observations.</p> <p>6.SP.5b Summarize numerical data sets in relation to their context, such as by: Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</p> <p>6.SP.5c Summarize numerical data sets in relation to their context, such as by: Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</p> <p>6.SP.5d Summarize numerical data sets in relation to their context, such as by: Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 7: Proportional Relationships	Common Core State Standards
	<p>Ratios and Proportions</p> <p>6.RP.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p>6.RP.2. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”</i></p> <p>6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <p>6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i></p> <p>6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</p> <p>6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 8: Geometric Relationships	Common Core State Standards
	<p>The Number System</p> <p>6.NS.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>
	<p>Geometry</p> <p>6.G.3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 9: Measurement and Geometry	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Holt Course 1 Chapter 10: Area and Volume	Common Core State Standards
	<p>Geometry</p> <p>6.G.1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.</p> <p>6.G.2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p> <p>6.G.4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 11: Integers, Graphs, and Functions	Common Core State Standards
	<p>The Number System</p> <p>6.NS.5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p>6.NS.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>6.NS.6a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.</p> <p>6.NS.6b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p>6.NS.6c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p> <p>6.NS.7. Understand ordering and absolute value of rational numbers.</p> <p>6.NS.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i></p> <p>6.NS.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i></p> <p>6.NS.7c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i></p> <p>6.NS.7d. Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i></p>

	<p>6.EE.9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</p>
Anticipated Time: 3 weeks	

Holt Course 1 Chapter 12: Probability	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 3 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Common Core State Standards	
Holt Course 2 Chapter 1: Algebraic Reasoning	Expressions and Equations 6.EE.1. Write and evaluate numerical expressions involving whole-number exponents 6.EE.2. Write, read, and evaluate expressions in which letters stand for numbers. 6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as $5 - y$.</i> 6.EE.2b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i> 6.EE.3. Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i> 6.EE.4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for. Reason about and solve one-variable equations and inequalities.</i> 6.EE.5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. 6.EE.6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. 6.EE.7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers. 6.EE.8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.
	Anticipated Time: 3

Holt Course 2 Chapter 2: Integers and Rational Numbers	Common Core State Standards
	<p>The Number System</p> <p>6.NS.2. Fluently divide multi-digit numbers using the standard algorithm.</p> <p>6.NS.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$. Apply and extend previous understandings of numbers to the system of rational numbers.</i></p> <p>6.NS.5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p>6.NS.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>6.NS.6a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.</p> <p>6.NS.7. Understand ordering and absolute value of rational numbers.</p> <p>6.NS.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i></p> <p>6.NS.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i></p> <p>6.NS.7c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i></p> <p>6.NS.7d. Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i></p>
Anticipated Time: 4	
Holt Course 2 Chapter 3: Applying Rational Numbers	Common Core State Standards
	<p>The Number System</p> <p>6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.</i></p> <p>6.NS.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p>
Anticipated Time: 2	

Holt Course 2 Chapter 4: Patterns and Functions	Common Core State Standards
	<p>The Number System</p> <p>6.NS.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p> <p>6.NS.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>6.NS.6b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p>6.NS.6c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p> <p>Expressions and Equations</p> <p>6.EE.9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</p>
Anticipated Time: 3	

Holt Course 2 Chapter 5: Proportional Relationships	Common Core State Standards
	<p>Ratios and Proportions</p> <p>6.RP.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p>6.RP.2. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $\frac{3}{4}$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”</i></p> <p>6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <p>6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i></p> <p>6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $\frac{30}{100}$ times the quantity); solve problems involving finding the whole, given a part and the percent.</p> <p>6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p> <p>Expressions and Equations</p> <p>6.EE.9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. <i>For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</i></p>
Anticipated Time: 3	

Holt Course 2 Chapter 6: Percents	Common Core State Standards
	<p>The Number System</p> <p>6.NS.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>6.NS.6a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.</p> <p>6.NS.7. Understand ordering and absolute value of rational numbers.</p> <p>6.NS.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i></p> <p>6.NS.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i></p> <p>6.NS.7c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i></p> <p>6.NS.7d. Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i></p>
	Anticipated Time: 3

Holt Course 2 Chapter 7: Collecting, Displaying, and Analyzing Data	Common Core State Standards
	<p>Statistics and Probability</p> <p>6.SP.1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p>6.SP.2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p> <p>6.SP.3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p> <p>6.SP.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p> <p>6.SP.5a Summarize numerical data sets in relation to their context, such as by: Reporting the number of observations.</p> <p>6.SP.5b Summarize numerical data sets in relation to their context, such as by: Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</p> <p>6.SP.5c Summarize numerical data sets in relation to their context, such as by: Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</p> <p>6.SP.5d Summarize numerical data sets in relation to their context, such as by: Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</p>
	Anticipated Time: 3

Holt Course 2 Chapter 8: Geometric Figures	Common Core State Standards
	Geometry 6.G.3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
Anticipated Time: 2	

Holt Course 2 Chapter 9: Measurement- Two-Dimensional Figures	Common Core State Standards
	Geometry 6.G.1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
Anticipated Time: 2	

Holt Course 2 Chapter 10: Measurement: Three- Dimensional Figures	Common Core State Standards
	<p>Expressions and Equations</p> <p>6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.</i></p> <p>Geometry</p> <p>6.G.2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p> <p>6.G.4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
	Anticipated Time: 2

Holt Course 2 Chapter 11: Probability	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
	Anticipated Time: 2

Holt Course 2 Chapter 12: Multi-Step Equations and Inequalities	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 2	

Alignment of Common Core State Standards to Core Curricular Tools

Common Core State Standards	
Holt Course 2 Chapter 1: Algebraic Reasoning	Expressions and Equations
	7.EE.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
	7.EE.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>
	7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
	7.NS.1d. Apply properties of operations as strategies to add and subtract rational numbers.
Anticipated Time: 3 weeks	

Holt Course 2 Chapter 2: Integers and Rational Numbers	Common Core State Standards	
	The Number System 7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. 7.NS.1a. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. 7.NS.1b. Understand $p + q$ as the number located a distance $ q $ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 7.NS.1c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. 7.NS.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. 7.NS.2a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. 7.NS.2b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. 7.NS.2c. Apply properties of operations as strategies to multiply and divide rational numbers. 7.NS.3. Solve real-world and mathematical problems involving the four operations with rational numbers. ¹ Expressions and Equations E.EE.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>	
	Anticipated Time: 4 weeks	
Holt Course 2 Chapter 3: Applying Rational Numbers	Common Core State Standards	
	The Number System 7.NS.2d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. Expressions and Equations E.EE.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>	
	Anticipated Time: 3 weeks	

Holt Course 2 Chapter 4: Patterns and Functions	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Holt Course 2 Chapter 5: Proportional Relationships	Common Core State Standards
	<p>Ratios and Proportional Relationship</p> <p>7.RP.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.2. Recognize and represent proportional relationships between quantities.</p> <p>7.RP.2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p> <p>7.RP.2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>7.RP.2c. Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i></p> <p>7.RP.2d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>7.RP.3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</p> <p>Expressions and Equations</p> <p>7.EE.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i></p> <p>Geometry</p> <p>7.G.1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>
Anticipated Time: 3 weeks	

Holt Course 2 Chapter 6: Percents	Common Core State Standards
	Ratios and Proportional Relationships 7.RP.3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
Anticipated Time: 2 weeks	

Holt Course 2 Chapter 7: Collecting, Displaying, and Analyzing Data	Common Core State Standards
	Statistics and Probability 7.SP.1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. 7.SP.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i> 7.SP.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i> 7.SP.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i>
Anticipated Time: 3 weeks	

Holt Course 2 Chapter 8: Geometric Figures	Common Core State Standards
	Geometry 7.G.2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. 7.G.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.
Anticipated Time: 3 weeks	

Holt Course 2 Chapter 9: Measurement- Two- Dimensional Figures	Common Core State Standards
	Geometry 7.G.4. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. 7.G.6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
Anticipated Time: 2 weeks	

Holt Course 2 Chapter 10: Measurement: Three- Dimensional Figures	Common Core State Standards
	<p>Geometry</p> <p>7.G.3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p> <p>7.G.6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
Anticipated Time: 2 weeks	

Holt Course 2 Chapter 11: Probability	Common Core State Standards
	<p>7.SP.5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p> <p>7.SP.6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i></p> <p>7.SP.7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p> <p>7.SP.7a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></p> <p>7.SP.7b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i></p> <p>7.SP.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p> <p>7.SP.8a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p> <p>7.SP.8b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.</p> <p>7.SP.8c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i></p>
Anticipated Time: 3 weeks	

Holt Course 2 Chapter 12: Multi-Step Equations and Inequalities	Common Core State Standards
	<p>Expressions and Equations</p> <p>7.EE.4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>7.EE.4a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>7.EE.4b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p>
Anticipated Time: 4 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Holt Course 3 Chapter 1: Principles of Algebra	Common Core State Standards
	<p>The Number System</p> <p>7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <p>7.NS.1a. Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i></p> <p>7.NS.1b. Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.</p> <p>7.NS.1c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.</p>
Anticipated Time: 2 weeks	

Common Core State Standards	
Holt Course 3 Chapter 2: Rational Numbers	<p>The Number System</p> <p>7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <p>7.NS.1d. Apply properties of operations as strategies to add and subtract rational numbers.</p> <p>7.NS.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <p>7.NS.2a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.</p> <p>7.NS.2b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.</p> <p>7.NS.2c. Apply properties of operations as strategies to multiply and divide rational numbers.</p> <p>7.NS.2d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p> <p>7.NS.3. Solve real-world and mathematical problems involving the four operations with rational numbers.¹</p> <p>Expressions and Equations</p> <p>7.EE.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $1/10$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p>
	Anticipated Time: 3 weeks

Common Core State Standards	
Holt Course 3 Chapter 3: Graphs, Functions, and Sequences	<p>Expressions and Equations</p> <p>7.EE.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i></p>
	Anticipated Time: 2 weeks

Holt Course 3 Chapter 4: Exponents and Roots	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 5: Ratios, Proportions, and Similarity	Common Core State Standards
	<p>Ratios and Proportional Relationships</p> <p>7.RP.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i></p> <p>7.RP.2. Recognize and represent proportional relationships between quantities.</p> <p>7.RP.2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p> <p>7.RP.2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>7.RP.2c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</p> <p>7.RP.2d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p> <p>Geometry</p> <p>7.G.1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 6: Percents	Common Core State Standards
	7.RP.3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 7: Foundations of Geometry	Common Core State Standards
	Geometry 7.G.2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. 7.G.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 8: Perimeter, Area, and Volume	Common Core State Standards
	<p>Geometry</p> <p>7.G.3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p> <p>7.G.4. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</p> <p>7.G.6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 9: Data and Statistics	Common Core State Standards
	<p>Statistics and Probability</p> <p>7.SP.1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>7.SP.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i></p> <p>7.SP.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i></p> <p>7.SP.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i></p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 10: Probability	Common Core State Standards
	<p>Statistics and Probability</p> <p>7.SP.5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p> <p>7.SP.6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i></p> <p>7.SP.7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p> <p>7.SP.7a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></p> <p>7.SP.7b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i></p> <p>7.SP.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p> <p>7.SP.8a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p> <p>7.SP.8b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.</p> <p>7.SP.8c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i></p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 11: Multi-Step Equations and Inequalities	Common Core State Standards
	<p>Expressions and Equations</p> <p>7.EE.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p>7.EE.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p>7.EE.4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>7.EE.4a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>7.EE.4b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 12: Graphing Lines	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 13: Sequences and Functions	Common Core State Standards
	<p>7.RP.2. Recognize and represent proportional relationships between quantities.</p> <p>7.RP.2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p> <p>7.RP.2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p>
Anticipated Time: 2 weeks	
Holt Course 3 Chapter 14: Polynomials	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

Holt Algebra 1 Chapter 1: Foundations for Algebra	Common Core State Standards
	<p>N-RN.1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.</i></p> <p>N-RN.2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.</p> <p>N-RN.3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational</p> <p>N-Q.2. Define appropriate quantities for the purpose of descriptive modeling.</p> <p>N-Q.3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p>A-SSE.1a. Interpret parts of an expression, such as terms, factors, and coefficients.</p> <p>A-SSE.1b. Interpret complicated expressions by viewing one or more of their parts as a single entity. <i>For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P.</i></p> <p>A-SSE.2 Use the structure of an expression to identify ways to rewrite it. <i>For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.</i></p>
Anticipated Time: 3 weeks	

Holt Algebra 1 Chapter 2: Equations	Common Core State Standards
	<p>A-REI.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.</p> <p>A-CED.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. <i>For example, rearrange Ohm's law $V = IR$ to highlight resistance R.</i></p> <p>A-REI.3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</p> <p>F-LE.5. Interpret the parameters in a linear or exponential function in terms of a context.</p>
Anticipated Time: 3 weeks	

Holt Algebra 1 Chapter 3: Inequalities	Common Core State Standards
	<p>A-CED.1 Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i></p> <p>A-CED.3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i></p> <p>A-REI.12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.</p>
Anticipated Time: 2 weeks	

Holt Algebra 1 Chapter 4: Functions	Common Core State Standards
	<p>8.F.1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.¹</p> <p>8.F.4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p> <p>8.F.5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p> <p>A-CED.2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p> <p>A-REI.10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).</p> <p>F-IF.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.</p> <p>F-IF.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p> <p>F-IF.3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. <i>For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.</i></p> <p>F-IF.5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function</i></p> <p>F-BF.1a. Determine an explicit expression, a recursive process, or steps for calculation from a context.</p>
	Anticipated Time: 4 weeks

Holt Algebra 1 Chapter 5: Linear Functions	Common Core State Standards
	<p>8.F.2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</p> <p>8.F.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</p> <p>F-IF.4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.</p> <p>F-IF.6. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.</p> <p>F-BF.2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.</p> <p>F-LE.1b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.</p> <p>F-LE.2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).</p>
Anticipated Time: 3 weeks	

Chapter 6: Systems of Equations and Inequalities	Common Core State Standards
	<p>8.EE.8a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</p> <p>8.EE.8b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</i></p> <p>8.EE.8c. Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for</i></p>

	<p><i>two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i></p> <p>A-REI.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.</p> <p>A-REI.6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.</p> <p>A-REI.10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).</p>
Anticipated Time: 3 weeks	

Holt Algebra 1 Chapter 7: Exponents and Polynomials	Common Core State Standards
	<p>A-APR.1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.</p>
Anticipated Time: 2 weeks	

Holt Algebra 1 Chapter 8: Factoring Polynomials	Common Core State Standards
	<p>A-REI.4b. Solve quadratic equations in one variable: Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.</p>
Anticipated Time: 2 weeks	

Holt Algebra 1 Chapter 9: Quadratic Functions and Equations	Common Core State Standards
	<p>A-SSE.3a. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression: Factor a quadratic expression to reveal the zeros of the function it defines.</p> <p>A-SSE.3b. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression: Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.</p> <p>A-SSE.3c. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression: Use the properties of exponents to transform expressions for exponential functions. <i>For example the expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.</i></p> <p>A-REI.4a. Solve quadratic equations in one variable: Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.</p> <p>A-REI.4b. Solve quadratic equations in one variable: Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.</p> <p>A-REI.7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. <i>For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.</i></p> <p>F-IF.7a. Graph linear and quadratic functions and show intercepts, maxima, and minima</p> <p>F-IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i></p> <p>F-LE.3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.</p>
Anticipated Time: 4 weeks	

Holt Algebra 1 Chapter 10: Data Analysis and Probability	Common Core State Standards
	<p>8.SP.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p>8.SP.3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height</i></p> <p>8.SP.4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p> <p>N-Q.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays</p> <p>S-ID.1. Represent data with plots on the real number line (dot plots, histograms, and box plots).</p> <p>S-ID.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.</p> <p>S-ID.3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</p> <p>S-ID.5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.</p> <p>S-ID.6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</p> <p>S-ID.6b. Informally assess the fit of a function by plotting and analyzing residuals.</p> <p>S-ID.6c. Fit a linear function for a scatter plot that suggests a linear association.</p> <p>S-ID.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.</p> <p>S-ID.8 Compute (using technology) and interpret the correlation coefficient of a linear fit.</p> <p>S-ID.9 Distinguish between correlation and causation.</p>
	Anticipated Time: 4 weeks

Holt Algebra 1 Chapter 11: Exponential and Radical Functions	Common Core State Standards
	<p>F-IF.7.b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.</p> <p>F-IF.7.e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.</p> <p>F-IF.8a. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function: Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.</p> <p>F-IF.8b. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function: Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay.</p> <p>F-BF.1b. Combine standard function types using arithmetic operations. <i>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</i></p> <p>F-BF.3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.</p> <p>F-LE.1a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.</p> <p>F-LE.1c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.</p> <p>F-LE.5. Interpret the parameters in a linear or exponential function in terms of a context.</p>
Anticipated Time: 3 weeks	

Holt Algebra 1 Chapter 12: Rational Functions and Equations	Common Core State Standards
	<p>F-BF.4a. Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.</p>
Anticipated Time: 3 weeks	

Not Addressed in Holt Algebra 1	Common Core State Standards
	<p>8.G.6. Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p> <p>8.G.8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p>
Anticipated Time: 1 week	

Alignment of Common Core State Standards to Core Curricular Tools

Holt Course 3 Chapter 1: Principles of Algebra	Common Core State Standards
	<p>8.EE.7. Solve linear equations in one variable.</p> <p>8.EE.7a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).</p> <p>8.EE.7b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 2: Rational Numbers	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 3: Graphs, Functions, and Sequences	Common Core State Standards
	<p>Functions</p> <p>8.F.1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.¹</p> <p>8.F.2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</p> <p>8.F.4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p> <p>8.F.5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p>
	Anticipated Time: 2 weeks

Holt Course 3 Chapter 4: Exponents and Roots	Common Core State Standards
	<p>The Number System</p> <p>8.NS.1. Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.</p> <p>8.NS.2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i></p> <p>Expressions and Equations</p> <p>8.EE.1. Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.</p> <p>8.EE.2. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.</p> <p>8.EE.3. Use numbers expressed in the form of a single digit times a whole-number power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3 times 10^8 and the population of the world as 7 times 10^9, and determine that the world population is more than 20 times larger.</i></p> <p>8.EE.4. Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.</p> <p>Geometry</p> <p>8.G.6. Explain a proof of the Pythagorean Theorem and its converse.</p> <p>8.G.7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p>
	Anticipated Time: 3 weeks

Holt Course 3 Chapter 5: Ratios, Proportions, and Similarity	Common Core State Standards	
	Geometry	
	8.G.3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 8.G.4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	
Anticipated Time: 3 weeks		

Holt Course 3 Chapter 6: Percents	Common Core State Standards	
	While teaching this chapter, focus on the Standards for Mathematical Practice.	
Anticipated Time: 2 weeks		

Holt Course 3 Chapter 7: Foundations of Geometry	Common Core State Standards
	<p>Geometry</p> <p>8.G.1. Verify experimentally the properties of rotations, reflections, and translations:</p> <p>8.G.1a. Lines are taken to lines, and line segments to line segments of the same length.</p> <p>8.G.1b. Angles are taken to angles of the same measure.</p> <p>8.G.1c. Parallel lines are taken to parallel lines.</p> <p>8.G.2. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p> <p>8.G.3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>8.G.4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p> <p>8.G.5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 8: Perimeter, Area, and Volume	Common Core State Standards
	<p>Geometry</p> <p>8.G.9. Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 9: Data and Statistics	Common Core State Standards
	<p>Statistics and Probability</p> <p>8.SP.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p>8.SP.3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></p> <p>8.SP.4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p>
Anticipated Time: 3 weeks	

Holt Course 3 Chapter 10: Probability	Common Core State Standards
	<p>While teaching this chapter, focus on the Standards for Mathematical Practice.</p>
Anticipated Time:	

Holt Course 3 Chapter 11: Multi-Step Equations and Inequalities	Common Core State Standards
	<p>Expressions and Equations</p> <p>8.EE.7. Solve linear equations in one variable.</p> <p>8.EE.7a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).</p> <p>8.EE.7b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p> <p>8.EE.8. Analyze and solve pairs of simultaneous linear equations.</p> <p>8.EE.8a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</p> <p>8.EE.8b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</p> <p>8.EE.8c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 12: Graphing Lines	Common Core State Standards
	<p>Expressions and Equations</p> <p>8.EE.6. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.</p> <p>Functions</p> <p>8.F.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</p> <p>Statistics and Probability</p> <p>8.SP.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p>
Anticipated Time: 2 weeks	

Holt Course 3 Chapter 13: Sequences and Functions	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time:	

Holt Course 3 Chapter 14: Polynomials	Common Core State Standards
	While teaching this chapter, focus on the Standards for Mathematical Practice.
Anticipated Time: 3 weeks	

Alignment of Common Core State Standards to Core Curricular Tools

	Common Core State Standards
Holt Geometry Chapter 1: Foundations for Geometry	<p>Geometry - Congruence</p> <p>G.CO.1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.</p> <p>G-CO.4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.</p> <p>G-CO.5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.</p> <p>G-CO.12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). <i>Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</i></p> <p>Geometry – Expressing Geometric Properties with Equations</p> <p>G-GPE.6. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.</p>
	Anticipated Time: 3 weeks

Holt Geometry Chapter 2: Geometric Reasoning	Common Core State Standards
	<p>Statistics and Probability – Conditional Probability and the Rules of Probability</p> <p>S-CP.1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).</p> <p>S-CP.2. Understand that two events <i>A</i> and <i>B</i> are independent if the probability of <i>A</i> and <i>B</i> occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</p> <p>S-CP.3. Understand the conditional probability of <i>A</i> given <i>B</i> as $P(A \text{ and } B)/P(B)$, and interpret independence of <i>A</i> and <i>B</i> as saying that the conditional probability of <i>A</i> given <i>B</i> is the same as the probability of <i>A</i>, and the conditional probability of <i>B</i> given <i>A</i> is the same as the probability of <i>B</i>.</p> <p>S-CP.4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</i></p> <p>S-CP.5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i></p> <p>S-CP.6. Find the conditional probability of <i>A</i> given <i>B</i> as the fraction of <i>B</i>’s outcomes that also belong to <i>A</i>, and interpret the answer in terms of the model.</p> <p>S-CP.7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.</p> <p>S-CP.8. (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model.</p> <p>S-CP.9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems.</p> <p>Statistics and Probability – Using Probability to Make Decisions</p> <p>S-MD.6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).</p> <p>S-MD.7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).</p>
	Anticipated Time: 3 weeks

Holt Geometry Chapter 3: Parallel and Perpendicular	Common Core State Standards
	<p>Geometry - Congruence</p> <p>G-CO.9. Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment’s endpoints</i></p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 4: Triangle Congruence	Common Core State Standards
	<p>Geometry – Congruence</p> <p>G-CO.7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.</p> <p>G-CO.8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.</p> <p>G-CO.10. Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i></p> <p>Geometry – Similarity, Right Triangles, and Trigonometry</p> <p>G-SRT.2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.</p> <p>G-SRT.3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</p> <p>G-SRT.4. Prove theorems about triangles. <i>Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</i></p> <p>G-SRT.5. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.</p>
Anticipated Time: 3 Weeks	

Holt Geometry Chapter 5: Properties and Attributes of Triangles	Common Core State Standards
	<p>Geometry - Congruence G-CO.9. Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints</i></p>
	<p>Geometry – Similarity, Right Triangles, and Trigonometry G-SRT.8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</p> <p>Geometry – Expressing Geometric Properties with Equations G-GPE.5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point)</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 6: Polygons and Quadrilaterals	Common Core State Standards
	<p>Geometry – Congruence G-CO.11. Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i></p>
Anticipated Time: 2 weeks	

Holt Geometry Chapter 7: Similarity	Common Core State Standards
	<p>Geometry – Similarity, Right Triangles, and Trigonometry</p> <p>G-SRT.1. Verify experimentally the properties of dilations given by a center and a scale factor:</p> <p>G-SRT.1a. Verify experimentally that a dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.</p> <p>G-SRT.1b Verify experimentally that the dilation of a line segment is longer or shorter in the ratio given by the scale factor.</p> <p>G-SRT.2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.</p> <p>G-SRT.3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</p> <p>Geometry – Geometric Measurement and Dimension</p> <p>G-GMD.4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 8: Right Triangles and Trigonometry	Common Core State Standards
	<p>Geometry – Similarity, Right Triangles, and Trigonometry</p> <p>G-SRT.6. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</p> <p>G-SRT.7. Explain and use the relationship between the sine and cosine of complementary angles.</p> <p>G-SRT.8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</p> <p>G-SRT.9. (+) Derive the formula $A = \frac{1}{2} ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.</p> <p>G-SRT.10. (+) Prove the Laws of Sines and Cosines and use them to solve problems.</p> <p>G-SRT.11. (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 9: Extending Perimeter, Circumference, and Area	Common Core State Standards
	<p>Geometry – Expressing Geometric Properties with Equations G-GPE.7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.*</p> <p>Geometry – Geometric Measurement and Dimension G-GMD.1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri’s principle, and informal limit arguments.</i></p> <p>Statistics and Probability – Conditional Probability and the Rules of Probability S-CP.1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).</p> <p>Statistics and Probability – Using Probability to Make Decisions S-MD.6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). S-MD.7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 10: Spatial Reasoning	Common Core State Standards
	<p>Geometry – Geometric Measurement and Dimension</p> <p>G-GMD.1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i></p> <p>G-GMD.3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.</p> <p>G-GMD.4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.</p> <p>Geometry- Modeling and Geometry</p> <p>G-MG.1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).</p> <p>G-MG.2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).</p> <p>G-MG.3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 11: Spatial Reasoning	Common Core State Standards
	<p>Geometry – Congruence</p> <p>G-CO.13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.</p> <p>Geometry- Circles</p> <p>G-C.1. Prove that all circles are similar.</p> <p>G-C.2. Identify and describe relationships among inscribed angles, radii, and chords. <i>Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</i></p> <p>G-C.3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</p> <p>G-C.4. (+) Construct a tangent line from a point outside a given circle to the circle.</p> <p>G-C.5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.</p>
Anticipated Time: 3 weeks	

Holt Geometry Chapter 12: Extending Transformational Geometry	Common Core State Standards	
	Geometry – Congruence G-CO.2. Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). G-CO.3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself G-CO.4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. G-CO.5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. G-CO.6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.	
	Geometry – Expressing Geometric Properties with Equations G-GPE.4. Use coordinates to prove simple geometric theorems algebraically. <i>For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.</i>	
Anticipated Time: 3 weeks		

Not Addressed in Holt Algebra 1	Common Core State Standards	NHA Objectives
	<p>Geometry – Expressing Geometric Properties with Equations</p> <p>G-GPE.1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.</p> <p>G-GPE.2. Derive the equation of a parabola given a focus and directrix.</p>	All NHA Objectives are addressed in Holt Geometry.
Anticipated Time: 1 week		

COUNTING AND CARDINALITY
Know number names and the count sequence.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • K.CC.1. Count to 100 by ones and by tens. • K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1) • K.CC.3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Count K.CC.1 ○ Forward K.CC.2 ○ Numeral K.CC.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ count up to 10 by ones K.CC.1 ○ count forward from 1 to 20 K.CC.2 ○ write the numbers 0-9 K.CC.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



COUNTING AND CARDINALITY

Count to tell the number of objects.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • K.CC.4. Understand the relationship between numbers and quantities; connect counting to cardinality. <ul style="list-style-type: none"> ○ K.CC.4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. ○ K.CC.4b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. ○ K.CC.4c. Understand that each successive number name refers to a quantity that is one larger. • K.CC.5. Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Count K.CC.4a ○ Total K.CC.4b ○ one more/one less K.CC.4c ○ group K.CC.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Count the number of objects in a group K.CC.4a ○ State how many are in a group after counting K.CC.4b ○ Identify which number is one more than a given number K.CC.4c ○ Count up to 10 objects in any arrangement K.CC.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



COUNTING AND CARDINALITY

Compare numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: K.CC.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. ¹ K.CC.7. Compare two numbers between 1 and 10 presented as written numerals.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> greater than/less than K.CC.6 equal K.CC.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the group that has more by matching the items K.CC.6 Read numbers up to 10 K.CC.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings¹, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p> <p>K.OA.2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p> <p>K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p> <p>K.OA.5. Fluently add and subtract within 5.</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Add K.OA.1, K.OA.2 Subtract K.OA.1, K.OA.2 equation K.OA.1, K.OA.3 addend K.OA.4 subtraction K.OA.1, K.OA.2, K.OA.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the mathematical symbols for addition and subtraction K.OA.1 Model an addition number sentence using objects or drawings K.OA.2 Decompose the number 10 K.OA.3 Find the number to add to 5 to make 10 K.OA.4 Add numbers that add up to 5 or less K.OA.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN
Work with numbers 11-19 to gain foundations for place value.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: K.NBT.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Compose/decompose K.NBT.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Use numbers 1-9 to make 10 using objects or drawings K.NBT.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Describe and compare measureable attributes.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Length K.MD.1 Weight K.MD.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify one attribute of an object K.MD.1 Identify the same attribute in two objects K.MD.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Classify objects and count the number of objects in each category.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Category K.MD.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Classify objects into a given category K.MD.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: K.G.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. K.G.2. Correctly name shapes regardless of their orientations or overall size. K.G.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Shapes K.G.1 Above/below K.G.2 Solid K.G.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Find and name shapes K.G.1 Name upright shapes correctly K.G.2 Identify flat shapes as two-dimensional K.G.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Analyze, compare, create, and compose shapes.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <p>K.G.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).</p> <p>K.G.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p> <p>K.G.6. Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Two- dimensional K.G.4 Three-dimensional K.G.4 Corner K.G.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describe a shape K.G.4 Create shaped from materials K.G.5 Name a shape that has been created from two simple shapes K.G.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Represent and solve problems involving addition and subtraction.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹ • 1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Compare 1.OA.1 ○ Sum 1.OA.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Model addition word problems using objects, drawings, and equations 1.OA.1 ○ Add three whole numbers whose sum is less than 20 1.OA.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING

Understand and apply properties of operations and the relationship between addition and subtraction.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.OA.3. Apply properties of operations as strategies to add and subtract.² <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i> • 1.OA.4. Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. Add and subtract within 20.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Commutative property 1.OA.3 ○ Associative property 1.OA.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Show that changing the order of addends does not change the sum 1.OA.3 ○ Model how a subtraction equation can be rewritten as an addition equation 1.OA.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Add and subtract within 20.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). • 1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Count on/count back 1.OA.5 ○ Subtraction 1.OA.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify that +1 means the next number 1.OA.5 ○ Subtract within 20 by counting on 1.OA.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Work with addition and subtraction equations.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.OA.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i> • 1.OA.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ True equation 1.OA.7 ○ False equation 1.OA.7 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define equal sign as meaning “same as” 1.OA.7 ○ Determine the unknown number that makes an addition equation true. 1.OA.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN
Extend the counting sequence.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.NBT.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ One hundred 1.NBT.1 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Count to 120 starting at 1 1.NBT.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN
Understand place value.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.NBT.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: <ul style="list-style-type: none"> ○ 1.NBT.2a. 10 can be thought of as a bundle of ten ones — called a “ten.” ○ 1.NBT.2b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. ○ 1.NBT.2c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). • 1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Value 1.NBT.2a, 1.NBT.2b, 1.NBT.2c ○ Greater than 1.NBT.3 ○ Less than 1.NBT.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use objects to represent a number from 11 -19 1.NBT.2a ○ Determine if a number is greater than, less than, or equal to another number 1.NBT.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS IN BASE TEN
Understand place value.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.NBT.4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. • 1.NBT.5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. • 1.NBT.6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Multiple 1.NBT.4 ○ place value 1.NBT.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use concrete models or drawings to add a two-digit number and a one-digit number 1.NBT.4 ○ Mentally find 10 more than a two-digit number 1.NBT.5 ○ Use concrete models or drawings to subtract a multiple of 10 from a multiple of 10 1.NBT.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Measure lengths indirectly and by iterating length units.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. • 1.MD.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Length 1.MD.1 ○ Unit 1.MD.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the shorter of two objects. 1.MD.1 ○ Explain how to use a shorter object to measure the length of a longer object. 1.MD.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Tell and write time.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.MD.3. Tell and write time in hours and half-hours using analog and digital clocks.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Hour 1.MD.3 ○ Analog 1.MD.3 ○ Digital 1.MD.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the hours and minutes on a digital clock. 1.MD.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.MD.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Data points 1.MD.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Organize data in up to three groups. 1.MD.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Reason with shapes and their attributes.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 1.G.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. • 1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.¹ • 1.G.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Attributes 1.G.1 ○ Composite 1.G.2 ○ Half 1.G.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a defining attribute 1.G.1 ○ Identify three-dimensional shapes 1.G.2 ○ Divide a rectangle into two and four equal parts 1.G.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Represent and solve problems involving addition and subtraction.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Symbol 2.OA.1 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Represent addition and subtraction word problems using objects, drawings, and equations with unknowns in all positions 2.OA.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Add and subtract within 20.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.OA.2. Fluently add and subtract within 20 using mental strategies.² By end of Grade 2, know from memory all sums of two one-digit numbers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Mental strategies 2.OA.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use mental strategies to add and subtract numbers within 10 2.OA.2.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING

Work with equal groups of objects to gain foundations for multiplication.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. • 2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Odd/even 2.OA.3 ○ Array 2.OA.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a group of objects as odd or even by pairing 2.OA.3 ○ Identify an array and determine the number of objects in it by counting 2.OA.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBERS AND OPERATIONS IN BASE TEN
Understand place value.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: <ul style="list-style-type: none"> ○ 2.NBT.1a. 100 can be thought of as a bundle of ten tens — called a “hundred.” ○ 2.NBT.1b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). • 2.NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s. • 2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. • 2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Place Value 2.NBT.1, 2.NBT.1a, 2.NBT.1b ○ Skip Count 2.NBT.2 ○ Expanded form 2.NBT.3 ○ Comparison 2.NBT.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Represent 100 as ten groups of 10 Value 2.NBT.1, 2.NBT.1a ○ Skip count by 10 to 100 2.NBT.2 ○ Write numbers up to 1000 using base-ten numerals 2.NBT.3 ○ Compare two two-digit numbers 2.NBT.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN

Use place value understanding and properties of operations to add and subtract.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. • 2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations. • 2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. • 2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. • 2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Identity property 2.NBT.5 ○ Properties 2.NBT.6, 2.NBT.7 ○ Operations 2.NBT.6, 2.NBT.7 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Add and subtract within 20 2.NBT.5 ○ Add two two-digit numbers 2.NBT.6 ○ Use concrete models or drawings to add two three-digit numbers 2.NBT.7 ○ Mentally add 10 to a given number from 100-900 2.NBT.8 ○ List properties of operations 2.NBT.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

MEASUREMENT AND DATA
Measure and estimate lengths in standard units.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. • 2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. • 2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters. • 2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Yardstick 2.MD.1 ○ Meter stick 2.MD.1 ○ Meter 2.MD.3 ○ Centimeter 2.MD.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify rulers, yardsticks, meter sticks, and measuring tapes 2.MD.1 ○ Select the appropriate unit for measurement 2.MD.2 ○ Identify the units inches, feet, meter, and centimeter 2.MD.3 ○ Measure to find the length of an object 2.MD.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

MEASUREMENT AND DATA
Relate addition and subtraction to late.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. • 2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Length 2.MD.5 ○ Number line diagram 2.MD.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Add or subtract units of the same length within 20 2.MD.5 ○ Create a number line with whole number intervals 2.MD.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Work with time and money.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. • 2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ a.m./p.m. 2.MD.7 ○ dollars 2.MD.8 ○ cents 2.MD.8 ○ quarters 2.MD.8 ○ dimes 2.MD.8 ○ nickels 2.MD.8 ○ pennies 2.MD.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify time to the nearest half hour 2.MD.7 ○ Count groups of coins 2.MD.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. • 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Line plot 2.MD.9 ○ Scale 2.MD.9 ○ Picture graph 2.MD.10 ○ Bar graph 2.MD.10 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Accurately measure the length of an object. 2.MD.9 ○ Identify a picture graph and a bar graph 2.MD.10
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY
Reason with shapes and their attributes.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. • 2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. • 2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Angles 2.G.1 ○ Faces 2.G.1 ○ Quadrilaterals 2.G.1 ○ Pentagons 2.G.1 ○ Hexagons 2.G.1 ○ Columns 2.G.2. ○ Halves 2.G.3 ○ Thirds 2.G.3 ○ Fourths 2.G.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify an angle 2.G.1 ○ Identify an array 2.G.2 ○ Divide a circle into halves 2.G.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Represent and solve problems involving multiplication and division.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i> • 3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i> • 3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹ • 3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Factor 3.OA.1 ○ Product 3.OA.1 ○ Multiplication 3.OA.1, 3.OA.3, 3.OA.4 ○ Quotient 3.OA.2 ○ Dividend 3.OA.2 ○ Divisor 3.OA.2 ○ Division 3.OA.2, 3.OA.3, 3.OA.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the product and factors in a multiplication problem 3.OA.1 ○ Identify the quotient, divisor, and dividend in a division problem 3.OA.2 ○ Determine when to multiply and divide in word problems 3.OA.3 ○ Solve multiplication and divisions equations within 20 3.OA.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING

Understand properties of multiplication and the relationship between multiplication and division.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.OA.5. Apply properties of operations as strategies to multiply and divide.² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i> • 3.OA.6. Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Distributive property 3.OA.5 ○ Factor 3.OA.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain the commutative and distributive property of addition 3.OA.5 ○ Identify multiplication and division fact families 3.OA.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Multiply and divide within 100.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.OA.7.Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ multiplication 3.OA.7 ○ division 3.OA.7 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Multiply and divide within 20. 3.OA.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.³ • 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Order of operations 3.OA.8 ○ Estimation 3.OA.8 ○ Rounding 3.OA.8 ○ Arithmetic pattern 3.OA.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Choose the correct operation(s) to use in a word problem 3.OA.8 ○ Identify simple numeric and geometric patterns (ABA, ABBA, ABC, etc.) 3.OA.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100. • 3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. • 3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ rounding 3.NBT.1 ○ algorithm 3.NBT.2 ○ multiply 3.NBT.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Round numbers using a number line 3.NBT.1 ○ Add and subtract within 100. 3.NBT.2 ○ Multiply one-digit numbers by 10 3.NBT.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS - FRACTIONS
Develop understanding of fractions as numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.NF.1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. • 3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. <ul style="list-style-type: none"> ○ 3.NF.2a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. ○ 3.NF.2b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. • 3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. <ul style="list-style-type: none"> ○ 3.NF.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. ○ 3.NF.3b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model. ○ 3.NF.3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram. ○ 3.NF.3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Numerator 3.NF.1. ○ Denominator 3.NF.1. ○ Unit fraction 3.NF.1, 3.NF.2a. ○ Number line 3.NF.2b ○ Equivalent 3.NF.3a., 3.NF.3b • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a fraction. 3.NF.1 ○ Plot whole numbers on a number line. 3.NF.2 ○ Identify equations that are equivalent. 3.NF.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.MD.1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. • 3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).¹ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.²

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Minute 3.MD.1 ○ Volume 3.MD.2 ○ Mass 3.MD.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Tell time to the nearest 5 minutes 3.MD.1 ○ Distinguish between volume and mass 3.MD.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i> • 3.MD.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Scaled pictographs 3.MD.3 ○ Scaled bar graphs 3.MD.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Create a bar graph or picture graph. 3.MD.3 ○ Measure the length of objects to the closest inch. 3.MD.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

MEASUREMENT AND DATA

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area measurement. <ul style="list-style-type: none"> ○ 3.MD.5a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. ○ 3.MD.5b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. • 3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). • 3.MD.7. Relate area to the operations of multiplication and addition. <ul style="list-style-type: none"> ○ 3.MD.7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. ○ 3.MD.7b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. ○ 3.MD.7c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. ○ 3.MD.7d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Unit square 3.MD.5a, 3.MD.6 ○ Plane figure 3.MD.5b ○ Area model 3.MD.7 ○ perimeter 3.MD.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a square 3.MD.5a. ○ Identify a plane figure. 3.MD.5b ○ Recognize and use centimeters, meters, and inches 3.MD.6 ○ Identify rectangles 3.MD.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY
Reason with shapes and their attributes.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. • 3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Attribute 3.G.1. ○ Trapezoid 3.G.1. ○ Unit fraction 3.G.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify rectangles, rhombuses, and squares 3.G.1. ○ Divide shapes into two equal parts 3.G.2.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Use the four operations with whole numbers to solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.OA.1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. • 4.OA.2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.¹ • 4.OA.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Multiplicative comparison 4.OA.1 ○ Additive comparison 4.OA.2 ○ Remainder 4.OA.3. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Write a multiplication equation for a real world situation 4.OA.1 ○ Solve multiplication and division equations within 20 4.OA.2 ○ Solve division equations with remainders 4.OA.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Gain familiarity with factors and multiples.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Composite 4.OA.4. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the factors in a multiplication equation 4.OA.4.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Generate and analyze patterns.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Rule 4.OA.5. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Determine the rule in a given pattern 4.OA.5.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN
Generalize place-value understanding for multi-digit whole numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.NBT.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</i> • 4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. • 4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Expanded form 4.NBT.2. ○ Round 4.NBT.3. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the place value of a single digit in a three-digit number 4.NBT.1. ○ Compare single digit numbers 4.NBT.2. ○ Round a two-digit number to the nearest 10. 4.NBT.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.NBT.4. Fluently add and subtract multi-digit whole numbers using the standard algorithm. • 4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. • 4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Standard algorithm 4.NBT.4. ○ Array model 4.NBT.5., 4.NBT.6. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Add and subtract using models or drawings 4.NBT.4 ○ Multiply a single digit number by a single digit number. 4.NBT.5. ○ Divide a single digit number by a single digit number with and without remainders 4.NBT.6.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS - FRACTIONS
Extend understanding of fraction equivalence and ordering.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.NF.1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. • 4.NF.2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Equivalent fraction 4.NF.1. ○ Denominator 4.NF.1. ○ Numerator 4.NF.1. ○ Benchmark Fraction 4.NF.2. ○ Common Denominator 4.NF.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain why fractions are equivalent using models. 4.NF.1 ○ Compare fractions with like denominators. 4.NF.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS - FRACTIONS

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 4.NF.3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. <ul style="list-style-type: none"> 4.NF.3a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. 4.NF.3b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. 4.NF.3c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. 4.NF.3d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. 4.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. <ul style="list-style-type: none"> Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.) Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Mixed number 4.NF.3. Factor 4.NF.4. Multiple 4.NF.4. Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Add a fraction and a whole number 4.NF.3a., 4.NF.3d. Decompose a whole number in a sum of whole numbers 4.NF.3b. Determine an equivalent fraction for a given fraction 4.NF.3c. Multiply whole numbers 4.NF.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS - FRACTIONS
Understand decimal notation for fractions, and compare decimal fractions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.NF.5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.² <i>For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.</i> • 4.NF.6. Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</i> • 4.NF.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Equivalent fraction 4.NF.5. ○ Decimal notation 4.NF.6. ○ Decimal 4.NF.7. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Add a fraction and a whole number 4.NF.3a., 4.NF.3d. ○ Decompose a whole number in a sum of whole numbers 4.NF.3b. ○ Determine an equivalent fraction for a given fraction 4.NF.3c. ○ Multiply whole numbers 4.NF.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 4.MD.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i> • 4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. • 4.MD.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Metric 4.MD.1. ○ Standard Units 4.MD.1. ○ Scale 4.MD.2. ○ Formula 4.MD.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify something that is one inch and one centimeter 4.MD.1. ○ Use operations to solve word problems involving length in whole numbers only. 4.MD.2. ○ Use models or drawings to determine the area of a rectangle. 4.MD.3.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Line plot 4.MD.4. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Make a line plot that displays data in whole numbers from a given data set. 4.MD.4.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

MEASUREMENT AND DATA
Geometric measurement: understand concepts of angle and measure angles.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.MD.5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: <ul style="list-style-type: none"> ○ 4.MD.5a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. ○ 4.MD.5b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees. • 4.MD.6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. • 4.MD.7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ ray 4.MD.5a. ○ endpoint 4.MD.5a. ○ arc 4.MD.5a. ○ angle 4.MD.5b, 4.MD.7 ○ Protractor 4.MD.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify an angle 4.MD.5. ○ Describe how to use a protractor 4.MD.6. ○ Solve unknown addend problems 4.MD.7.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. • 4.G.2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. • 4.G.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Line segment 4.G.1. ○ Ray 4.G.1. ○ Right angle 4.G.1., 4.G.2. ○ Acute angle 4.G.1., 4.G.2. ○ Obtuse angle 4.G.1., 4.G.2. ○ Parallel 4.G.1., 4.G.2. ○ Perpendicular 4.G.1., 4.G.2. ○ Symmetry 4.G.3. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use a ruler to draw a line 4.G.1. ○ Classify two-dimensional figures 4.G.2. ○ Divide a shape into two equal parts 4.G.3.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

OPERATIONS AND ALGEBRAIC THINKING
Write and interpret numerical expressions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. • 5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ parentheses 5.OA.1. ○ brackets 5.OA.1. ○ braces 5.OA.1. ○ evaluate 5.OA.1. ○ numerical expression 5.OA.1., 5.OA.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Solve real world problems using the four operations 5.OA.1 ○ Write simple equations using the four operations 5.OA.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



OPERATIONS AND ALGEBRAIC THINKING
Analyze patterns and relationships.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.OA.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Corresponding term 5.OA.3. ○ ordered pair 5.OA.3 ○ coordinate plane 5.OA.3. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Generate a numeric pattern using one given rule. 5.OA.3.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS IN BASE TEN
Understand the place-value system.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. • 5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. • 5.NBT.3. Read, write, and compare decimals to thousandths. <ul style="list-style-type: none"> ○ 5.NBT.3a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$. ○ 5.NBT.3b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. • 5.NBT.4. Use place value understanding to round decimals to any place.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Powers of ten 5.NBT.2. ○ Exponent 5.NBT.2 ○ Decimal 5.NBT.2, 5. NBT.3a. ○ Decimal place 5.NBT.3b, 5. NBT.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use models, drawings, or manipulatives to show place value relationship in a two-digit number 5.NBT.1. ○ Explain the pattern in numbers when multiplying by 10 5.NBT.2. ○ Write decimals to hundredths 5.NBT.3a. ○ Compare two decimals to hundredths 5.NBT.3b. ○ Round a multi-digit number to any place value 5.NBT.4.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS IN BASE TEN

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.NBT.5. Fluently multiply multi-digit whole numbers using the standard algorithm. • 5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. • 5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Standard algorithm 5.NBT.5. ○ Array model 5.NBT.6. ○ Decimal 5.NBT.7. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Multiply a multi-digit whole number, by a single digit whole number. 5.NBT.5. ○ Divide a multi-digit number by a single digit number with and without remainders 5.NBT.6. ○ Add and subtract money amounts. 5. NBT.7.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NUMBER AND OPERATIONS - FRACTIONS

Use equivalent fractions as a strategy to add and subtract fractions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)</i> • 5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Equivalent fraction 5.NF.1. ○ Mixed number 5.NF.1. ○ Benchmark Fraction 5.NF.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Determine an equivalent fraction for a given fraction 5.NF.1. ○ Add and subtract fractions with like denominators 5.NF.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

NUMBER AND OPERATIONS - FRACTIONS

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 5.NF.3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i> 5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. <ul style="list-style-type: none"> 5.NF.4a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. <i>For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)</i> 5.NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Mixed number 5.NF.3. Factor 5.NF.5. scaling 5.NF.5. mixed numbers 5.NF.6. unit fraction 5.NF.7. Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Divide two numbers that result in quotients with remainders 5.NF.3. Use the commutative and associative property to solve multiplication problems. 5.NF.4a. Determine the area of a rectangle using the formula 5.NF.4b. Compare multi-digit numbers and explain how they are related 5.NF.5a. Using models or strategies, describe the process of multiplication. 5.NF.5b. Solve real world problems involving multiplication 5.NF.6. Solve division problems. 5.NF.7a., 5.NF.7b., 5.NF.7c.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



Score 3.0

- **5.NF.5.** Interpret multiplication as scaling (resizing), by:
 - **5.NF.5a.** Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
 - **5.NF.5b.** Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.
- **5.NF.6.** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- **5.NF.7.** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹
 - **5.NF.7a.** Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.*
 - **5.NF.7b.** Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.*
 - **5.NF.7c.** Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?*



MEASUREMENT AND DATA

Convert like measurement units within a given measurement system.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Convert 5.MD.1. ○ Conversion 5.MD.1. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify units of measurements in metric and standard systems. 5.MD.1.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Line plot 4.MD.4. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Make a line plot that displays data in whole numbers from a given data set. 4.MD.4.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MEASUREMENT AND DATA

Represent and interpret data.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.MD.2. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Line plot 5.MD.2. ○ Unit fraction 5.MD.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Create a line plot from a given set of data including fractions. 5.MD.2.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

MEASUREMENT AND DATA

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. <ul style="list-style-type: none"> ○ 5.MD.3a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. ○ 5.MD.3b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. • 5.MD.4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. • 5.MD.5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. <ul style="list-style-type: none"> ○ 5.MD.5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. ○ 5.MD.5b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. ○ 5.MD.5c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Unit Cube 5.MD.3a., 5.MD.4. ○ volume 5.MD.3a., 5.MD.3b., 5.MD.4., 5.MD.5a. ○ cubic unit 5.MD.3b. ○ right rectangular prism 5.MD.5b. ○ additive 5.MD.5c. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Sort three-dimensional figures based on attributes 5.MD.3a., 5.MD.3b. ○ Find the area of an object using tiles. 5.MD.4. ○ Define area and perimeter of an object 5.MD.5a., 5.MD.5b., 5.MD.5c.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Graph points on the coordinate plane to solve real-world and mathematical problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). • 5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Axis/axes 5.G.1. ○ intersect 5.G.1. ○ coordinate system 5.G.1. ○ origin 5.G.1. ○ coordinates 5.G.1. ○ x-axis 5.G.1. ○ y-axis 5.G.1. ○ x-coordinate 5.G.1. ○ y-coordinate 5.G.1. ○ ordered pair 5.G.1., 5.G.2. ○ quadrant 5.G.2. ○ coordinate plane 5.G.2. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Plot whole numbers, fractions, and decimals on a number line 5.G.1. ○ Identify the 4 quadrants of the coordinate plane 5.G.2.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOMETRY
Classify two-dimensional figures into categories based on their properties.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 5.G.3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i> • 5.G.4. Classify two-dimensional figures in a hierarchy based on properties.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ attribute 5.G.3. ○ hierarchy 5.G.4. • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Categorize two-dimensional objects. 5.G.3., 5.G.4.
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

RATIOS AND PROPORTIONAL RELATIONSHIPS
Understand ratio concepts and use ratio reasoning to solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."</i> • 6.RP.2 Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."</i> • 6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. <ul style="list-style-type: none"> ○ 6.RP.3.a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. ○ 6.RP.3.b Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i> ○ 6.RP.3.c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent. ○ 6.RP.3.d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Ratio 6.RP.1, 6.RP.2, 6.RP.3 ○ Rate 6.RP.2, 6.RP.3 ○ Unit Rate 6.RP.2, 6.RP.3 ○ Equivalent Ratio 6.RP.3 ○ Percent 6.RP.3 ○ Coordinate Plane 6.RP.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Write a ratio that describes a relationship between two quantities. 6.RP.1 ○ Recognize a ratio written as a unit rate, explain a unit rate, and give an example of a unit rate. 6.RP.2 ○ Use visual representations (e.g., strip diagrams, percent bars, and one-hundred grids) to model percents. 6.RP.3 ○ Write a percent as a rate per one-hundred. 6.RP.3 ○ Compare ratios presented in various tables. 6.RP.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



THE NUMBER SYSTEM

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Quotient 6.NS.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Represent fractions with a visual model 6.NS.1 Divide unit fractions by whole numbers. 6.NS.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



THE NUMBER SYSTEM

Compute fluently with multi-digit numbers and find common factors and multiples.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.NS.2 Fluently divide multi-digit numbers using the standard algorithm. • 6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. • 6.NS.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Factor 6.NS.4 ◦ Multiple 6.NS.4 ◦ Greatest common factor 6.NS.4 ◦ Least common multiple 6.NS.4 ◦ Distributive property 6.NS.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Divide single digit numbers into multi-digit numbers with the standard algorithm. 6.NS.2 ◦ Add, subtract, multiply, and divide multi-digit decimals with models. 6.NS.3 ◦ Find all factors of any given number, less than or equal to 100. 6.NS.4 ◦ Create a list of multiples for any number less than or equal to 12. 6.NS.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

THE NUMBER SYSTEM

Apply and extend previous understandings of numbers to the system of rational numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 6.NS.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., <i>temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge</i>); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. 6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. <ul style="list-style-type: none"> 6.NS.6.a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. 6.NS.6.b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. 6.NS.6.c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS.7 Understand ordering and absolute value of rational numbers. <ul style="list-style-type: none"> 6.NS.7.a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i> 6.NS.7.b Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i> 6.NS.7.c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i> 6.NS.7.d Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i> 6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rational Number 6.NS.6, 6.NS.7 Integer 6.NS.6 Coordinate Plane 6.NS.6, 6.NS.8 Ordered Pair 6.NS.6 Quadrant 6.NS.6, 6.NS.8 Reflection 6.NS.6 Absolute Value 6.NS.7, 6.NS.8 Coordinates 6.NS.8 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize that positive and negative signs represent opposite values and/or directions 6.NS.5 Find the opposite of any given number including zero. 6.NS.6 Use the signs of the coordinates to determine the quadrant of an ordered pair in the coordinate plane. 6.NS.6 Identify positive and negative integers on a number line and find the absolute value of these integers. 6.NS.7 Graph points in any quadrant of a coordinate plane. 6.NS.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Apply and extend previous understandings of arithmetic to algebraic expressions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 6.EE.1 Write and evaluate numerical expressions involving whole-number exponents. • 6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers. <ul style="list-style-type: none"> ○ 6.EE.2.a Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation "Subtract y from 5" as $5 - y$.</i> ○ 6.EE.2.b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i> ○ 6.EE.2.c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.</i> • 6.EE.3 Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i> • 6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Exponent 6.EE.1 ○ Evaluate 6.EE.1, 6.EE.2 ○ Difference 6.EE.2 ○ Algebraic Expression 6.EE.2 ○ Substitute 6.EE.2 ○ Equivalent Expressions 6.EE.3, 6.EE.4 ○ Commutative Property 6.EE.3 ○ Associative Property 6.EE.3 ○ Distributive Property 6.EE.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain the meaning of a number raised to a power. 6.EE.1 ○ Identify parts of an algebraic expression by using correct mathematical terms. 6.EE.2 ○ Recognize when an expression is representing a sum and/or difference of terms versus a product and/or quotient of terms. 6.EE.2 ○ Create a visual model to show two expressions are equivalent 6.EE.3 ○ Solve a simple one variable expression to determine the result. 6.EE.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESIONS AND EQUATIONS

Reason about and solve one-variable equations and inequalities.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. • 6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. • 6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers. • 6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Inequality 6.EE.5, 6.EE.8 ○ Solution 6.EE.5 ○ Variable 6.EE.6 ○ Constant 6.EE.6 ○ Algebraic Expression 6.EE.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Substitute a given value into an algebraic equation or inequality for a solution. 6.EE.5 ○ Use variables to represent unknown numbers. 6.EE.6 ○ Solve one variable equations for an unknown. 6.EE.7 ○ Show a solution set of an inequality by graphing it on a number line. 6.EE.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Represent and analyze quantitative relationships between dependent and independent variables.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. <i>For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Independent variable 6.EE.9 Dependent Variable 6.EE.9 Coordinate Plane 6.EE.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain the difference between the independent variable and the dependent variable and give examples of both. 6.EE.9 Create a table of two variables that represent a real-world situation in which one quantity will change in relation to the other. 6.EE.9 Determine the independent and dependent variable in a relationship. 6.EE.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOMETRY

Solve real-world and mathematical problems involving area, surface area, and volume.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. • 6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems. • 6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. • 6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Polygon 6.G.1, 6.G.2 ○ Right Triangle 6.G.1 ○ Quadrilateral 6.G.1 ○ Parallelogram 6.G.1 ○ Right Rectangular Prism 6.G.2, 6.G.4 ○ Volume 6.G.2 ○ Vertex/vertices 6.G.3 ○ Right Triangular Prism 6.G.4 ○ Surface Area 6.G.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Show how to find the area of a parallelogram by decomposing it and recomposing the parts to form triangles. 6.G.1 ○ Show how to find the area of other polygons by decomposing them into simpler shapes such as triangles, rectangles, and parallelograms and combining the areas of those simple shapes. 6.G.1 ○ Generalize finding the volume of a right rectangular prism to the equation $V = lwh$ or $V = Bh$. 6.G.2 ○ Plot given coordinates on a coordinate plane to create a polygon. 6.G.3 ○ Match a net to the correct right rectangular prism, right triangular prism, right square pyramid, or right tetrahedron. 6.G.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

STATISTICS AND PROBABILITY

Develop understanding of statistical variability.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.</i> • 6.SP.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. • 6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Variability 6.SP.1 ◦ Distribution 6.SP.2 ◦ Measure of Center 6.SP.3 ◦ Measure of Variation 6.SP.3 ◦ Outlier 6.SP.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identify a statistical question opposed to questions that provide only specific data. 6.SP.1 ◦ Describe the center of a set of statistical data in terms of mean, median, and mode. 6.SP.2 ◦ Find measure of center by calculating the mean, median, and mode of a set of numerical data. 6.SP.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

STATISTICS AND PROBABILITY
Summarize and describe distributions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots. • 6.SP.5 Summarize numerical data sets in relation to their context, such as by: <ul style="list-style-type: none"> ○ 6.SP.5.a Reporting the number of observations. ○ 6.SP.5.b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. ○ 6.SP.5.c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. ○ 6.SP.5.d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Histogram 6.SP.4 ○ Box Plot 6.SP.4 ○ Range 6.SP.5 ○ Interquartile Range 6.SP.5 ○ Mean Absolute Deviation 6.SP.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Organize and display data on a number line. 6.SP.4 ○ Write and collect data that includes the number of observations, what is being investigated, how it is measured, and the units for measurement. 6.SP.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

RATIOS AND PROPORTIONAL RELATIONSHIPS

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i> • 7.RP.2 Recognize and represent proportional relationships between quantities. <ul style="list-style-type: none"> ○ 7.RP.2.a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. ○ 7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. ○ 7.RP.2.c Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i> ○ 7.RP.2.d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate. • 7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Ratio 7.RP.1, 7.RP.2 ○ Rate 7.RP.1 ○ Unit Rate 7.RP.1 ○ Proportional Relationship 7.RP.2, 7.RP.2 ○ Constant of Proportionality 7.RP.2 ○ Unit Rate 7.RP.2 ○ Equivalent Ratios 7.RP.2 ○ Percent 7.RP.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. 7.RP.1 ○ Create proportional and equivalent ratios when given a quantity. 7.RP.2.a ○ Graph given proportional points on a coordinate plane. 7.RP.2.d ○ Identify proportional relationships in real-world problems. 7.RP.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

THE NUMBER SYSTEM

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. <ul style="list-style-type: none"> 7.NS.1.a Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. 7.NS.1.b Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 7.NS.1.c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. 7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers. 7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. <ul style="list-style-type: none"> 7.NS.2.a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. 7.NS.2.b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real world contexts. 7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers. 7.NS.2.d Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. 7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Additive Inverse 7.NS.1, 7.NS.1 Absolute Value 7.NS.1 Rational Number 7.NS.2, 7.NS.3 Terminating Decimal 7.NS.2 Repeating Decimal 7.NS.2 Complex Fraction 7.NS.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Use a number line or positive/negative chips to show that an integer and its opposite will always have a sum of zero. 7.NS.1 Rewrite a subtraction problem as an addition problem by using the additive inverse. 7.NS.1 Use patterns and properties to explore the multiplication of integers. 7.NS.2 Use patterns and properties to develop procedures for multiplying integers. 7.NS.2 Use the relationship between multiplication and division to develop procedures for dividing integers. 7.NS.2 Verify that a number is rational based on its decimal equivalent. 7.NS.2 Fluently add, subtract, divide, and multiply rational numbers with the standard algorithm. 7.NS.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Use properties of operations to generate equivalent expressions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. • 7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Expression 7.EE.1 ○ Coefficient 7.EE.1 ○ Like Terms 7.EE.1 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Apply the properties of operations to generate equivalent expressions. 7.EE.1 ○ Create visual models to show two expressions are equivalent (e.g., use algebra tiles to model that $3(2+x) = 6 + 3x$.) 7.EE.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i> 7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. <ul style="list-style-type: none"> 7.EE.4.a Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i> 7.EE.4.b Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rational Number 7.EE.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Apply the properties of operations to fluently compute with rational numbers in any form. 7.EE.3 Use a variable to represent an unknown quantity. 7.EE.4 Solve a simple algebraic equation by using the properties of equality or mathematical reasoning, and show or explain my steps. 7.EE.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Draw, construct, and describe geometrical figures and describe the relationships between them.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. • 7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. • 7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Scale Drawing 7.G.1 ○ Right Rectangular Prism 7.G.3 ○ Right Rectangular Pyramid 7.G.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use a scale drawing to determine the actual dimensions and area of a geometric figure. 7.G.1 ○ Draw a simple geometric shape with specific conditions. 7.G.2 ○ Identify simple two-dimensional polygon figures 7.G.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. 7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. 7.G.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Radius 7.G.4 Diameter 7.G.4 Circumference 7.G.4 Area 7.G.4 Pi 7.G.4 Supplementary and Complementary Angles 7.G.5 Vertical and Adjacent Angles 7.G.5 Surface Area 7.G.6 Volume 7.G.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> State the formula for finding the area of a circle. 7.G.4 State the formula for finding the circumference of a circle. 7.G.4 State the relationship between supplementary, complementary, and vertical angles. 7.G.5 Determine the area of basic two-dimensional figures. 7.G.6 Determine the surface area and volume of basic three-dimensional figures. 7.G.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Use random sampling to draw inferences about a population.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.SP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. 7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Sample 7.SP.1, 7.SP.2 Population 7.SP.1, 7.SP.2 Random Sample 7.SP.1, 7.SP.2 Representative Sample 7.SP.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain that inferences about a population can be made by examining a sample. 7.SP.1 Draw simple inferences about a population based on data generated by a random sample. 7.SP.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Draw informal comparative inferences about two populations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i> 7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Measures of Center 7.SP.3, 7.SP.4 Measures of Variability 7.SP.3, 7.SP.4 Mean Absolute Deviation 7.SP.3, 7.SP.4 Interquartile Range 7.SP.3, 7.SP.4 Population 7.SP.4 Random Sample 7.SP.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the mean, median, and other measures of center for data sets. 7.SP.3 Identify differences between measures of center from two different data sets. 7.SP.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Investigate chance processes and develop, use, and evaluate probability models.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 7.SP.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. 7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i> 7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. <ul style="list-style-type: none"> 7.SP.7.a Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i> 7.SP.7.b Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i> 7.SP.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. <ul style="list-style-type: none"> 7.SP.8.a Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. 7.SP.8.b Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event. 7.SP.8.c Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Likely 7.SP.6 Unlikely 7.SP.6 Theoretical Probability 7.SP.6, 7.SP.7 Experimental Probability 7.SP.6, 7.SP.7 Relative Frequency 7.SP.6, 7.SP.7 Probability Model 7.SP.7 Frequency 7.SP.7 Compound Events 7.SP.8 Sample Space 7.SP.8 Tree Diagram 7.SP.8 Outcomes 7.SP.8 Simulation 7.SP.8 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize and explain that probabilities are expressed as a number between 0 and 1 as likely to occur. 7.SP.5 Collect data on a chance process to approximate its probability. 7.SP.6 Develop simple simulations to model a situation in which all events are equally likely to occur. 7.SP.7 Create a sample space of all possible outcomes for a compound event by using an organized list, a table, or tree diagram. 7.SP.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

RATIOS AND PROPORTIONAL RELATIONSHIPS

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2 ÷ 1/4 miles per hour, equivalently 2 miles per hour.</i> • 7.RP.2 Recognize and represent proportional relationships between quantities. <ul style="list-style-type: none"> ○ 7.RP.2.a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. ○ 7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. ○ 7.RP.2.c Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i> ○ 7.RP.2.d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate. • 7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Ratio 7.RP.1, 7.RP.2 ○ Rate 7.RP.1 ○ Unit Rate 7.RP.1 ○ Proportional Relationship 7.RP.2, 7.RP.2 ○ Constant of Proportionality 7.RP.2 ○ Unit Rate 7.RP.2 ○ Equivalent Ratios 7.RP.2 ○ Percent 7.RP.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. 7.RP.1 ○ Create proportional and equivalent ratios when given a quantity. 7.RP.2.a ○ Graph given proportional points on a coordinate plane. 7.RP.2.d ○ Identify proportional relationships in real-world problems. 7.RP.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

THE NUMBER SYSTEM

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> 7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. <ul style="list-style-type: none"> 7.NS.1.a Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. 7.NS.1.b Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 7.NS.1.c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. 7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers. 7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. <ul style="list-style-type: none"> 7.NS.2.a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. 7.NS.2.b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real world contexts. 7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers. 7.NS.2.d Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. 7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Additive Inverse 7.NS.1, 7.NS.1 Absolute Value 7.NS.1 Rational Number 7.NS.2, 7.NS.3 Terminating Decimal 7.NS.2 Repeating Decimal 7.NS.2 Complex Fraction 7.NS.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Use a number line or positive/negative chips to show that an integer and its opposite will always have a sum of zero. 7.NS.1 Rewrite a subtraction problem as an addition problem by using the additive inverse. 7.NS.1 Use patterns and properties to explore the multiplication of integers. 7.NS.2 Use patterns and properties to develop procedures for multiplying integers. 7.NS.2 Use the relationship between multiplication and division to develop procedures for dividing integers. 7.NS.2 Verify that a number is rational based on its decimal equivalent. 7.NS.2 Fluently add, subtract, divide, and multiply rational numbers with the standard algorithm. 7.NS.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



THE NUMBER SYSTEM

Know that there are numbers that are not rational, and approximate them by rational numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. 8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rational Number 8.NS.1, 8.NS.2 Irrational Number 8.NS.1, 8.NS.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Covert rational and irrational numbers to their decimal equivalents using long division. 8.NS.1 Plot estimated values of irrational numbers on a number line 8.NS.2 Estimate the value of an irrational number by rounding to a specific place value. 8.NS.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Use properties of operations to generate equivalent expressions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. • 7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Expression 7.EE.1 ○ Coefficient 7.EE.1 ○ Like Terms 7.EE.1 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Apply the properties of operations to generate equivalent expressions. 7.EE.1 ○ Create visual models to show two expressions are equivalent (e.g., use algebra tiles to model that $3(2+x) = 6 + 3x$.) 7.EE.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i> 7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. <ul style="list-style-type: none"> 7.EE.4.a Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i> 7.EE.4.b Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rational Number 7.EE.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Apply the properties of operations to fluently compute with rational numbers in any form. 7.EE.3 Use a variable to represent an unknown quantity. 7.EE.4 Solve a simple algebraic equation by using the properties of equality or mathematical reasoning, and show or explain my steps. 7.EE.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Work with radicals and integer exponents.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $32 \times 3 - 5 = 3 - 3 = 1/33 = 1/27$.</i> • 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. • 8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.</i> • 8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Integer 8.EE.1 ○ Exponent 8.EE.1 ○ Cube 8.EE.2 ○ Square 8.EE.2 ○ Cube Root 8.EE.2 ○ Square Root 8.EE.2 ○ Radical 8.EE.2 ○ Perfect Square 8.EE.2 ○ Perfect Cube 8.EE.2 ○ Irrational 8.EE.2 ○ Powers of Ten 8.EE.3, 8.EE.4 ○ Scientific Notation 8.EE.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Determine the properties of integer exponents by exploring patterns and applying understanding of properties of whole number exponents. 8.EE.1 ○ Recognize taking a square root as the inverse of squaring a number. 8.EE.2 ○ Recognize taking a cube root as the inverse of cubing a number. 8.EE.2 ○ Write an estimation of a very large and small quantity by expressing it as the product of a single-digit number and a positive or negative power of ten. 8.EE.3 ○ Identify and interpret the various ways scientific notation is displayed on calculators and through computer software. 8.EE.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Understand the connections between proportional relationships, lines, and linear equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. <i>For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</i> 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Proportional Relationship 8.EE.5, 8.EE.6 Unit Rate 8.EE.5 Slope 8.EE.5, 8.EE.6 Hypotenuse 8.EE.6 Ratio 8.EE.6 y-intercept 8.EE.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Graph a proportional relationship in a coordinate plane. 8.EE.5 Create right triangles by drawing a horizontal line segment and a vertical line segment from any two points on a non-vertical line in the coordinate plane. 8.EE.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Analyze and solve linear equations and pairs of simultaneous linear equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.EE.7 Solve linear equations in one variable. <ul style="list-style-type: none"> 8.EE.7.a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). 8.EE.7.b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Linear Equation 8.EE.7, 8.EE.8 Equivalent Equations 8.EE.7 Rational Number 8.EE.7 Coefficient 8.EE.7 Like Terms 8.EE.7 System of Linear Equations 8.EE.8 Intersection 8.EE.8 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Simplify a linear equation by using the distributive property and/or combining like terms. 8.EE.7 Use the properties of real numbers to determine the solution of a simple linear equation. 8.EE.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Draw, construct, and describe geometrical figures and describe the relationships between them.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. • 7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. • 7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Scale Drawing 7.G.1 ○ Right Rectangular Prism 7.G.3 ○ Right Rectangular Pyramid 7.G.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use a scale drawing to determine the actual dimensions and area of a geometric figure. 7.G.1 ○ Draw a simple geometric shape with specific conditions. 7.G.2 ○ Identify simple two-dimensional polygon figures 7.G.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. • 7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. • 7.G.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Radius 7.G.4 ○ Diameter 7.G.4 ○ Circumference 7.G.4 ○ Area 7.G.4 ○ Pi 7.G.4 ○ Supplementary and Complementary Angles 7.G.5 ○ Vertical and Adjacent Angles 7.G.5 ○ Surface Area 7.G.6 ○ Volume 7.G.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ State the formula for finding the area of a circle. 7.G.4 ○ State the formula for finding the circumference of a circle. 7.G.4 ○ State the relationship between supplementary, complementary, and vertical angles. 7.G.5 ○ Determine the area of basic two-dimensional figures. 7.G.6 ○ Determine the surface area and volume of basic three-dimensional figures. 7.G.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOMETRY

Understand congruence and similarity using physical models, transparencies, or geometry software.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.G.1 Verify experimentally the properties of rotations, reflections, and translations: <ul style="list-style-type: none"> ○ 8.G.1.a Lines are taken to lines, and line segments to line segments of the same length. ○ 8.G.1.b Angles are taken to angles of the same measure. ○ 8.G.1.c Parallel lines are taken to parallel lines. • 8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. • 8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. • 8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. • 8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Transformation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Translation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Reflection 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Rotation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Parallel Line 8.G.1, 8.G.5 ○ Congruent 8.G.2 ○ Dilation 8.G.3, 8.G.4 ○ Similar 8.G.4, 8.G.5 ○ Interior Angle 8.G.5 ○ Exterior Angle 8.G.5 ○ Transversal 8.G.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Perform a series of rotations, reflections and/or translations of a simple geometric shape. 8.G.1, ○ Explain how transformations can be used to prove that two figures are congruent 8.G.2 ○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given coordinates. 8.G.3 ○ Describe the changes occurring to the x- and y- coordinates of a figure after the position changes. 8.G.3 ○ Explain how transformations can be used to prove that two figures are similar. 8.G.4 ○ Informally prove that the sum of any triangle's interior angles will for 180-degrees and the sum of a polygon's exterior angles will be 360-degrees. 8.G.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Cylinder 8.G.9 Cone 8.G.9 Sphere 8.G.9 Volume 8.G.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recall the formula to find the volume of a cylinder. 8.G.9 Recall the formula to find the volume of a cone. 8.G.9 Recall the formula to find the volume of a sphere. 8.G.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Use random sampling to draw inferences about a population.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.SP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. 7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Sample 7.SP.1, 7.SP.2 Population 7.SP.1, 7.SP.2 Random Sample 7.SP.1, 7.SP.2 Representative Sample 7.SP.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Explain that inferences about a population can be made by examining a sample. 7.SP.1 Draw simple inferences about a population based on data generated by a random sample. 7.SP.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Draw informal comparative inferences about two populations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i> 7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Measures of Center 7.SP.3, 7.SP.4 Measures of Variability 7.SP.3, 7.SP.4 Mean Absolute Deviation 7.SP.3, 7.SP.4 Interquartile Range 7.SP.3, 7.SP.4 Population 7.SP.4 Random Sample 7.SP.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the mean, median, and other measures of center for data sets. 7.SP.3 Identify differences between measures of center from two different data sets. 7.SP.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



STATISTICS AND PROBABILITY

Investigate chance processes and develop, use, and evaluate probability models.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 7.SP.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. • 7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i> • 7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. <ul style="list-style-type: none"> ○ 7.SP.7.a Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i> ○ 7.SP.7.b Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i> • 7.SP.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. <ul style="list-style-type: none"> ○ 7.SP.8.a Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. ○ 7.SP.8.b Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event. ○ 7.SP.8.c Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Likely 7.SP.6 ○ Unlikely 7.SP.6 ○ Theoretical Probability 7.SP.6, 7.SP.7 ○ Experimental Probability 7.SP.6, 7.SP.7 ○ Relative Frequency 7.SP.6, 7.SP.7 ○ Probability Model 7.SP.7 ○ Frequency 7.SP.7 ○ Compound Events 7.SP.8 ○ Sample Space 7.SP.8 ○ Tree Diagram 7.SP.8 ○ Outcomes 7.SP.8 ○ Simulation 7.SP.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize and explain that probabilities are expressed as a number between 0 and 1 as likely to occur. 7.SP.5 ○ Collect data on a chance process to approximate its probability. 7.SP.6 ○ Develop simple simulations to model a situation in which all events are equally likely to occur. 7.SP.7 ○ Create a sample space of all possible outcomes for a compound event by using an organized list, a table, or tree diagram. 7.SP.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

THE NUMBER SYSTEM

Know that there are numbers that are not rational, and approximate them by rational numbers.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. 8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Rational Number 8.NS.1, 8.NS.2 Irrational Number 8.NS.1, 8.NS.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Covert rational and irrational numbers to their decimal equivalents using long division. 8.NS.1 Plot estimated values of irrational numbers on a number line 8.NS.2 Estimate the value of an irrational number by rounding to a specific place value. 8.NS.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Work with radicals and integer exponents.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $32 \times 3 - 5 = 3 - 3 = 1/33 = 1/27$.</i> 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. 8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.</i> 8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Integer 8.EE.1 Exponent 8.EE.1 Cube 8.EE.2 Square 8.EE.2 Cube Root 8.EE.2 Square Root 8.EE.2 Radical 8.EE.2 Perfect Square 8.EE.2 Perfect Cube 8.EE.2 Irrational 8.EE.2 Powers of Ten 8.EE.3, 8.EE.4 Scientific Notation 8.EE.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Determine the properties of integer exponents by exploring patterns and applying understanding of properties of whole number exponents. 8.EE.1 Recognize taking a square root as the inverse of squaring a number. 8.EE.2 Recognize taking a cube root as the inverse of cubing a number. 8.EE.2 Write an estimation of a very large and small quantity by expressing it as the product of a single-digit number and a positive or negative power of ten. 8.EE.3 Identify and interpret the various ways scientific notation is displayed on calculators and through computer software. 8.EE.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Understand the connections between proportional relationships, lines, and linear equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. <i>For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</i> 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Proportional Relationship 8.EE.5, 8.EE.6 Unit Rate 8.EE.5 Slope 8.EE.5, 8.EE.6 Hypotenuse 8.EE.6 Ratio 8.EE.6 y-intercept 8.EE.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Graph a proportional relationship in a coordinate plane. 8.EE.5 Create right triangles by drawing a horizontal line segment and a vertical line segment from any two points on a non-vertical line in the coordinate plane. 8.EE.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSIONS AND EQUATIONS

Analyze and solve linear equations and pairs of simultaneous linear equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.EE.7 Solve linear equations in one variable. <ul style="list-style-type: none"> ○ 8.EE.7.a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). ○ 8.EE.7.b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. • 8.EE.8 Analyze and solve pairs of simultaneous linear equations. <ul style="list-style-type: none"> ○ 8.EE.8.a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. ○ 8.EE.8.b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6. ○ 8.EE.8.c Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Equation 8.EE.7, 8.EE.8 ○ Equivalent Equations 8.EE.7 ○ Rational Number 8.EE.7 ○ Coefficient 8.EE.7 ○ Like Terms 8.EE.7 ○ System of Linear Equations 8.EE.8 ○ Intersection 8.EE.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Simplify a linear equation by using the distributive property and/or combining like terms. 8.EE.7 ○ Use the properties of real numbers to determine the solution of a simple linear equation. 8.EE.7 ○ Explain how a line represents the infinite number of solutions to a linear equation with two variables. 8.EE.8 ○ Use algebraic reasoning (simple substitution) and the properties of real numbers to simplify linear equations. 8.EE.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



FUNCTIONS

Define, evaluate, and compare functions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. 8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i> 8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Function 8.F.1, 8.F.2 Input 8.F.1 Output 8.F.1 Linear Function 8.F.2, 8.F.3 Rate of Change 8.F.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Find the output of a function when specific inputs are provided. 8.F.1 Determine the properties of a function written in algebraic form, in table format and represented on a graph (e.g., rate of change, meaning of y-intercept, linear, non-linear). 8.F.2 Explain that linear functions form a straight line and nonlinear functions do not form a straight line. 8.F.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



FUNCTIONS

Use functions to model relationships between quantities.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. • 8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Function 8.F.4 ○ Rate of Change 8.F.4 ○ Increasing 8.F.5 ○ Decreasing 8.F.5 ○ Linear 8.F.5 ○ Nonlinear 8.F.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define the y-intercept in relation to the situation. 8.F.4 ○ Define the rate of change in relation to the situation. 8.F.4 ○ Match the graph of function to a given situation. 8.F.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOMETRY

Understand congruence and similarity using physical models, transparencies, or geometry software.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.G.1 Verify experimentally the properties of rotations, reflections, and translations: <ul style="list-style-type: none"> ○ 8.G.1.a Lines are taken to lines, and line segments to line segments of the same length. ○ 8.G.1.b Angles are taken to angles of the same measure. ○ 8.G.1.c Parallel lines are taken to parallel lines. • 8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. • 8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. • 8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. • 8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Transformation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Translation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Reflection 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Rotation 8.G.1, 8.G.2, 8.G.3, 8.G.4 ○ Parallel Line 8.G.1, 8.G.5 ○ Congruent 8.G.2 ○ Dilation 8.G.3, 8.G.4 ○ Similar 8.G.4, 8.G.5 ○ Interior Angle 8.G.5 ○ Exterior Angle 8.G.5 ○ Transversal 8.G.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Perform a series of rotations, reflections and/or translations of a simple geometric shape. 8.G.1, ○ Explain how transformations can be used to prove that two figures are congruent 8.G.2 ○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given coordinates. 8.G.3 ○ Describe the changes occurring to the x- and y- coordinates of a figure after the position changes. 8.G.3 ○ Explain how transformations can be used to prove that two figures are similar. 8.G.4 ○ Informally prove that the sum of any triangle's interior angles will for 180-degrees and the sum of a polygon's exterior angles will be 360-degrees. 8.G.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Understand and apply the Pythagorean Theorem.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.G.6 Explain a proof of the Pythagorean Theorem and its converse. • 8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. • 8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Pythagorean Theorem 8.G.6, 8.G.7, 8.G.8 ○ Leg 8.G.6, 8.G.7, 8.G.8 ○ Hypotenuse 8.G.6, 8.G.7, 8.G.8 ○ Converse 8.G.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use visual models to demonstrate the relationship of the three side lengths of any right triangle. 8.G.6 ○ Draw a diagram to set up the equation to solve for the unknown side length of a right triangle. 8.G.7 ○ Connect any two points on a coordinate grid to a third point so that the three points form a right triangle. 8.G.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Cylinder 8.G.9 Cone 8.G.9 Sphere 8.G.9 Volume 8.G.9 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recall the formula to find the volume of a cylinder. 8.G.9 Recall the formula to find the volume of a cone. 8.G.9 Recall the formula to find the volume of a sphere. 8.G.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

STATISTICS AND PROBABILITY

Investigate patterns of association in bivariate data.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • 8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. • 8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line. • 8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i> • 8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Scatter Plot 8.SP.1, 8.SP.2 ◦ Bivariate 8.SP.1, 8.SP.3, 8.SP.4 ◦ Clustering 8.SP.1 ◦ Outliers 8.SP.1 ◦ Positive & Negative Association 8.SP.1 ◦ Linear & Nonlinear Association 8.SP.1, 8.SP.2, 8.SP.3 ◦ Trend Line 8.SP.1, 8.SP.3 ◦ Line of Best Fit 8.SP.1, 8.SP.3 ◦ Slope 8.SP.3 ◦ y-intercept 8.SP.3 ◦ Categorical Data 8.SP.4 ◦ Two-way Table 8.SP.4 ◦ Frequency 8.SP.4 ◦ Relative Frequency 8.SP.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Plot ordered pairs on a coordinate grid representing the relationship between two data sets. 8.SP.1 ◦ Recognize whether or not data plotted on a scatter plot have a linear association. 8.SP.2 ◦ Interpret the y-intercept of the equation in the context of the collected data. 8.SP.3 ◦ Interpret the slope of the equation in the context of the collected data. 8.SP.3 ◦ Create a two-way table to record the frequencies of bivariate categorical values. 8.SP.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSIONS AND EQUATIONS

Analyze and solve linear equations and pairs of simultaneous linear equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.EE.8 Analyze and solve pairs of simultaneous linear equations. <ul style="list-style-type: none"> ○ 8.EE.8.a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. ○ 8.EE.8.b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6. ○ 8.EE.8.c Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Equation 8.EE.8 ○ System of Linear Equations 8.EE.8 ○ Intersection 8.EE.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain how a line represents the infinite number of solutions to a linear equation with two variables. 8.EE.8 ○ Use algebraic reasoning (simple substitution) and the properties of real numbers to simplify linear equations. 8.EE.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



FUNCTIONS

Define, evaluate, and compare functions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> 8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. 8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i> 8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Function 8.F.1, 8.F.2 Input 8.F.1 Output 8.F.1 Linear Function 8.F.2, 8.F.3 Rate of Change 8.F.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Find the output of a function when specific inputs are provided. 8.F.1 Determine the properties of a function written in algebraic form, in table format and represented on a graph (e.g., rate of change, meaning of y-intercept, linear, non-linear). 8.F.2 Explain that linear functions form a straight line and nonlinear functions do not form a straight line. 8.F.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



FUNCTIONS

Use functions to model relationships between quantities.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. • 8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Function 8.F.4 ○ Rate of Change 8.F.4 ○ Increasing 8.F.5 ○ Decreasing 8.F.5 ○ Linear 8.F.5 ○ Nonlinear 8.F.5 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define the y-intercept in relation to the situation. 8.F.4 ○ Define the rate of change in relation to the situation. 8.F.4 ○ Match the graph of function to a given situation. 8.F.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRY

Understand and apply the Pythagorean Theorem.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.G.6 Explain a proof of the Pythagorean Theorem and its converse. • 8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. • 8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Pythagorean Theorem 8.G.6, 8.G.7, 8.G.8 ○ Leg 8.G.6, 8.G.7, 8.G.8 ○ Hypotenuse 8.G.6, 8.G.7, 8.G.8 ○ Converse 8.G.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Use visual models to demonstrate the relationship of the three side lengths of any right triangle. 8.G.6 ○ Draw a diagram to set up the equation to solve for the unknown side length of a right triangle. 8.G.7 ○ Connect any two points on a coordinate grid to a third point so that the three points form a right triangle. 8.G.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

STATISTICS AND PROBABILITY

Investigate patterns of association in bivariate data.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • 8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. • 8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line. • 8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i> • 8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Scatter Plot 8.SP.1, 8.SP.2 ○ Bivariate 8.SP.1, 8.SP.3, 8.SP.4 ○ Clustering 8.SP.1 ○ Outliers 8.SP.1 ○ Positive & Negative Association 8.SP.1 ○ Linear & Nonlinear Association 8.SP.1, 8.SP.2, 8.SP.3 ○ Trend Line 8.SP.1, 8.SP.3 ○ Line of Best Fit 8.SP.1, 8.SP.3 ○ Slope 8.SP.3 ○ y-intercept 8.SP.3 ○ Categorical Data 8.SP.4 ○ Two-way Table 8.SP.4 ○ Frequency 8.SP.4 ○ Relative Frequency 8.SP.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Plot ordered pairs on a coordinate grid representing the relationship between two data sets. 8.SP.1 ○ Recognize whether or not data plotted on a scatter plot have a linear association. 8.SP.2 ○ Interpret the y-intercept of the equation in the context of the collected data. 8.SP.3 ○ Interpret the slope of the equation in the context of the collected data. 8.SP.3 ○ Create a two-way table to record the frequencies of bivariate categorical values. 8.SP.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



THE REAL NUMBER SYSTEM

Extend the properties of exponents to rational exponents.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • N-RN.1 Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5.</i> • N-RN.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Exponent N-RN.1, N-RN.2 ○ Rational N-RN.1, N-RN.2 ○ Expression N-RN.1, N-RN.2 ○ Integer N-RN.1, N-RN.2 ○ Extraneous Solution N-RN.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a method for finding the square roots of numbers. N-RN.1 ○ Apply the properties of exponents to simplify algebraic expressions with rational exponents. N-RN.1, N-RN.2 ○ Apply the properties of exponents to simplify algebraic expressions with integer exponents. N-RN.2 ○ Apply the properties of exponents to simplify algebraic expressions with rational exponents. N-RN.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



THE REAL NUMBER SYSTEM

Use properties of rational and irrational numbers.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • N-RN.3 Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Real Number N-RN.3 ○ Rational Number N-RN.3 ○ Irrational Number N-RN.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Know how to find the square root of a perfect square. N-RN.3 ○ Use the order of operations to evaluate expressions. N-RN.3 ○ Classify real numbers as rational or irrational according to their definitions. N-RN.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



QUANTITIES

Reason quantitatively and use units to solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • N-Q.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. • N-Q.2 Define appropriate quantities for the purpose of descriptive modeling. • N-Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Scale N-Q.1 ◦ Origin N-Q.1 ◦ Descriptive Model N-Q.2 ◦ Accuracy N-Q.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Label units through multiple steps of a problem. N-Q.1 ◦ Choose appropriate units for real world problems involving formulas N-Q.1 ◦ Choose an appropriate scale and origin for graphs and data displays. N-Q.1 ◦ Identify or choose the appropriate unit of measure for each variable or quantity. N-Q.2 ◦ Report calculated quantities using the same level of accuracy as used in the problem statement. N-Q.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

SEEING STRUCTURE IN EXPRESSIONS

Interpret the structure of expressions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • A-SSE.1 Interpret expressions that represent a quantity in terms of its context. <ul style="list-style-type: none"> ○ A-SSE.1a Interpret parts of an expression, such as terms, factors, and coefficients. ○ A-SSE.1b Interpret complicated expressions by viewing one or more of their parts as a single entity. <i>For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P.</i> • A-SSE.2 Use the structure of an expression to identify ways to rewrite it. <i>For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.</i>

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Expression A-SSE.1 ○ Term A-SSE.1 ○ Factor A-SSE.1 ○ Coefficient A-SSE.1 ○ Equivalent A-SSE.1, A-SSE.2 ○ Polynomials A-SSE.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Know how to identify the terms and like terms in an algebraic expression. A-SSE.1 ○ Group the parts of an expression differently in order to better interpret their meaning. A-SSE.1 ○ Look for and identify clues in the structure of expressions (e.g., like terms, common factors, difference of squares, perfect squares) in order to rewrite it another way. A-SSE.2 ○ Explain why equivalent expressions are equivalent. A-SSE.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



SEEING STRUCTURE IN EXPRESSIONS
Write expressions in equivalent forms to solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • A-SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. <ul style="list-style-type: none"> ○ A-SSE.3a Factor a quadratic expression to reveal the zeros of the function it defines. ○ A-SSE.3b Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. ○ A-SSE.3c Use the properties of exponents to transform expressions for exponential functions. <i>For example the expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Quadratic Expression A-SSE.3 ○ Complete the Square A-SSE.3 ○ Exponential Function A-SSE.3 ○ Function A-SSE.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Predict whether a quadratic will have a minimum or maximum based on the value of a. A-SSE.3b ○ Identify and factor perfect-square trinomials. A-SSE.3b ○ Define an exponential function, $f(x) = ab^x$. A-SSE.3c
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ARITHMETIC WITH POLYNOMIALS AND RATIONAL EXPRESSIONS
Perform arithmetic operations on polynomials.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> A-APR.1 Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Polynomial A-APR.1 Integers A-APR.1 Closure Property A-APR.1 FOIL Method A-APR.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the like terms in an algebraic expression. A-APR.1 Use models to add, subtract and multiply polynomials (like terms). A-APR.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CREATING EQUATIONS

Create equations that describe numbers or relationships.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> A-CED.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. A-CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i> A-CED.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. <i>For example, rearrange Ohm's law $V = IR$ to highlight resistance R.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Linear A-CED.1, A-CED.2, A-CED.3 Quadratic A-CED.1, A-CED.2, A-CED.3 Rational A-CED.1 Exponential A-CED.1 Coordinate Axes A-CED.2, A-CED.3 Constraints A-CED.3 Solutions A-CED.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the variables and quantities represented in a real-world problem. A-CED.1, A-CED.2, A-CED.3 Determine the best model for the real-world problem (linear equation, linear inequality, quadratic equation, quadratic inequality, rational equation, exponential equation). A-CED.1, A-CED.2, A-CED.3 Set up coordinate axes using an appropriate scale and label the axes. A-CED.2 Identify the system of equations and/or inequalities that best models the problem. A-CED.3 Know the common formulas for area, perimeter, and volume. A-CED.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



REASONING WITH EQUATIONS AND INEQUALITIES

Understand solving equations as a process of reasoning and explain the reasoning.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> A-REI.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Solution A-REI.1 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Apply order of operations and inverse operations to solve equations. A-REI.1
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

REASONING WITH EQUATIONS AND INEQUALITIES

Solve equations and inequalities in one variable.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • A-REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. • A-REI.4 Solve quadratic equations in one variable. <ul style="list-style-type: none"> ○ A-REI.4a Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. ○ A-REI.4b Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Equation A-REI.3 ○ Linear Inequality A-REI.3 ○ Coefficient A-REI.3 ○ Quadratic Equation A-REI.4 ○ Quadratic Formula A-REI.4 ○ Radicand A-REI.4 ○ Perfect Square Trinomial A-REI.4 ○ Imaginary Number A-REI.4 ○ Factoring Completely A-REI.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Solve simple linear equations and inequalities for one variable. A-REI.3 ○ Identify a quadratic equation, $ax^2 + bx + c$. A-REI.4 ○ Identify a perfect-square trinomial by first noticing if a and c are perfect squares and if $b=2ac$. A-REI.4 ○ Explain that complex solutions result when the radicand is negative in the quadratic formula ($b^2 - 4ac < 0$). A-REI.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

REASONING WITH EQUATIONS AND INEQUALITIES
Solve systems of equations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • A-REI.5 Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. • A-REI.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. • A-REI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. <i>For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ System of Equations A-REI.5, A-REI.6, A-REI.7 ○ Equivalent Equations A-REI.5 ○ Elimination Method A-REI.5, A-REI.6 ○ Substitution Method A-REI.6, A-REI.7 ○ Intersection A-REI.6, A-REI.7 ○ Linear Equation A-REI.7 ○ Quadratic Equation A-REI.7 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recall that equivalent equations result when an equation is multiplied by the same number on both sides of the equal sign. A-REI.5 ○ Explain why some linear systems have no solutions and identify linear systems that have no solution. A-REI.6 ○ Explain why some linear systems have infinitely many solutions and identify linear systems that have infinitely many solutions. A-REI.6 ○ Distinguish between equations that are linear and those that are quadratic. A-REI.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



REASONING WITH EQUATIONS AND INEQUALITIES
Represent and solve equations and inequalities graphically.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • A-REI.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). • A-REI.11 Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions. • A-REI.12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Polynomial Function A-REI.11 ○ Rational Function A-REI.11 ○ Absolute Value Function A-REI.11 ○ Exponential Function A-REI.11 ○ Logarithmic Function A-REI.11 ○ Half-Plane A-REI.12 ○ Boundary A-REI.12 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Verify that any point on a graph will result in a true equation when their coordinates are substituted into the equation. A-REI.10 ○ Explain that a point of intersection on the graph of a system of equations, $y=f(x)$ and $y=g(x)$, represents a solution to both equations. A-REI.11 ○ Explain that the solution set for a system of linear inequalities is the intersection of the shaded regions (half-planes) of both inequalities. A-REI.12 ○ Check points in the intersection of the half-planes to verify that they represent a solution to the system. A-REI.12
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



INTERPRETING FUNCTIONS

Understand the concept of a function and use function notation.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> F-IF.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$. F-IF.2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. F-IF.3 Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. <i>For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Domain F-IF.1, F-IF.2, F-IF.3 Range F-IF.1, F-IF.3 Function F-IF.1, F-IF.2, F-IF.3 Input F-IF.1, F-IF.2 Output F-IF.1, F-IF.2 Element F-IF.1 Function Notation F-IF.1, F-IF.2 Sequence F-IF.3 Explicit Formula F-IF.3 Recursive Formula F-IF.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Define a function as a relation in which each input (domain) has exactly one output (range). F-IF.1 Explain that when x is an element of the input of a function, $f(x)$ represents the corresponding output of the function. F-IF.1 Explain that function notation is not limited to $f(x)$; other letters (e.g., $g(x)$ and $p(x)$) can also be used so we can tell different function apart. F-IF.1 Use order of operations to evaluate a function for a given domain (input) value. F-IF.2 Convert a table, graph, set of ordered pairs, or description into function notation by identifying the rule used to turn inputs into outputs and writing the rule. F-IF.2 Convert a list of number (a sequence) into a function by making the whole numbers (0,1,2,etc.) the inputs and the elements of the sequence the outputs. F-IF.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

INTERPRETING FUNCTIONS

Interpret functions that arise in applications in terms of the context.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. F-IF.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.</i> F-IF.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Interval F-IF.4, F-IF.6 Maximum F-IF.4 Minimum F-IF.4 End Behavior F-IF.4 Periodicity F-IF.4 Function F-IF.5, F-IF.6 Domain F-IF.5 Rate of Change F-IF.6 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Locate the information that explains what each quantity represents. F-IF.4 Identify the y-intercept. F-IF.4 Locate the information that explain what each quantity represents. F-IF.4 Explain how the domain of the function is represented in its graph. F-IF.5 Explain the connection between average rate of change and the slope formula: $\Delta y / \Delta x$. F-IF.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

INTERPRETING FUNCTIONS

Analyze functions using different representations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> F-UF.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. <ul style="list-style-type: none"> F-IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima. F-IF.7.b Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. F-IF.7e Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. F-IF.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <ul style="list-style-type: none"> F-IF.8a Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. F-IF.8b Use the properties of exponents to interpret expressions for exponential functions. <i>For example, identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay.</i> F-IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> End Behavior F-IF.7 Logarithmic Function F-IF.7 Intercept Form F-IF.8 Exponential Growth & Decay F-IF.8 Algebraically, Graphically, Numerically F-IF.8 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the x-intercept(s), y-intercept, increasing intervals, decreasing intervals, the maximums, and minimums of a function by looking at its graph. F-IF.7 Identify that the parent function for lines is the line $f(x) = x$. F-IF.7 Identify the slope-intercept form of a linear function as $F(x) = mx + b$. F-IF.7 Explain that the parent function for quadratic functions is the parabola $f(x) = x^2$. F-IF.7 Find the y-intercept of a quadratic by substituting 0 for x and evaluating. F-IF.7 Explain that the parent function for square root functions is the function $f(x) = \sqrt{x}$. F-IF.7 Define piecewise functions as functions that have different rules for evaluation depending on the value of the input. F-IF.7 Explain that the parent function for exponentials is $f(x) = b^x$ where b is a positive number. F-IF.7 Explain that standard form for a quadratic function is $f(x) = ax^2 + bx + c$. F-IF.8 Explain that factored form is $f(x) = a(x-x_1)(x-x_2)$ where x_1 and x_2 are x-intercepts of the function. F-IF.8 Distinguish between exponential functions that model exponential growth and exponential decay. F-IF.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



BUILDING FUNCTIONS

Build a function that models a relationship between two quantities.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • F-BF.1 Write a function that describes a relationship between two quantities. <ul style="list-style-type: none"> ○ F-BF.1a Determine an explicit expression, a recursive process, or steps for calculation from a context. ○ F-BF.1b Combine standard function types using arithmetic operations. <i>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</i> • F-BF.2 Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Parent Function F-BF.1 ○ Composition of Functions F-BF.1 ○ Transformation F-BF.1 ○ Arithmetic Sequence F-BF.2 ○ Geometric Sequence F-BF.2 ○ Recursive Formula F-BF.2 ○ Explicit Formula F-BF.2 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define explicit and recursive expressions of a function. F-BF.1 ○ Identify the quantities being compared in real-world problems. F-BF.1 ○ Explain that recursive formula tells me how a sequence starts and tells me how to use the previous value(s) to generate the next element of the sequence. F-BF.2 ○ Explain that an explicit formula allows me to find any element of a sequence without knowing the element before it. (e.g., if I want to know the 11th number on the list, I plug the number 11 into the explicit formula). F-BF.2 ○ Define an arithmetic sequence as a sequence of numbers that is formed so that the difference between consecutive terms is always the same known as a common difference. F-BF.2 ○ Define a geometric sequence as a sequence of numbers that is formed so that the ratio of consecutive terms is always the same known as a common ratio. F-BF.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



BUILDING FUNCTIONS

Build new functions from existing functions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> F-BF.3 Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. F-BF.4 Find inverse functions. <ul style="list-style-type: none"> F-BF.4a Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. <i>For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Function F-BF.3, F-BF.4 Even & Odd Functions F-BF.3 Inverse B-BF.3, F-BF.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describe the transformation that changed a graph of $f(x)$ into a different graph when given pictures of the pre-image and image. F-BF.3 Define the inverse of a function. F-BF.4 Explain that after solving $f(x)=c$ for x, c can be considered the input and x can be considered the output. F-BF.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

LINEAR, QUADRATIC, AND EXPONENTIAL MODELS

Construct and compare linear, quadratic, and exponential models and solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • F-LE.1 Distinguish between situations that can be modeled with linear functions and with exponential functions. <ul style="list-style-type: none"> ○ F-LE.1a Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. ○ F-LE.1b Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. ○ F-LE.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. • F-LE.2 Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). • F-LE.3 Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Linear Function F-LE.1, F-LE.2, F-LE.3 ○ Exponential Function F-LE.1, F-LE.2 ○ Rate of Change F-LE.1 ○ Slope F-LE.1 ○ Common Ratio F-LE.1 ○ Arithmetic Sequence F-LE.2 ○ Geometric Sequence F-LE.2 ○ Quadratic Function F-LE.3 ○ Polynomial Function F-LE.3 ○ Exponential Function F-LE.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define linear function ($y=mx + b$) and exponential function ($y=ab^x$). F-LE.1 ○ Determine if a function has a constant rate of change or a constant multiplier over equal intervals. F-LE.1 ○ Determine if a function is linear or exponential given a sequence, a graph, a verbal description, or a table. F-LE.2 ○ Use graphs or tables to compare the output values of linear, quadratic, polynomial, and exponential functions. F-LE.3 ○ Estimate the intervals for which the output of one function is greater than the output of another function when given a table or graph. F-LE.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

LINEAR, QUADRATIC, AND EXPONENTIAL MODELS
Interpret expressions for functions in terms of the situation they model.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> F-LE.5 Interpret the parameters in a linear or exponential function in terms of a context.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Domain F-LE.5 Range F-LE.5 Slope F-LE.5 y-intercept F-LE.5 Growth Rate F-LE.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the names and definitions of the parameters m and b in the linear function $f(x) = mx + b$. F-LE.5 Explain the meaning (using appropriate units) of the slope of a line when the line models a real-world relationship. F-LE.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



INTERPRETING CATEGORICAL AND QUANTITATIVE DATA

Summarize, represent, and interpret data on a single count or measurement variable.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • S-ID.1 Represent data with plots on the real number line (dot plots, histograms, and box plots). • S-ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. • S-ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Dot Plot S-ID.1 ○ Histogram S-ID.1 ○ Box Plot S-ID.1 ○ Median S-ID.1, S-ID.2 ○ Frequency S-ID.1 ○ Upper and Lower Quartile S-ID.1 ○ Standard Deviation S-ID.2 ○ Distribution S-ID.2, S-ID.3 ○ Interquartile Range S-ID.2 ○ Shape S-ID.2, S-ID.3 ○ Center S-ID.2, S-ID.3 ○ Outlier S-ID.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Choose the best representation (dot plot, histogram, box plot) for a set of data. S-ID.1 ○ Choose the appropriate scale to represent data on a number line. S-ID.1 ○ Describe the center of the data distribution (mean and median). S-ID.2 ○ Identify outliers for the data set. S-ID.3 ○ Predict the effect an outlier will have on the shape, center, and spread of a data set. S-ID.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



INTERPRETING CATEGORICAL AND QUANTITATIVE DATA

Summarize, represent, and interpret data on two categorical and quantitative variables.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • S-ID.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. • S-ID.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. <ul style="list-style-type: none"> ○ S-ID.6a Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. ○ S-ID.6b Informally assess the fit of a function by plotting and analyzing residuals. ○ S-ID.6c Fit a linear function for a scatter plot that suggests a linear association.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Two-way Frequency Table S-ID.5 ○ Relative Frequencies S-ID.5 ○ Joint Relative Frequency S-ID.5 ○ Marginal Relative Frequency S-ID.5 ○ Conditional Relative Frequency S-ID.5 ○ Trend S-ID.5 ○ Scatter Plot S-ID.6 ○ Independent and Dependent Variable S-ID.6 ○ Line of Best Fit S-ID.6 ○ Residuals S-ID.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify possible patterns observed in the data. S-ID.5 ○ Read data displayed in a two-way frequency table. S-ID.5 ○ Explain that a scatter plot can only be used to represent quantitative variables. S-ID.6 ○ Identify any outliers on the scatter plot. S-ID.6 ○ Determine whether linear and exponential models are increasing or decreasing. S-ID.6 ○ Construct a scatter plot. S-ID.6 ○ Sketch a line of best fit on a scatter plot that appears linear. S-ID.6
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

INTERPRETING CATEGORICAL AND QUANTITATIVE DATA

Interpret linear models.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • S-ID.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. • S-ID.8 Compute (using technology) and interpret the correlation coefficient of a linear fit. • S-ID.9 Distinguish between correlation and causation.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Slope S-ID.7 ○ y-intercept S-ID.7 ○ Linear Model S-ID.7 ○ Data S-ID.7 ○ Correlation Coefficient S-ID.8 ○ Quantitative Variable S-ID.8 ○ Significance S-ID.8 ○ Linear Model of Best Fit S-ID.8 ○ Correlation S-ID.9 ○ Causation S-ID.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the slope and y-intercept in the linear function $f(x) = mx + b$. S-ID.7 ○ Explain that the correlation coefficient must be between -1 and 1 inclusive and explain what each of these values means. S-ID.8 ○ Explain the correlation coefficient as a measure of the “goodness of a linear fit”. S-ID.8 ○ Recognize that correlation does not imply causation and that causation is not illustrated on a scatter plot. S-ID.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CONGRUENCE
Experiment with transformations in the plane.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. G-CO.2 Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). G-CO.3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. G-CO.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. G-CO.5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Angle G-CO.1, G-CO.4 Line Segment G-CO.1, G-CO.4 Arc G-CO.1 Transformation G-CO.2 Horizontal Stretch G-CO.2 Rotation G-CO.3 Reflection G-CO.3 Sequence G-CO.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Categorize angles, circles, lines and line segments based on attributes G-CO.1 Model the effect of dilations, translations, rotations, and reflections with two-dimensional figure manipulatives. G-CO.2 Recognize when an object has been rotated, reflected, or translated G-CO.3 Identify matching angles and line segments in geometric shapes that has undergone rotation, reflection and/or translation. G-CO.4 Use reflection, rotation, and translation to move an object G-CO.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CONGRUENCE

Understand congruence in terms of rigid motions.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • G-CO.6 Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. • G-CO.7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. • G-CO.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Congruence G-CO.6, G-CO.7 ○ Rigid Motion G-CO.6, G-CO.7, G-CO.8 ○ Angle Measure G-CO.6, G-CO.7 ○ Rotation G-CO.7, G-CO.8 ○ Translation G-CO.7, G-CO.8 ○ Corresponding Sides G-CO.7 ○ Corresponding Angles G-CO.7 ○ Reflection G-CO.8 ○ SAS, ASA, SSS G-CO.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define rigid motions as reflections, rotations, translations, and combinations of these, all of which preserve distance and angle measure. G-CO.6 ○ Define congruent figures as figures that have the same shape and size and state that a composition of rigid motions will map one congruent figure onto the other. G-CO.6 ○ Identify corresponding sides and corresponding angles of congruent triangles. G-CO.7 ○ List the sufficient conditions to prove triangles are congruent. G-CO.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CONGRUENCE

Prove geometric theorems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-CO.9 Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i> G-CO.10 Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i> G-CO.11 Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Theorem G-CO.9 Vertical Angles G-CO.9 Congruent G-CO.9 Alternate Interior Angle G-CO.9 Corresponding Angles G-CO.9 Perpendicular Bisector G-CO.9 Supplementary Angles G-CO.9 Complimentary Angles G-CO.9 Equidistant G-CO.9 Midpoint G-CO.10 Isosceles Triangle G-CO.10 Quadrilateral G-CO.11 Parallelogram G-CO.11 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify and use the properties of congruence and equality (reflexive, symmetric, transitive) in my proofs. G-CO.9 Correctly interpret geometric diagrams by identifying what can and cannot be assumed G-CO.9 Correctly interpret geometric diagram (what can and cannot be assumed). G-CO.10 Correctly identify parallelograms based on the properties of a parallelogram. G-CO.11
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CONGRUENCE

Make geometric constructions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-CO.12 Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). <i>Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</i> G-CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Segment G-CO.12 Perpendicular Lines G-CO.12 Perpendicular Bisector G-CO.12 Parallel Lines G-CO.12 Bisect G-CO.12 Compass G-CO.12 Equilateral Triangle G-CO.13 Inscribe G-CO.13 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the tools used in formal constructions. G-CO.12 Identify inscribed polygons (the vertices of the figure must be points on the circle.) G-CO.13
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



SIMILARITY, RIGHT TRIANGLES, AND TRIGONOMETRY

Understand similarity in terms of similarity transformations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-SRT.1 Verify experimentally the properties of dilations given by a center and a scale factor: <ul style="list-style-type: none"> G-SRT.1a A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. G-SRT.1b The dilation of a line segment is longer or shorter in the ratio given by the scale factor. G-SRT.2 Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. G-SRT.3 Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Dilation G-SRT.1, G-SRT.1 Parallel G-SRT.1 Scale Factor G-SRT.1 Segment G-SRT.1 Similarity G-SRT.2, G-SRT.3 Composition G-SRT.2 Corresponding Sides G-SRT.2 Corresponding Angles G-SRT.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Perform a dilation with a given center and scale factor on a figure in the coordinate plane. G-SRT.1 Identify corresponding sides and corresponding angles of similar triangles. G-SRT.2 Show and explain that when two angle measures are known (AA), the third angle measure is also known (Third Angle Theorem). G-SRT.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



SIMILARITY, RIGHT TRIANGLES, AND TRIGONOMETRY

Prove theorems involving similarity.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-SRT.4 Prove theorems about triangles. <i>Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</i> G-SRT.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Proof G-SRT.4 Corresponding Angles G-SRT.4 Similarity G-SRT.4 Pythagorean Theorem G-SRT.4 Congruence G-SRT.5 Side Length G-SRT.5 Angle Measure G-SRT.5 Proportional G-SRT.5 Corresponding Sides G-SRT.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify theorems commonly used with triangle. G-SRT.4 Identify congruent and similar sides, angles, and measures between two triangles. G-SRT.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

SIMILARITY, RIGHT TRIANGLES, AND TRIGONOMETRY
Define trigonometric ratios and solve problems involving right triangles.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • G-SRT.6 Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. • G-SRT.7 Explain and use the relationship between the sine and cosine of complementary angles. • G-SRT.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Similarity G-SRT.6 ○ Proportional G-SRT.6 ○ Right Triangle G-SRT.6, G-SRT.7, G-SRT.8 ○ Leg G-SRT.6 ○ Hypotenuse G-SRT.6 ○ Tangent G-SRT.6, G-SRT.8 ○ Sine G-SRT.6, G-SRT.7, G-SRT.8 ○ Cosine G-SRT.6, G-SRT.7, G-SRT.8 ○ Acute Angle G-SRT.6, G-SRT.7, G-SRT.8 ○ Complementary Angles G-SRT.7 ○ Trigonometric Ratio G-SRT.8 ○ Pythagorean Theorem G-SRT.8 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Demonstrate that within a right triangle, line segments parallel to a leg create similar triangles by angle-angle similarity. G-SRT.6 ○ Identify complementary angles between right triangles. G-SRT.7 ○ Use angle measure to estimate side lengths (e.g., the side across from a 33° angle will be shorter than the side across from a 57° angle). G-SRT.8 ○ Use side lengths to estimate angle measures (e.g., the angle opposite of a 10cm side will be larger than the angle across from a 9cm side). G-SRT.8 ○ Use the Pythagorean Theorem to solve for an unknown side length of a right triangle. G-SRT.8
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



SIMILARITY, RIGHT TRIANGLES, AND TRIGONOMETRY

Apply trigonometry to general triangles.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-SRT.9 (+) Derive the formula $A = 1/2 ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side. G-SRT.10 (+) Prove the Laws of Sines and Cosines and use them to solve problems. G-SRT.11 (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Vertex G-SRT.9 Perpendicular G-SRT.9 Altitude G-SRT.9, G-SRT.10 Sine Ratio G-SRT.9 Law of Sines G-SRT.10, G-SRT.11 Law of Cosines G-SRT.10, G-SRT.11 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Understand that two right triangles are created when an altitude is drawn from a vertex. G-SRT.9 Identify missing angles and angle measurements in a triangle and determine if the Law of Sines or Cosines would best be used to determine the missing measurement. G-SRT.10 Determine real-world locations where the Law of Sines and Cosines could be used to solve a problem. G-SRT.11 Use the triangle inequality and side/angle relationships (e.g., largest angle is opposite the largest side) to estimate the measures of unknown sides and angles. G-SRT.11
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CIRCLES

Understand and apply theorems about circles.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • G-C.1 Prove that all circles are similar. • G-C.2 Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. • G-C.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. • G-C.4 (+) Construct a tangent line from a point outside a given circle to the circle.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Circle G-C.1, G-C.2, G-C.4 ○ Similar Figures G-C.1 ○ Central Angle G-C.2 ○ Inscribed Angle G-C.2, G-C.3 ○ Circumscribed Angle G-C.2 ○ Diameter G-C.2 ○ Radius G-C.2, G-C.4 ○ Chord G-C.2 ○ Tangent G-C.2, G-C.4 ○ Angle Bisector G-C.3 ○ Perpendicular Bisector G-C.3 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify properties that circles share. G-C.1 ○ Identify central angles, inscribed angles, circumscribed angles, diameters, radii, chords, and tangents. G-C.2 ○ Construct perpendicular and angle bisectors for a triangle. G-C.3 ○ Identify and define a tangent line. G-C.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CIRCLES

Find arc lengths and areas of sectors of circles.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-C.5 Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Similarity G-C.5 Angle Measure G-C.5 Arc G-C.5 Radian G-C.5 Sector G-C.5 Intercepted Arc G-C.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Define similarity as rigid motions with dilation, which preserves angle measures and makes length proportional. G-C.5 Convert degrees to radians using the constant of proportionality. G-C.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



EXPRESSING GEOMETRIC PROPERTIES WITH EQUATIONS

Translate between the geometric description and the equation for a conic section.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-GPE.1 Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. G-GPE.2 Derive the equation of a parabola given a focus and directrix.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Pythagorean Theorem G-GPE.1 Coordinates G-GPE.1 Hypotenuse G-GPE.1 Radius G-GPE.1 Parabola G-GPE.2 Focus G-GPE.2 Directrix G-GPE.2 Distance Formula G-GPE.2 Factor G-GPE.2 Perfect Square Trinomial G-GPE.2 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the center and radius of a circle given its equation. G-GPE.1 Draw a right triangle with a horizontal leg, a vertical leg, and the radius of a circle as its hypotenuse. G-GPE.1 Use the Pythagorean Theorem to identify the missing length on a right triangle. G-GPE.1 Find the distance from a point on a parabola (x,y) to the focus using the distance formula (Pythagorean Theorem). G-GPE.2 Find the distance from a point on a parabola (x,y) to the directrix. G-GPE.2
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

EXPRESSING GEOMETRIC PROPERTIES WITH EQUATIONS

Use coordinates to prove simple geometric theorems algebraically.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-GPE.4 Use coordinates to prove simple geometric theorems algebraically. <i>For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.</i> G-GPE.5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). G-GPE.6 Find the point on a directed line segment between two given points that partitions the segment in a given ratio. G-GPE.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.*

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Side Length G-GPE.4 Vertex G-GPE.4 First Quadrant G-GPE.4 Slope G-GPE.4, G-GPE.5 Perpendicular G-GPE.5 Slope-Intercept Form G-GPE.5 Point-Slope Form G-GPE.5 Directed Line Segment G-GPE.5 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Represent the vertices of a figure in the coordinate plane using variables G-GPE.4 Connect a property of a figure to the tool needed to verify that property. G-GPE.4 Draw a line on a coordinate plane and translate that line to the produce its image. G-GPE.5 Explain that these lines are parallel since translations preserve angle. G-GPE.5 State that parallel lines have the same slope. G-GPE.5 Draw a line on a coordinate plane and rotate that line 90° to produce a perpendicular image. G-GPE.5 State that perpendicular lines have the opposite reciprocal slopes. G-GPE.5 Correctly identify the formula used to partition a line segment into a given ratio. G-GPE.6 Identify the coordinates of vertices of a polygon graphed in a coordinate plane. G-GPE.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRIC MEASURE AND DIMENSION

Explain volume formulas and use them to solve problems.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-GMD.1 Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i> G-GMD.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Pi G-GMD.1 Circumference G-GMD.1 Diameter G-GMD.1 Dissection G-GMD.1 Volume G-GMD.1, G-GMD.3 Radius G-GMD.1 Cylinder G-GMD.3 Pyramid G-GMD.3 Cone G-GMD.3 Sphere G-GMD.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the radius, diameter and circumference of a circle and investigate connections between the diameter and circumference of a circle. G-GMD.1 Inscribe a regular polygon in a circle and break it into many congruent triangles to find its area. G-GMD.1 Identify the base for prisms, cylinders, pyramids, and cones. G-GMD.1 Calculate the area of the base for prisms, cylinders, pyramids, and cones. G-GMD.1 Identify which formula is best used to solve for the volume of a specific three-dimensional object (remember: two-dimensional figures can be "stacked" to create three-dimensional objects and generate volume formulas). G-GMD.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOMETRIC MEASURE AND DIMENSION

Visualize relationships between two-dimensional and three-dimensional objects.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> G-GMD.4 Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Cross-section G-GMD.4 Rotate G-GMD.4 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the shapes of two-dimensional cross-sections of three-dimensional objects (e.g., The cross-section of a sphere is a circle and the cross-section of a rectangular prism is a rectangle, triangle, pentagon or hexagon.). G-GMD.4
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



MODELING WITH GEOMETRY

Apply geometric concepts in modeling situations.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: G-MG.1 Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder). G-MG.2 Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot). G-MG.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognize and recall specific terminology such as: <ul style="list-style-type: none"> Circumference G-MG.1 Area G-MG.1, G-MG.2 Perimeter G-MG.1 Volume G-MG.1, G-MG.2 Density G-MG.2 Geometric Model G-MG.3 Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Estimate measures (circumference, area, perimeter, volume) of real-world objects using comparable geometric shapes or three-dimensional figures. G-MG.1 Break composite geometric figures into manageable pieces. G-MG.2 Convert units of measure (e.g., convert square feet to square miles). G-GM.2 Create a visual representation of a design problem. G-GM.3
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CONDITIONAL PROBABILITY AND THE RULES OF PROBABILITY

Understand independence and conditional probability and use them to interpret data.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> • S-CP.1 Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). • S-CP.2 Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. • S-CP.3 Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. • S-CP.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</i> • S-CP.5 Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Event S-CP.1, S-CP.2, S-CP.4 ○ Sample Space S-CP.1 ○ Subset S-CP.1 ○ Union S-CP.1 ○ Intersection S-CP.1 ○ Complement S-CP.1 ○ Independent Events S-CP.2, S-CP.3, S-CP.4, S-CP.5 ○ Probability S-CP.2, S-CP.3, S-CP.4 ○ Conditional Probability S-CP.3, S-CP.4, S-CP.5 ○ Dependent Events S-CP.3, S-CP.5 ○ Two-way Frequency Table S-CP.4 ○ Random Sample S-CP.4 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Establish events as subsets of a sample space. S-CP.1 ○ Explain and provide an example to illustrate that for two independent events, the probability of the events occurring together is the product of the probability of each event. S-CP.2 ○ Explain that conditional probability is the probability of an event occurring given the occurrence of some other event and give examples that illustrate conditional probability. S-CP.3 ○ Construct a two-way frequency table for the data using the appropriate categories for each variable. S-CP.4 ○ Identify everyday situations that are more or less likely to happen due to a connection between another event. S-CP.5
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



CONDITIONAL PROBABILITY AND THE RULES OF PROBABILITY

Use the rules of probability to compute probabilities of compound events in a uniform probability model.

Evidence shows student has met or exceeded the learning

Evidence shows misunderstanding, misconceptions, or

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • S-CP.6 Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. • S-CP.7 Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. • S-CP.8 (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)$, and interpret the answer in terms of the model. • S-CP.9 (+) Use permutations and combinations to compute probabilities of compound events and solve problems.

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ◦ Probability S-CP.6, S-CP.7, S-CP.8, S-CP.9 ◦ Event S-CP.6, S-CP.7, S-CP.8 ◦ Dependent Event S-CP.6 ◦ Conditional Probability S-CP.6 ◦ Intersection S-CP.6, S-CP.7, S-CP.8 ◦ Set S-CP.6 ◦ Union S-CP.6 ◦ Addition Rule S-CP.6 ◦ General Multiplication Rule S-CP.8 ◦ Fundamental Counting Principle S-CP.9 ◦ Outcomes S-CP.9 ◦ Sample Space S-CP.9 ◦ Permutation S-CP.9 ◦ Combination S-CP.9 ◦ Compound Event S-CP.9 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Calculate the probability of the intersection of two events. S-CP.6 ◦ Calculate the probability of two events both occurring, $P(A \text{ and } B)$. S-CP.7, S-CP.8 ◦ Distinguish between situations that require permutations and those that require combinations. S-CP.9 ◦ Apply the fundamental counting principle to find the total number of possible outcomes in a sample space. S-CP.9
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

USE PROBABILITY TO MAKE DECISIONS
Use probability to evaluate outcomes of decisions.

Evidence shows student has met or exceeded the learning

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • S-MD.6 (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). • S-MD.7 (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).

Evidence shows misunderstanding, misconceptions, or

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognize and recall specific terminology such as: <ul style="list-style-type: none"> ○ Sample Space S-MD.6, S-MD.7 ○ Probability S-MD.6, S-MD.7 ○ Event S-MD.6, S-MD.7 ○ Simulation S-MD.6 ○ Fair S-MD.6 • Perform basic processes and recognize and recall the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Explain what fractional and decimal probability representations mean in situations ($\frac{1}{4}$ or .25 demonstrate a 25% chance of an event). S-MD.6 ○ Predict what information you would want to know before making a decision (e.g., You need to foul a basketball player to stop the clock; you may want to know which player had the worst free throw percentage.). S-MD.7
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



KINDERGARTEN

Science Grade Level Content

Michigan Alignment

NATIONAL HERITAGE ACADEMIES CURRICULUM

MICHIGAN KINDERGARTEN ALIGNMENT

SCIENCE

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis</p> <p>The Living Environment Animal Body Structures and Functions Classification Needs of Organisms Ecosystems Life Cycles of Plants and Animals</p> <p>Physical Science Magnetism</p> <p>Earth and Space Science Weather and Climate</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Force and Motion Position Gravity Force</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Life Requirements</p> <p>Discipline 4: Earth Science Standard: Solid Earth Earth Materials</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Kindergarten

UNIT: Introduction to Animals (Foss Learning Kit: Animals Two by Two)

NHA Science Content	NHA Objectives	MI GLCE
Comparing and Contrasting Organisms <ul style="list-style-type: none"> Living and nonliving characteristics that indicate something is/was (even after death) an organism as opposed to an inanimate object 	The Living Environment, Animal Body Structures and Functions Identify structures specific to a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region	MI.L.OL.00.12 Identify and compare living and nonliving things
Comparing and Contrasting Organisms <ul style="list-style-type: none"> Plants and animals Wild and tame animals Currently living vs. extinct Fairy tale animals vs. actual Body coverings (e.g. animals with fur vs. feathers or scales, etc.) Body features such as size, shape, color Appendages Methods of movement 	The Living Environment, Classification Categorize organisms based on a variety of simple criteria (e.g., body features, appendages, methods of movement, body covering)	MI.L.OL.00.12 Identify and compare living and nonliving things
Needs of Organisms <ul style="list-style-type: none"> Animals <ul style="list-style-type: none"> Food, water, air, shelter <ul style="list-style-type: none"> Every living thing needs food to be able to grow and move 	The Living Environment, Needs of Organisms Describe the basic needs of a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region	MI.L.OL.00.11 Identify that living things have basic needs.
Needs of Organisms <ul style="list-style-type: none"> Animals <ul style="list-style-type: none"> Food, water, air, shelter <ul style="list-style-type: none"> Every living thing needs food to be able to grow and move 	The Living Environment, Needs of Organisms Explain how food is used by animals	MI.L.OL.00.11 Identify that living things have basic needs.

<p>Needs of Organisms</p> <ul style="list-style-type: none"> Humans <ul style="list-style-type: none"> Food, water, air, shelter Following safety and security rules Personal hygiene <ul style="list-style-type: none"> Dental hygiene Hand washing and showers Exercise Good nutrition Avoiding harmful substances 	<p>The Living Environment, Needs of Organisms Compare and contrast the needs of animals with the needs of humans which include safety precautions, good hygiene and healthy habits</p>	<p>MI.L.OL.00.11 Identify that living things have basic needs.</p>
<p>Needs of Organisms</p> <ul style="list-style-type: none"> Animals <p>Animal behavior is related to needs</p>	<p>The Living Environment, Ecosystems Describe how the behavior of animals is influenced by the conditions of their environment</p>	<p>MI.L.OL.00.11 Identify that living things have basic needs.</p>
<p>Animal Life Cycles</p> <ul style="list-style-type: none"> Changes observed over time in objects around us <ul style="list-style-type: none"> Humans Common animals such as butterflies and frogs 	<p>The Living Environment, Life Cycles of Plants and Animals Describe the basic differences in life cycles of common animals, including humans, as they grow and develop over time</p>	<p>MI.L.OL.01.21 Describe the life cycle of animals including the following stages: egg, young, adult; egg, larva, pupa, adult.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>5 Senses</p> <ul style="list-style-type: none"> Identifying the senses (taste, touch, smell, hearing, sight) Matching senses to sensing organs Describing properties of materials using senses <ul style="list-style-type: none"> Taste (sweet, sour, bitter, etc.) Touch (smooth, rough, hot, cold, etc.) Smell (food smells, bad smells, etc.) Hearing (loud, soft, etc.) Sight (bright, dull, shiny, colors, etc.) 	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events and identify this as something that scientists do to gain knowledge about the world</p>	<p>MI.L.OL.00.12 Identify and compare living and nonliving things</p>

<p>Science Inquiry</p> <ul style="list-style-type: none"> • Data collection of observations and experiments includes drawings, journaling, and basic graphing <ul style="list-style-type: none"> – Describing things accurately is important in science because it enables people to compare their observations with those of others 	<p>The Nature of Science, Scientific Inquiry- Data Collection</p> <p>Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations</p>	<p>MI.S.IA.00.12 Share ideas about science through purposeful conversation</p> <p>MI.S.IA.00.13 Communicate and present findings of observations</p> <p>MI.S.RS.00.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p> <p>MI.S.IP.00.16 Construct simple charts from data and observations.</p>
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NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Kindergarten

UNIT: How Do We Learn (Delta Learning Kit: How Do We Learn)

NHA Science Content	NHA Objectives	MI GLCE
<p>5 Senses</p> <ul style="list-style-type: none"> Identifying the senses (taste, touch, smell, hearing, sight) Matching senses to sensing organs Describing properties of materials using senses <ul style="list-style-type: none"> Taste (sweet, sour, bitter, etc.) Touch (smooth, rough, hot, cold, etc.) Smell (food smells, bad smells, etc.) Hearing (loud, soft, etc.) <p>Sight (bright, dull, shiny, colors, etc.)</p>	<p>The Nature of Science – Scientific Inquiry – The Scientific Method</p> <p>Make observations related to the 5 senses about living things, nonliving objects, and events and identify this as something that scientists do to gain knowledge about the world</p>	<p>MI.S.IP.00.11 Make purposeful observation of the natural world using the appropriate senses.</p>
<p>Science Inquiry</p> <ul style="list-style-type: none"> Observations lead to questions and experiments <ul style="list-style-type: none"> People can learn about things by observation, but sometimes they can learn more by doing something to the thing and observing what happens 	<p>The Nature of Science – Scientific Inquiry – The Scientific Method</p> <p>Generate basic questions (who, what, when, where, why, and “I wonder...”) from observations of the natural world</p>	<p>MI.S.IP.00.12 Generate questions based on observations.</p>
<p>Science Inquiry</p> <ul style="list-style-type: none"> Data collection of observations and experiments includes drawings, journaling, and basic graphing <ul style="list-style-type: none"> Describing things accurately is important in science because it enables people to compare their observations with those of others 	<p>The Nature of Science – Scientific Inquiry – Data Collection and Analysis</p> <p>Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations</p>	<p>MI.S.IA.00.12 Share ideas about science through purposeful conversation MI.S.IA.00.13 Communicate and present findings of observations MI.S.IA.00.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video). MI.S.RS.00.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities. MI.S.IP.00.16 Construct simple charts from data and observations.</p>

<p>Extending the Senses with Tools</p> <ul style="list-style-type: none"> • Proper use of thermometers, magnifiers, rulers, scales to explore properties <ul style="list-style-type: none"> – Tools give us more information than can be gotten with our senses • Science tools vs. construction tools <ul style="list-style-type: none"> – Rulers, magnifiers, thermometers, hammers, pliers, screwdrivers – Construction tools are used to do things better or more easily or to do things that could not have been done at all without them 	<p>The Nature of Science – Scientific Inquiry – Data Collection and Analysis Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects</p>	<p>MI.S.IP.00.14 Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.</p>
<p>Measurement</p> <ul style="list-style-type: none"> • Size <ul style="list-style-type: none"> – Measurement using student made units, centimeter, inches and feet • Capacity <ul style="list-style-type: none"> – Measurement using tablespoons, teaspoons, cups quarts, gallons, milliliters, liters • Weight <ul style="list-style-type: none"> – Measurement using pounds – Note- a balance can compare weights, but it is technically used to measure mass 	<p>The Nature of Science – Scientific Inquiry – Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments</p>	<p>MI.S.IP.00.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Kindergarten

UNIT: Magnetism

NHA Science Content	NHA Objectives	MI GLCE
<p>Interaction: Magnets and Non-magnets</p> <ul style="list-style-type: none"> • Effect on some objects whether touching or not • Attraction vs. repelling • Objects affected by magnets <ul style="list-style-type: none"> – Cobalt – Iron – Nickel 	<p>Physical Science, Magnetism Explain the effect of magnets on certain objects whether touching or not</p>	<p>MI.P.PM.01.32 Observe that like poles of a magnet repel and unlike poles of a magnet attract.</p>
<p>Uses of Magnets</p> <ul style="list-style-type: none"> • Can openers, refrigerator magnets, paper clip holders 	<p>Physical Science, Magnetism Describe some real-world applications of magnets</p>	<p>MI.P.PM.01.32 Observe that like poles of a magnet repel and unlike poles of a magnet attract.</p>
<p>Magnet Safety</p> <ul style="list-style-type: none"> • Can damage most electrical devices <ul style="list-style-type: none"> – Television screens – Computer monitors <p>CD's, DVD's and tapes</p>	<p>Physical Science, Magnetism Recall objects that can be damaged by exposure to magnets</p>	<p style="color: red;">There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Kindergarten

UNIT: Seasons

NHA Science Content	NHA Objectives	MI GLCE
<p>Four Seasons</p> <ul style="list-style-type: none"> Characteristic local weather patterns during the different seasons 	<p>Earth and Space Science, Weather and Climate Observe and describe the cyclical pattern of seasons</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Life Process Connections</p> <ul style="list-style-type: none"> Spring <ul style="list-style-type: none"> Sprouting Sap flow in plants Hatching Summer <ul style="list-style-type: none"> Growth Fall <ul style="list-style-type: none"> Ripening Leaves changing color and falling Migration Winter <ul style="list-style-type: none"> Plant dormancy Animal hibernation 	<p>Earth and Space Science, Weather and Climate Correlate the different seasons with different life processes in plants and animals</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice investigating, measuring, graphing, etc. related to the content.</p>		
<p>Science Inquiry</p> <ul style="list-style-type: none"> Observations lead to questions and experiments <ul style="list-style-type: none"> People can learn about things by observation, but sometimes they can learn more by doing something to the thing and observing what happens 	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Generate basic questions (who, what, when, where, why, and “I wonder...”) from observations of the natural world</p>	<p>MI.S.IP.00.12 Generate questions based on observations.</p>

<p>Science Inquiry</p> <ul style="list-style-type: none"> Data collection of observations and experiments includes drawings, journaling, and basic graphing <p>Describing things accurately is important in science because it enables people to compare their observations with those of others</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection</p> <p>Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations</p>	<p>MI.S.IA.00.12 Share ideas about science through purposeful conversation</p> <p>MI.S.IA.00.13 Communicate and present findings of observations</p> <p>MI.S.RS.00.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p> <p>MI.S.IP.00.16 Construct simple charts from data and observations.</p>
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Kindergarten

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Personal Appearance</p> <ul style="list-style-type: none"> • Hygiene <ul style="list-style-type: none"> - Washing hands - Blowing nose - Using toilet - Brushing teeth • Importance of having good hygiene <ul style="list-style-type: none"> - Avoiding illness - Sanitation • Clothing <ul style="list-style-type: none"> - Wearing appropriate clothing for weather - Tying shoes <p>Healthy Diet</p> <ul style="list-style-type: none"> • Nutrition <ul style="list-style-type: none"> - How our body uses food - Healthy vs. unhealthy food <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Safety <ul style="list-style-type: none"> - Traffic/pedestrian safety - Playground/classroom /home safety - Appropriate touch - Strangers - Recognition of dangerous objects and substances • Emergency Situations <ul style="list-style-type: none"> - Routines for fire drills/tornado drills - Calling 911 - Police officers/fire fighters <p>Healthy Practices</p> <ul style="list-style-type: none"> • Exercise • Avoidance of dangerous substances 	<p>Strand 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Describe how consuming a variety of healthy foods and beverages helps a person stay healthy.</p> <p>1.2 Describe how being physically active helps a person stay healthy.</p> <p>1.3 Describe how drinking water helps a person stay healthy.</p> <p>Standard 3: Health Behaviors</p> <p>1.4 Generate examples of physical activities that are personally enjoyable.</p> <p>1.5 Select a variety of foods that can be eaten for healthy snacks.</p> <p>Strand 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Identify household products that are harmful if touched, ingested, or inhaled.</p> <p>2.2 Describe ways that over-the-counter and prescription medicines can be helpful or harmful.</p> <p>Standard 2: Access Information</p> <p>2.3 Identify trustworthy sources of accurate information about potentially poisonous household products.</p> <p>Standard 3: Health Behaviors</p> <p>2.4 Explain rules for handling household products and avoiding poisons.</p> <p>2.5 Describe how to safely use medicines.</p> <p>Strand 3: Safety</p> <p>Standard 1: Core Concepts</p> <p>3.1 Describe pedestrian hazards and safe pedestrian behaviors.</p> <p>3.2 Identify dangerous objects and weapons.</p> <p>3.3 Describe the characteristics of appropriate touch and inappropriate touch.</p> <p>3.4 Explain that a child is not at fault if someone touches him or her in an inappropriate way.</p>

- Drugs/alcohol

Healthy Minds

- Appropriate television use
- Healthy sleeping habits
- Interacting with others
 - Sharing feelings
 - Coping with change
 - Role of family

Standard 2: Access Information

3.5 Demonstrate the procedure for calling 911 and explain when it is appropriate to do so.

3.6 Demonstrate how to ask trusted adults for help.

Standard 3: Health Behaviors

3.7 Demonstrate safe pedestrian behaviors.

3.8 Describe dangerous and destructive situations that need to be reported to an adult.

3.9 Apply a rule and demonstrate actions to use in hypothetical situations when weapons may be present.

3.10 Generate examples of safe places one might go if feeling personally threatened.

3.11 Apply strategies to avoid personally unsafe situations.

3.12 Apply strategies to get away in hypothetical cases of inappropriate touching or abduction.

Strand 4: Social and Emotional Health

Standard 1: Core Concepts

4.1 Identify and describe different kinds of feelings.

Standard 2: Access Information

4.2 Identify and locate people who can help at home and school.

Standard 3: Health Behaviors

4.3 Describe and demonstrate ways to be responsible at home and school.

4.4 Demonstrate the ability to recognize and express a variety of feelings appropriately.

4.5 Identify and demonstrate strategies to manage strong feelings.

Standard 7: Social Skills

4.6 Identify and practice strategies to make friends.

4.7 Demonstrate giving and accepting a compliment or statement of appreciation.

4.8 Describe situations when it is appropriate to use “please,” “thank you,” “excuse me,” and “I am sorry.”

4.9 Apply “please,” “thank you,” “excuse me,” and “I am sorry” to appropriate situations.

Strand 5: Personal Health and Wellness

Standard 1: Core Concepts

5.1 Explain the importance of taking care of teeth and having one’s own

toothbrush to prevent disease.
5.2 Explain the importance of dental health cleanings and exams.
5.3 Explain the importance of proper hand washing to prevent disease.

Standard 3: Health Behaviors

5.4 Demonstrate proper tooth brushing techniques.
5.5 Demonstrate proper hand washing to prevent the spread of germs.

Standard 8: Advocacy

5.6 Encourage peers to make positive choices for personal health and wellness.

NHA Science Michigan Alignment
Kindergarten

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 1

MI.E.SE.00.11 Identify Earth materials that occur in nature (sand, rocks, soil, water). (The Surface of Earth Unit)

NHA Grade 2

MI.P.FM.00.11 Describe the position of an object (for example: above, below, in front of, behind, on) in relation to other objects around it. (Motion and Forces Unit)

MI.P.FM.00.12 Describe the direction of a moving object (for example: away from or closer to) from different observers' views. (Motion and Forces Unit)

MI.P.FM.00.21 Observe how objects fall toward the earth. (Motion and Forces Unit)

MI.P.FM.00.31 Demonstrate pushes and pulls on objects that can move. (Motion and Forces Unit)

MI.P.FM.00.32 Observe that objects initially at rest will move in the direction of the push or pull. (Motion and Forces Unit)

MI.P.FM.00.33 Observe how pushes and pulls can change the speed or direction of moving objects. (Motion and Forces Unit)

MI.P.FM.00.34 Observe how shape (for example: cone, cylinder, sphere) and mass of an object can affect motion. (Motion and Forces Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.

Science Vertical Alignment- Michigan

Measurement Topic	K	1	2	3	4	5	6	7	8
The Nature of Science									
Scientific Knowledge		+	+	+	+	+	+	+	+
Scientific Inquiry- The Scientific Method	+	+	+	+	+	+	+	+	+
Scientific Inquiry- Data collection and Analysis	+	+	+	+	+	+	+	+	+
Scientific Enterprise - Science and Society				+	+	+	+	+	+
Common Themes in Science		+	+	+	+	+	+	+	+
Engineering and Technology									
Technology				+		+	+		
Engineering		+				+	+		
The Living Environment									
Classification	+			+					
Needs of Organisms	+		+		+				
Life Cycles of Plants and Animals	+		+		+				
Plant Structures and Functions			+		+				
Animal Body Structures and Functions	+			+	+	+	+		+
Plant and Animal Adaptations		+			+				+
Fossils and Extinction		+			+				+
Food Chains and Webs		+			+		+		
Ecosystems	+	+			+		+		
Genetics and Heredity		+			+		+	+	
Cell Theory								+	
Cell Structure and Function								+	
Physical Science									
Atoms and Molecules								+	
Properties of Materials		+	+		+			+	
Physical States and Changes			+		+			+	
Chemical Changes					+				
Mixtures and Solutions			+			+		+	
Forms of Energy and their Interactions			+		+		+	+	
Energy Resources			+				+		
Electricity					+				+
Magnetism	+				+				
Sound				+			+		
Light				+			+		
Measuring Motion			+	+				+	
Forces Effect on Motion			+	+				+	
Simple Machines			+						
Earth and Space Science									
The Changing Earth		+		+			+		
Earth Materials and Responsible Use		+		+	+		+		
Water on Earth			+			+		+	
Atmosphere		+						+	
Weather and Climate	+	+				+		+	
Daily Weather Measurement		+							
Characteristics of Objects in Space		+		+					+
Interaction of the Sun, Earth and Moon		+		+					+
Earth Systems									+

Vertical Alignment for the Measurement Topic: <i>Scientific Knowledge</i>	
Grade Eight	<ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables (UNITS: Introduction to Science, Earth Systems, Electricity and Magnetism) Trace the development of an idea to a scientific theory (UNITS: Introduction to Science, Earth in Space, Species Over Time)
Grade Seven	<ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables (UNITS: Introduction to Science, Motion and Forces) Trace the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNITS: Introduction to Science, Chemistry)
Grade Six	<ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound) Trace the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Grade Five	<ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies (UNIT: Introduction to Science) Construct reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (UNIT: Introduction to Science) Differentiate between observation and inference in scientific explanations (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Introduction to Science)
Grade Four	<ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies (UNITS: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) Construct reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (UNITS: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) Differentiate between observation and inference in scientific explanations (UNIT: Introduction to Science)
Grade Three	<ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies (UNITS: Introduction to Science, Sound, Motion and Forces) Construct reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (UNITS: Introduction to Science, Sound, Motion and Forces) Differentiate between observation and inference in scientific explanations (UNIT: Introduction to Science)
Grade Two	<ul style="list-style-type: none"> Describe the consistency of the results of a experiment conducted multiple times (UNITS: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces) Communicate a scientific idea using evidence (UNITS: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)
Grade One	<ul style="list-style-type: none"> Describe the consistency of the results of a experiment conducted multiple times (UNITS: Introduction to Science, Weather) Communicate a scientific idea using evidence (UNITS: Introduction to Science, Weather)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Scientific Inquiry- The Scientific Method</i>	
Grade Eight	<ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypotheses that cannot be examined scientifically (UNITS: Introduction to Science, Electricity and Magnetism, Earth Systems) Explain why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (UNITS: Introduction to Science, Electricity and Magnetism, Earth Systems) Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (UNITS: Introduction to Science, Electricity and Magnetism, Earth Systems)
Grade Seven	<ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypotheses that cannot be examined scientifically (UNITS: Introduction to Science, Motion and Forces) Explain why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (UNITS: Introduction to Science, Motion and Forces) Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (UNITS: Introduction to Science, Motion and Forces)
Grade Six	<ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypotheses that cannot be examined scientifically (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound) Explain why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound) Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound)
Grade Five	<ul style="list-style-type: none"> Propose and test independent and dependent variables in a controlled experiment (UNIT: Introduction to Science)
Grade Four	<ul style="list-style-type: none"> Plan and conduct simple investigations (<i>e.g., formulating a testable question, planning a fair test, making systematic observations, and developing logical conclusions</i>) (UNITS: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy)
Grade Three	<ul style="list-style-type: none"> Plan and conduct simple investigations (<i>e.g., formulating a testable question, planning a fair test, making systematic observations, and developing logical conclusions</i>) (UNITS: Introduction to Science, Sound, Motion and Forces)
Grade Two	<ul style="list-style-type: none"> Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world (UNITS: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces) Make observations related to the 5 senses about living things, nonliving objects, and events (UNITS: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)
Grade One	<ul style="list-style-type: none"> Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world (UNITS: Introduction to Science, Weather) Make observations related to the 5 senses about living things, nonliving objects, and events (UNITS: Introduction to Science, Weather)
Kindergarten	<ul style="list-style-type: none"> Generate basic questions (who, what, when, where, why, and "I wonder...") from observations of the natural world (UNITS: How Do We Learn, Seasons) Make observations related to the 5 senses about living things, nonliving objects, and events and identify this as something that scientists do to gain knowledge about the world (UNITS: How Do We Learn, Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Scientific Inquiry- Data Collection and Analysis</i>	
Grade Eight	<ul style="list-style-type: none"> • Use appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) • Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (UNIT: Introduction to Science) • Organize, display, and interpret scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (UNITS: Introduction to Science, Earth Systems, Electricity and Magnetism) • Interpret and evaluate tables, charts, and graphs produced by others (UNITS: Introduction to Science, Earth Systems, Electricity and Magnetism) • Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (UNITS: Introduction to Science, Earth Systems, Electricity and Magnetism)
Grade Seven	<ul style="list-style-type: none"> • Use appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) • Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Introduction to Science) • Organize, display, and interpret scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (UNITS: Introduction to Science, Motion and Forces) • Interpret and evaluate tables, charts, and graphs produced by others (UNITS: Introduction to Science, Motion and Forces) • Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (UNITS: Introduction to Science, Motion and Forces)
Grade Six	<ul style="list-style-type: none"> • Use appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) • Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (UNIT: Introduction to Science) • Organize, display, and interpret scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound) • Interpret and evaluate tables, charts, and graphs produced by others (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound) • Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (UNITS: Introduction to Science, Models and Design, Ecosystems, Sound)
Grade Five	<ul style="list-style-type: none"> • Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (UNIT: Introduction to Science) • Safely use appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicate the results of investigations and describe the investigations in ways that enable others to repeat them (UNIT: Introduction to Science) • Organize, display, and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (UNIT: Introduction to Science)
Grade Four	<ul style="list-style-type: none"> • Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (UNITS: Introduction to Science, Properties of Materials, Animal Adaptations, Plants, Electricity and Magnetism, Energy) • Safely use appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicate the results of investigations and describe the investigations in ways that enable others to repeat them (UNITS: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) • Organize, display, and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (UNITS: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy)
Grade Three	<ul style="list-style-type: none"> • Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (UNITS: Introduction to Science, Sound, Motion and Forces) • Safely use appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicate the results of investigations and describe the investigations in ways that enable others to repeat them (UNITS: Introduction to Science, Sound, Motion and Forces) • Organize, display, and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (UNITS: Introduction to Science, Sound, Motion and Forces)
Grade Two	<ul style="list-style-type: none"> • Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (UNITS: Introduction to Science; Matter, Mixtures, and Changes)

	<ul style="list-style-type: none"> • Safely use tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (UNIT: Introduction to Science) • Record and communicate findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs (UNITS: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)
Grade One	<ul style="list-style-type: none"> • Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (UNITS: Introduction to Science, Properties, Weather, The Surface of Earth) • Safely use tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (UNITS: Introduction to Science, Properties) • Record and communicate findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs (UNITS: Introduction to Science, Weather)
Kindergarten	<ul style="list-style-type: none"> • Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (UNIT: How Do We Learn) • Safely use tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (UNIT: How Do We Learn) • Record and communicate findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations (UNITS: How Do We Learn, Introduction to animals, Seasons)

Vertical Alignment for the Measurement Topic: <i>Scientific Enterprise- Science and Society</i>	
Grade Eight	<ul style="list-style-type: none"> Describe ways in which science and society influence one another (UNITS: Introduction to Science, Earth Systems, Body Systems) Describe the diverse nature of science and scientists past and present (UNITS: Introduction to Science, Earth in Space, Earth Systems, Classification, Species Over Time, Body Systems)
Grade Seven	<ul style="list-style-type: none"> Describe ways in which science and society influence one another (UNITS: Introduction to Science, Heredity) Describe the diverse nature of science and scientists past and present (UNITS: Introduction to Science, Cells, Heredity, Chemistry, Motion and Forces)
Grade Six	<ul style="list-style-type: none"> Describe ways in which science and society influence one another (UNITS: Introduction to Science, Energy, Geology, Ecosystems) Describe the diverse nature of science and scientists past and present (UNITS: Introduction to Science, Geology, Ecosystems, Light)
Grade Five	<ul style="list-style-type: none"> Identify scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (UNITS: Introduction to Science, Technological Design, Body Systems)
Grade Four	<ul style="list-style-type: none"> Identify scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (UNITS: Introduction to Science, Electricity and Magnetism, Species Over time, Ecosystems, Conservation of Natural Resources)
Grade Three	<ul style="list-style-type: none"> Identify scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (UNITS: Introduction to Science, Classification, Earth in Space, Light, Rocks and Minerals, The Changing Surface of Earth)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Common Themes in Science</i>	
Grade Eight	<ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system (UNITS: Introduction to Science, Earth in Space, Body Systems) Measure and graph change over time and analyze the results to determine patterns and trends or predict events (UNITS: Introduction to Science, Earth in Space, Body Systems, Species Over Time) Compare and contrast the properties of objects as they change in scale (UNITS: Introduction to Science, Earth in Space, Earth Systems)
Grade Seven	<ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measure and graph change over time and analyze the results to determine patterns and trends or predict events (UNITS: Introduction to Science, Motion and Forces, Weather and Water) Compare and contrast the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Grade Six	<ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measure and graph change over time and analyze the results to determine patterns and trends or predict events (UNITS: Introduction to Science, Geology, Ecosystems) Compare and contrast the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Construct physical and conceptual models that mimic the characteristics of an unknown system and compare the model to the system (UNIT: Models and Design) Evaluate the usefulness of the model as a comparison tool (UNIT: Models and Design)
Grade Five	<ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describing the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain the role of models in studying objects, events, and processes (UNITS: Introduction to Science, Body Systems, Weather and Water)
Grade Four	<ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describing the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain the role of models in studying objects, events, and processes (UNITS: Introduction to Science, Properties of Materials, Electricity and Magnetism)
Grade Three	<ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describing the different ways they change (UNITS: Introduction to Science, Earth in Space, Rocks and Minerals, The Changing Surface, Motion and Forces) Identify objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain the role of models in studying objects, events, and processes (UNITS: Introduction to Science, Earth in Space, Rocks and Minerals, The Changing Surface, Motion and Forces)
Grade Two	<ul style="list-style-type: none"> Identify the parts of things and how one part connects to and affects another (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and record instances of things that change and the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe the different sizes, weights, ages and speeds of things observed (UNITS: Introduction to Science, Plants, Motion and Forces) Identify similarities and differences between a model of an object and the real thing (UNITS: Introduction to Science, Motion and Forces)
Grade One	<ul style="list-style-type: none"> Identify the parts of things and how one part connects to and affects another (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and record instances of things that change and the different ways they change (UNITS: Introduction to Science, Animal Adaptations, Weather, Ecosystems) Describe the different sizes, weights, ages and speeds of things observed (UNITS: Introduction to Science, Animal Adaptations, Earth in Space) Identify similarities and differences between a model of an object and the real thing (UNITS: Introduction to Science, Animal Adaptations)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Technology</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> • Evaluate various technologies in terms of drawbacks and benefits to society (Unit: Models and Design) • Explain how societies influence what types of technology are developed and used in a variety of fields (e.g. agriculture, manufacturing, etc.) (Unit: Models and Design) • Describe the similarities and differences between scientific inquiry and technological design (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (Unit: Models and Design)
Grade Five	<ul style="list-style-type: none"> • Describe positive and negative effects of technology on the environment and society (UNIT: Technological Design)
Grade Four	<ul style="list-style-type: none"> • S.RS.04.16 Identify technology used in everyday life (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (Unit: Introduction to Science) • S.RS.04.17 Identify current problems that may be solved through the use of technology (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (Unit: Introduction to Science)
Grade Three	<ul style="list-style-type: none"> • Describe some of the technologies that have advanced our knowledge of objects in space (UNIT: Earth in Space)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Engineering</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Develop a product that fulfills a set of requirements using a product development approach (i.e., design, construction of prototype, tests, evaluation of design, and redesign) (UNIT: Models and Design)
Grade Five	<ul style="list-style-type: none"> Describe the properties of materials that make them useful in design and construction (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Technological Design) Describe examples of mechanical systems that are designed to serve similar purposes as natural systems (UNIT: Technological Design) Design and construct something useful out of a variety of materials using a variety of tools and the design process (UNIT: Technological Design) Evaluate the usefulness of inventions and suggest ways that the product could be changed or improved (UNIT: Technological Design)
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe the relationship between the properties of a material and its typical uses and determine the best material for a specific use (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Properties) Compare and contrast manmade and natural materials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Properties)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Classification</i>	
Grade Eight	<i>Not Applicable as of 2013-14</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Classify organisms based on physical and environmental characteristics (<i>e.g., ecosystem, body structures</i>) (UNIT: Classification) Classify vertebrates and invertebrates on the basis of observable physical characteristics (UNIT: Classification)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<ul style="list-style-type: none"> Categorize organisms based on a variety of simple criteria (<i>e.g., body features, appendages, methods of movement, body covering</i>) (UNIT: Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Needs of Organisms</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Explain the necessity of food for the survival, growth, and repair of animals (UNIT: Ecosystems)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe evidence that plants are alive and need air, water, light, and nutrients to grow (UNIT: Plants)
Grade One	<i>Not Applicable</i>
Kindergarten	<ul style="list-style-type: none"> Describe the basic needs of a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region (UNIT: Introduction to Animals) Explain how food is used by animals (UNIT: Introduction to Animals) Compare and contrast the needs of animals with the needs of humans which include safety precautions, good hygiene and healthy habits(UNIT: Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Life Cycles of Plants and Animals</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Explain ways that the stages of an animal's life cycle (including humans) contribute to the survival of the animal (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations) Compare the life cycles of common annuals, biennials, and perennials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Plants)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe the changes observed in plants as they progress through their life cycle (UNIT: Plants)
Grade One	<i>Not Applicable</i>
Kindergarten	<ul style="list-style-type: none"> Describe the basic differences in life cycles of common animals, including humans, as they grow and develop over time (UNIT: Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Plant Structures and Functions</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Explain the function of each of the plant parts (<i>e.g., root, stem, leaves, or flower</i>) (UNIT: Plants) MI.L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers). (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe the structure and function of the stem, bulbs, and roots in the growth of new plants (UNIT: Plants) Compare and contrast flowering plants and grasses of different species in structure, life processes, and reaction to environmental influences (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Plants)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Animal Body Structures and Functions</i>	
Grade Eight	<ul style="list-style-type: none"> Describe the interaction between each of the human body systems, including homeostasis and the mechanisms that maintain the balance of body systems (UNIT: Body Systems) Compare the body systems of various animals and explain how differences relate to the needs of the animals in their habitats (UNIT: Body Systems)
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Analyze the form and function of the human eye (UNIT: Light)
Grade Five	<ul style="list-style-type: none"> Describe the functions of human body systems (<i>e.g., digestive, circulatory, respiratory</i>) and major organs of the body (<i>e.g., heart, lungs, skin</i>) (UNIT: Body Systems) MI.L.OL.05.42 Explain how animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive) work together to perform selected activities (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)
Grade Four	<ul style="list-style-type: none"> Identify the external structures in a variety of animals from around the world that perform particular functions critical to the survival of the animals (<i>e.g., sensing structures, body coverings and coloration</i>) (UNIT: Animal Adaptations)
Grade Three	<ul style="list-style-type: none"> Describe the parts of the ear and their functions (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Sound)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<ul style="list-style-type: none"> Identify structures specific to a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region (UNIT: Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Plant and Animal Adaptations</i>	
Grade Eight	<ul style="list-style-type: none"> Analyze the inherited and learned structures, behavior and physiology of organisms that contribute to survival in their particular environment (UNIT: Species Over Time)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> MI.L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.HE.05.11 Explain that the traits of an individual are influenced by both the environment and the genetics of the individual (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.HE.05.12 Distinguish between inherited and acquired traits (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.21 Relate degree of similarity in anatomical features to the classification of contemporary organisms (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.13 Describe how fossils provide evidence about how living things and environmental conditions have changed (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.14 Analyze the relationship of environmental change and catastrophic events (for example: volcanic eruption, floods, asteroid impacts, tsunami) to species extinction (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)
Grade Four	<ul style="list-style-type: none"> Identify the adaptive features (<i>e.g., camouflage, behaviors, weapons</i>) of animals native to common habitats around the world (UNIT: Animal Adaptations) Describe the adaptive features of plants native to habitats around the world (UNIT: Plants) Identify individual differences in organisms from the same population that could give them an advantage or disadvantage in the competition for resources and reproduction (UNIT: Species Over Time)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe the physical and behavioral characteristics of a variety of North American animals that help them survive in their particular environments (UNIT: Animal Adaptations) Identify the similarities and differences in features and characteristics of animals of the same species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Fossils and Extinction</i>	
Grade Eight	<ul style="list-style-type: none"> Describe how fossils provide evidence of the existence, diversification, and extinction of organisms from the past (UNIT: Species Over Time)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Analyze organisms and environmental conditions of the past using fossil evidence (UNIT: Species Over Time) Compare fossils with each other and with living organisms to determine similarities and differences (UNIT: Species Over Time) Describe processes (human related, natural events) that can lead to the extinction of a species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Species Over Time)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe fossils as evidence that there are kinds of animals that lived long ago that are no longer found on Earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Food Chains and Webs</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Analyze the food webs formed by the interactions of producers, carnivores, herbivores and decomposers in an ecosystem (UNIT: Ecosystems) Describe the process of photosynthesis (UNIT: Ecosystems) Describe the flow of energy through an ecosystem (UNIT: Ecosystems) Describe the cycle of nitrogen, carbon, and phosphorous in an ecosystem (UNIT: Ecosystems)
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Analyze the role of plants in food chains and webs (UNIT: Ecosystems) Classify various organisms as producers, herbivores, carnivores, omnivores, or decomposers (UNIT: Ecosystems) Compare and contrast simple food chains and food webs (UNIT: Ecosystems)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Classify animals as plant eaters, animal eaters, or both plant and animal eaters and identify their primary food source (UNIT: Ecosystems)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Ecosystems</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Analyze and describe the relationships among biotic and abiotic factors and their effects on populations of terrestrial and aquatic ecosystems (UNIT: Ecosystems) Analyze natural changes and human-caused changes in an ecosystem to evaluate, with evidential support, whether they are detrimental or beneficial to the survival of populations in that ecosystem (UNIT: Ecosystems) Analyze the ecological succession of a variety of environments (UNIT: Ecosystems)
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Describe components of an ecosystem that have an effect on the behavior and types of organisms in the ecosystem (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Classify the interaction of organisms (<i>e.g., predator/prey, beneficial to both organisms, beneficial to one and harmful to another, or beneficial to one and neither harmful nor helpful to another</i>) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Describe changes to an ecosystem from natural causes (<i>e.g., disease, fire, flood, erosion, drought, and succession</i>) (UNIT: Ecosystems) Describe changes to an ecosystem from human causes (UNIT: Ecosystems) Describe changes (beneficial, neutral or detrimental) caused by organisms in the ecosystem (UNIT: Ecosystems)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe evidence that all environments change as a result of the organisms living there (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems)
Kindergarten	<ul style="list-style-type: none"> Describe how the behavior of animals is influenced by the conditions of their environment (UNIT: Introduction to Animals)

Vertical Alignment for the Measurement Topic: <i>Genetics and Heredity</i>	
Grade Eight	<ul style="list-style-type: none"> Analyze the process of natural selection and evaluate evidence of it as a mechanism that leads to diversity of species over time (UNIT: Species Over Time) Explain the impact of both sexual and asexual reproduction on the spread of traits that are detrimental or beneficial for the survival of an organism (UNIT: Species Over Time)
Grade Seven	<ul style="list-style-type: none"> Describe the relationship between genes, proteins, chromosomes, genomes, and DNA and explain their role in the process of heredity (UNIT: Heredity) Compare how genetic material is transferred to offspring in sexual and asexual reproduction (UNIT: Heredity) Use models such as Punnett squares or pedigree charts to determine the probability of dominant, recessive and incomplete traits being expressed (UNIT: Heredity)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Differentiate between those traits shared between parent and offspring that are inherited and those that are learned (UNIT: Species Over Time)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe similarities and differences between offspring and parents of a variety of animals (UNIT: Animal Adaptations)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Cell Theory</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Sequence the major points in the development of the cell theory, including important historical figures and technological advancements associated with the theory (UNIT: Cells) Explain the three components of the cell theory (UNIT: Cells)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Cell Structure and Function</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Describe the basic functions of cell organelles in plant and animal cells (UNIT: Cells) Describe how materials move into and out of cells in the processes of osmosis, diffusion, and active transport (UNIT: Cells) Explain how cellular respiration provides cells with energy (UNIT: Cells)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Atoms and Molecules</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Explain how chemical reactions form new substances with new properties from the rearrangement and conservation of atoms (UNIT: Chemistry)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Properties of Materials</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Describe physical and chemical properties of a variety of substances (UNIT: Chemistry) Describe the function of the periodic table in describing and grouping common earth elements by their basic properties (<i>e.g., symbol, reactivity, metal, non-metal or metalloid, natural state, what products contain them</i>) (UNIT: Chemistry)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Explain how the material make-up of an object determines some of the properties of the object (UNIT: Properties of Materials)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Compare and contrast the characteristics (<i>e.g., flexibility, transparency</i>) of various solid objects (UNIT: Matter, Mixtures, and Changes)
Grade One	<ul style="list-style-type: none"> Explain that objects have properties that can be analyzed and described using the senses (UNIT: Properties) Describe, compare and classify objects (<i>e.g., size, color, shape, texture, weight, magnetism, ability to float</i>) (UNIT: Properties)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Physical States and Changes</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> • Explain the physical properties of solids, liquids, gases and their changes (contraction & expansion) using the particulate nature of matter model (UNIT: Chemistry) • Describe phases of matter and changes in phases in terms of particle kinetic energy and energy transfer (UNIT: Chemistry)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> • Compare and contrast the three states of matter by observable characteristics (UNIT: States of Matter) • Explain the relationship between the temperature of an object and its state (UNIT: States of Matter) • Describe the unique properties of water (expansion and contraction) as it is heated and cooled (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: States of Matter)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> • Describe basic characteristics and properties of liquids (UNIT: Matter, Mixtures, and Changes) • Explain how different materials react to change (<i>e.g. in temperature, pressure, forces</i>) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Matter, Mixtures, and Changes)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Chemical Changes</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> Classify reactions as chemical or not based on the presence of color change, odor, light or heat emission, and/or gas (Teach if time. Though there isn't a 5th grade GLCE that aligns, this will better prepare students for chemistry studies in 7th.) (UNIT: Mixtures and Solutions)
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Mixtures and Solutions</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Describe characteristics of a solution at the particle level, including the process of dissolving, saturation, and concentration (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Chemistry)
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> Determine the appropriate tools and processes (magnet, filter, evaporation) needed to separate various mixtures (UNIT: Mixtures and Solutions) Describe factors that influence saturation in a solution (UNIT: Mixtures and Solutions) Describe the appropriate tools and senses needed to determine the concentration levels of various solutions (UNIT: Mixtures and Solutions) <p>(Teach these objectives if time. Though there aren't 5th grade GLCE that align, this unit will better prepare students for chemistry studies in 7th.)</p>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe characteristics of solutions (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Matter, Mixtures, and Changes) Describe how mixtures can be created and separated using various tools (UNIT: Matter, Mixtures, and Changes)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Forms of Energy and their Interactions</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> • Explain heat, heat energy transfer and temperature in terms of particle kinetic energy (UNIT: Chemistry) • Compare and contrast conduction, convection, and radiation as methods of heat energy transfer (UNIT: Chemistry)
Grade Six	<ul style="list-style-type: none"> • Describe the various forms of potential (chemical, elastic, gravitational) and kinetic (energy of motion) energy (UNIT: Energy) • Trace the conversion of energy from one form to another in a system (UNIT: Energy) • Explain the law of conservation of energy (UNIT: Energy)
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> • Describe forms of energy (sound, chemical, radiant, electrical, atomic, mechanical, heat (transfer and conduction) and provide a real-life example of each (UNIT: Energy) • Describe the transformation of energy from one form to another (UNIT: Energy) • Describe how heat spreads from one object or place to another (<i>e.g., conduction, convection, radiation</i>) (UNIT: Energy) • Investigate different materials to determine which are better conductors and which are better insulators of heat (UNIT: Energy)
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> • Describe various methods for generating and transferring heat energy (UNIT: Energy)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Energy Resources</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Evaluate energy sources in terms of advantages and disadvantages (<i>e.g. cost, environmental consequences, sustainability</i>) (UNIT: Energy) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe how energy is used in the household, in transportation, in toys, etc. (UNIT: Energy) Identify sources of energy, such as gasoline from oil, electricity, and food (UNIT: Energy) Demonstrate practical ways to conserve energy (UNIT: Energy)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Electricity</i>	
Grade Eight	<ul style="list-style-type: none"> Construct complex circuits and describe the interaction of the circuit components to produce heat, light, sound, and magnetic effects (UNIT: Electricity and Magnetism) Analyze changing current flow in given circuits (UNIT: Electricity and Magnetism) Analyze and describe the process for generating electrical energy from a variety of energy sources (e.g. sun, wind and coal) (UNIT: Electricity and Magnetism) Describe the relationship between electric current and magnetism (UNIT: Electricity and Magnetism)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Categorize substances and/or objects as conductors or nonconductors of electricity based on tests (UNIT: Electricity and Magnetism) Construct simple circuits and describe the interaction of the circuit components (UNIT: Electricity and Magnetism) Compare and contrast series and parallel circuits (UNIT: Electricity and Magnetism) Create a simple electromagnet and investigate variables affecting its strength (UNIT: Electricity and Magnetism)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Magnetism</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Describe the properties of magnets (UNIT: Electricity and Magnetism)
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<ul style="list-style-type: none"> Explain the effect of magnets on certain objects whether touching or not (UNIT: Magnetism) Describe some real-world applications of magnets (UNIT: Magnetism) Recall objects that can be damaged by exposure to magnets (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Magnetism)

Vertical Alignment for the Measurement Topic: Sound	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Describe the effect of the medium on sound (UNIT: Sound) Compare and contrast the properties of longitudinal and transverse waves and specify examples of each (UNIT: Sound) Relate the amplitude of a wave (<i>i.e. sound, seismic, water</i>) to the amount of energy used to create the vibration of the object producing the wave (UNIT: Sound) Describe the changing pitch of sound in terms of the speed, frequency, and wavelength of the sound waves (speed=wavelength X frequency) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Describe the relationship between vibrations and the production of sound (UNIT: Sound) Describe the variables that affect pitch (UNIT: Sound) Explain how sound energy travels through solids, liquids, and gas (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Sound) Compare and contrast sounds produced by various objects in terms of pitch and amplitude (UNIT: Sound)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Light</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> • Differentiate between color addition and color subtraction using colored lighting and filters (UNIT: Light) • Compare the reflection of light from various surfaces (<i>e.g., loss of light, angle of reflection, reflected color</i>) (UNIT: Light) • Investigate and describe the refraction of light passing through various materials (<i>e.g., prisms, lenses, water</i>) (UNIT: Light) • Compare and contrast waves that make up the electromagnetic spectrum as versions of radiation that differ in wavelengths, frequencies, and energy levels (UNIT: Light) • Describe an everyday application of each of the waves of the electromagnetic spectrum (UNIT: Light) <p>(NOTE- There are no GLCE that align with these NHA objectives. Teach only as an enrichment unit if time permits.)</p>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> • Describe the refraction, reflection, transmission, and/or absorption of light as it interacts with objects that are transparent, translucent, and opaque (UNIT: Light) • Describe the visible spectrum of light (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Light)
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Measuring Motion</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Analyze the motion of objects in terms of direction and changes in motion (UNIT: Motion and Forces) Describe, measure, and graph quantities that characterize moving objects such as direction, speed, velocity, and acceleration (UNIT: Motion and Forces)
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> P.FM.05.41 Explain the motion of an object relative to its point of reference (Unit: Motion and Forces) P.FM.05.42 Describe the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects (Unit: Motion and Forces) P.FM.05.43 Illustrate how motion can be measured and represented on a graph (Unit: Motion and Forces)
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Describe the position and change in position (motion) of an object in comparison to a reference point (UNIT: Motion and Forces) Calculate the speed of objects based on the distance traveled divided by the time it took to travel the distance (UNIT: Motion and Forces)
Grade Two	<ul style="list-style-type: none"> Describe the position of an object relative to another object or background (UNIT: Motion and Forces) Compare and contrast the motion of different objects (UNIT: Motion and Forces)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Forces Effect on Motion</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> • Explain the effects of contact and non-contact forces on objects using Newton's First Law (Unit: Motion and Forces) • Explain the relationship between the mass of the object, the size of the net force acting on the object, and the resulting change in motion of the object in real world examples of motion (Unit: Motion and Forces)
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> • P.FM.05.21 Distinguish between contact forces and non-contact forces (Unit: Motion and Forces) • P.FM.05.22 Demonstrate contact and non-contact forces to change the motion of an object (Unit: Motion and Forces) • P.FM.05.31 Describe what happens when two forces act on an object in the same or opposing directions (Unit: Motion and Forces) • P.FM.05.32 Describe how constant motion is the result of balanced (zero net) forces (Unit: Motion and Forces) • P.FM.05.33 Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force (Unit: Motion and Forces) • P.FM.05.34 Relate the size of change in motion to the strength of unbalanced forces and the mass of the object (Unit: Motion and Forces)
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> • Analyze changing motion of objects and identify forces acting on the object to cause change in motion (Unit: Motion and Forces) • Explain how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object (UNIT: Motion and Forces)
Grade Two	<ul style="list-style-type: none"> • Describe balance as a function of position and weight/counterweight (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Motion and Forces) • Describe the effects that pushing or pulling have on the motion of objects (UNIT: Motion and Forces) • Describe the observable effects of gravity on objects (UNIT: Motion and Forces)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Simple Machines</i>	
Grade Eight	<i>Not Applicable as of 2013-14</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable as of 2013-14</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe simple machines (<i>e.g., lever, pulley, wedge, inclined plane, wheel and axle, screw</i>) and their purpose (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (Unit: Motion and Forces)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>The Changing Earth</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Analyze and describe the Earth's surface features using maps (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Geology) Describe agents of physical and chemical weathering and explain their connection to the formation of soil and sediment (UNIT: Geology) Analyze how physical/mechanical weathering (e.g., waves, wind, water, and glacier movement) shape and reshape Earth's surface over time (UNIT: Geology) Describe the three primary types of plate boundaries and the landforms associated with each (UNIT: Geology) Compare the physical properties of the interior layers of Earth (UNIT: Geology) Describe major geological events (mountain building, earthquakes, volcanic eruptions) as processes resulting from heat flow and movement of material within Earth (UNIT: Geology) Describe ways scientists learn about Earth's geologic history (e.g., seismographs, ground penetrating radar, core drillers, observations) (UNIT: Geology)
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Compare and contrast major features of the earth's surface (e.g., ocean, sea, lake, pond, mountain, hill, mesa, plateau) (UNIT: The Changing Surface of Earth) Describe the variety of forces involved in weathering, erosion and deposition (UNIT: The Changing Surface of Earth) Describe how physical/mechanical weathering (e.g., wind, water, ice, and gravity) causes change to the Earth's surface over time (UNIT: The Changing Surface of Earth)
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Recall major features of the Earth's surface (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (e.g., mountains, oceans, plains) (UNIT: The Surface of Earth)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Earth Materials and Responsible Use</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<ul style="list-style-type: none"> Classify sedimentary, igneous and metamorphic rocks (UNIT: Geology) Analyze observable and measurable soil properties to predict soil quality (UNIT: Geology)
Grade Five	<i>Not Applicable</i>
Grade Four	<ul style="list-style-type: none"> Compare the components and properties (e.g., compressibility, water retention, color) of various soil types (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Demonstrate and describe the practices of reducing, reusing and recycling and other conservation measures (UNIT: Conservation of Natural Resources) Classify manufactured products according to the Earth materials from which they are made (UNIT: Conservation of Natural Resources) S.RS.03&04.18 Describe the effect humans and other organisms have on the balance of the natural world (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.41 Identify natural resources (metals, fuels, fresh water, farmland, and forests) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.42 Classify renewable (fresh water, farmland, forests) and non-renewable (fuels, metals) resources (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources)
Grade Three	<ul style="list-style-type: none"> Compare and contrast types of earth materials (UNIT: Rocks and Minerals) Describe properties used to identify minerals and determine the mineral makeup of rocks (UNIT: Rocks and Minerals) Compare and contrast the observable features and formation processes of igneous, sedimentary, and metamorphic rocks (UNIT: Rocks and Minerals) Describe the identifying properties of common rock samples (UNIT: Rocks and Minerals)
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Describe the basic properties of rocks (e.g., color, composition, texture, size) (UNIT: The Surface of Earth) Classify rock particles as boulders, cobble, pebbles, gravel, sand, silt, or clay (UNIT: The Surface of Earth) Compare and contrast soil samples by components (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Surface of Earth) Explain uses for different natural resources based upon their properties (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Surface of Earth)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Water on Earth</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Describe the basic distinguishing characteristics of various locations of water on Earth (<i>e.g. glaciers, ice caps, oceans, wetlands, etc.</i>) (UNIT: Weather and Water) Describe the various paths a water molecule might follow in the water cycle and explaining factors that influence each path (UNIT: Weather and Water)
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> Analyze the distribution, location, and state of water on Earth (UNIT: Weather and Water) Describe the processes of infiltration, runoff, evaporation, condensation, and precipitation as they relate to movement of water in the water cycle (UNIT: Weather and Water)
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<ul style="list-style-type: none"> Describe the locations of solid and liquid water on Earth (UNIT: The Water Cycle) Analyze precipitation such as snow, ice, rain, hail, and sleet as forms of water resulting from different conditions (UNIT: The Water Cycle) Compare and contrast the effect that surface type has on whether water seeps into the surface, runs off, or puddles (UNIT: The Water Cycle) Describe the effect of evaporation (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Water Cycle) Investigate and explain the changes in state from solid to liquid made by water and the conditions necessary for these changes (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Water Cycle) MI.E.FE.02.12 Identify household uses of water (drinking, cleaning, food preparation). (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Atmosphere</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Describe the composition, characteristics, and structure of the Earth's atmosphere (UNIT: Weather and Water)
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Explain that air is a substance that surrounds us, takes up space, moves as wind, and interacts with us and objects on earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Weather)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Weather and Climate</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<ul style="list-style-type: none"> Analyze common weather instruments (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Weather and Water) Interpret weather maps to describe local, regional and national weather conditions (UNIT: Weather and Water) Explain how the interaction of air masses influences weather conditions (UNIT: Weather and Water) Analyze how radiant energy from the sun heats earth materials and influences weather (UNIT: Weather and Water) Compare and contrast climate regions around the world (UNIT: Weather and Water)
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> Measure, record, and explain daily weather phenomena using the appropriate tools (UNIT: Weather and Water) Compile and use weather data to determine climate trends (UNIT: Weather and Water) Correlate cloud types with general weather conditions (UNIT: Weather and Water) Describe a variety of storm types, the weather conditions associated with each, and explain when they occur (UNIT: Weather and Water) Describe the effects geography can have on weather and climate (UNIT: Weather and Water)
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Compare and contrast cirrus, stratus, and cumulus clouds (UNIT: Weather) Describe examples of severe weather and appropriate safety precautions (UNIT: Weather) Describe the effect of the Sun's rays on land, air and water (UNIT: Weather)
Kindergarten	<ul style="list-style-type: none"> Observe and describe the cyclical pattern of seasons (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Seasons) Correlate the different seasons with different life processes in plants and animals (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Seasons)

Vertical Alignment for the Measurement Topic: <i>Daily Weather Measurement</i>	
Grade Eight	<i>Not Applicable</i>
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> • Describe patterns of change in the weather over time (UNIT: Weather) • Describe various tools that are used in weather measurement (UNIT: Weather)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Characteristics of Objects in Space</i>	
Grade Eight	<ul style="list-style-type: none"> Compare and contrast the major characteristics of bodies in the Solar System (UNIT: Earth in Space) Describe basic characteristics of the Milky Way and recognize it as one galaxy among billions in the universe (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Compare the size and distance of objects within systems in the universe using either astronomical units or light years, depending on the distance (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Describe the appearance and apparent motion of groups of stars in the night sky relative to Earth and how various cultures have understood and used them for navigation and calendars (UNIT: Earth in Space)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> MI.E.ST.05.11 Design a model of the solar system that shows the relative order and scale of the planets, dwarf planets, comets, and asteroids to the sun. (UNIT: Earth in Space) MI.E.ST.05.23 Explain the apparent motion of the stars (constellations) and the sun across the sky. (UNIT: Earth in Space) <p>(NOTE- There are no NHA Objectives that align with these GLCE. Include these objectives in your unit.)</p>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Describe the major characteristics of the Sun, Moon, and planets (UNIT: Earth in Space) Describe the motion and relative distance of the planets around the Sun (UNIT: Earth in Space) Describe characteristics of stars (UNIT: Earth in Space)
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> List observable characteristics of stars (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Interaction of the Sun, Earth, and Moon</i>	
Grade Eight	<ul style="list-style-type: none"> Explain how the rotation and revolution of Earth and the tilt of Earth on its axis cause observed phenomena on Earth such as days/nights and seasons (UNIT: Earth in Space) Compare and contrast the ideas of Ptolemy, Aristotle, Copernicus, and Galileo regarding Earth's position and motion in space (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Explain tides (high, low, neap, spring) as they relate to the position and gravitational force of the Sun and Moon (UNIT: Earth in Space) Correlate the pattern of change in the location and phase of the Moon with the actual motion of the Moon around Earth (UNIT: Earth in Space) Describe how the relative positions of the Sun, Earth, and Moon can result in solar and lunar eclipses (UNIT: Earth in Space) Analyze and describe the role of gravity in celestial phenomena (UNIT: Earth in Space)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<ul style="list-style-type: none"> MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity. (UNIT: Earth in Space) MI.E.ES.05.61 Demonstrate and explain seasons using a model. (UNIT: Earth in Space) MI.E.ES.05.62 Explain how the revolution of the Earth around the sun defines a year. (UNIT: Earth in Space) MI.E.ST.05.22 Explain the phases of the moon. (UNIT: Earth in Space) MI.E.ST.05.24 Explain lunar and solar eclipses. (UNIT: Earth in Space) MI.E.ST.05.25 Explain the tides of the oceans as they relate to the gravitational pull and orbit of the moon. (UNIT: Earth in Space) <p>(NOTE- There are no NHA Objectives that align with these GLCE. Include these objectives in your unit.)</p>
Grade Four	<i>Not Applicable</i>
Grade Three	<ul style="list-style-type: none"> Describe the correlation between the rotation and revolution of the Earth and our days, nights and years (UNIT: Earth in Space) Describe the pattern of changes in the appearance of the moon throughout the cycle (UNIT: Earth in Space) Describe the rotation and revolution of the Moon around Earth (UNIT: Earth in Space)
Grade Two	<i>Not Applicable</i>
Grade One	<ul style="list-style-type: none"> Compare and contrast day and night by observing and recording differences in temperature, light, and objects visible in the sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Describe the changing look and location of the moon in the day and night sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space)
Kindergarten	<i>Not Applicable</i>

Vertical Alignment for the Measurement Topic: <i>Earth Systems</i>	
Grade Eight	<ul style="list-style-type: none"> Compare the Earth system (hydrosphere, atmosphere, lithosphere, biosphere, cryosphere, anthrosphere) to other systems of parts that make up a whole (UNIT: Earth Systems) Compare and contrast different types of systems (open, closed) and identify what makes Earth an open mechanistic system (UNIT: Earth Systems) Analyze various events on Earth (<i>e.g., a volcano erupting</i>) and describe the impact they have across multiple spheres of the Earth (UNIT: Earth Systems)
Grade Seven	<i>Not Applicable</i>
Grade Six	<i>Not Applicable</i>
Grade Five	<i>Not Applicable</i>
Grade Four	<i>Not Applicable</i>
Grade Three	<i>Not Applicable</i>
Grade Two	<i>Not Applicable</i>
Grade One	<i>Not Applicable</i>
Kindergarten	<i>Not Applicable</i>



GRADE ONE

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 1ST GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Common Themes in Science</p> <p>Engineering and Technology Engineering</p> <p>The Living Environment Plant and Animal Adaptations Genetics and Heredity Fossils and Extinction Food Chains and Webs Ecosystems</p> <p>Physical Science Properties of Materials</p> <p>Earth and Space Science The Changing Earth Earth Materials and Responsible Use Atmosphere Daily Weather and Climate Interaction of the Sun, Earth, and Moon Characteristics of Objects in Space</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Properties of Matter Physical Properties States of Matter Magnets</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Life Requirements Life Cycles Standard: Heredity Observable Characteristics</p> <p>Discipline 4: Earth Science Standard: Earth Systems Solar Energy Weather Weather Measurement Standard: Solid Earth Earth Materials</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade One

UNIT: Introduction to Science

NHA Science Content	NHA Objectives	MI GLCE
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	MI.S.RS.01.12 Recognize that science investigations are done more than one time.
People are more likely to believe your ideas if you can back them up with reason or evidence. In science it is critical to based ideas on evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	MI.S.IA.01.12 Share ideas about science through purposeful conversation.
Scientists learn about things by observing those things carefully.	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	MI.S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	MI.S.IP.01.12 Generate questions based on observations. MI.S.IP.01.13 Plan and conduct simple investigations. MI.S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	MI.S.IP.01.16 Construct simple charts from data and observations MI.S.IA.01.12 Share ideas about science through purposeful conversation. MI.S.IA.01.13 Communicate and present findings of observations. MI.S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Tools such as thermometers, rulers and balances often give more information about things than can be gotten by just using our senses. Construction tools are used to do things better or more easily and to do some things that could not otherwise be done at all.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects	MI.S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.
Tools such as thermometers, rulers and balances often give more information about things than can be gotten by just using our senses. Construction tools are used to do things better or more easily and to do some things that could not otherwise be done at all.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments	MI.S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.
Most things are made of parts. Something may not work if some of its parts are missing. When parts are put together, they can do things that they couldn't do by themselves.	The Nature of Science, Common Themes in Science Identify the parts of things and how one part connects to and affects another	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to notice while they are taking place.	The Nature of Science, Common Themes in Science Identify and record instances of things that change and the different ways they change	MI.S.IP.01.16 Construct simple charts from data and observations.
Many toys are like real things in some ways but not others and would be considered models of the real thing. They may not be the same size, are missing many details, or are not able to do all of the same things. A model of something is different from the real thing but can be used to learn something about the real thing. One way to describe something is to say how it is and isn't like something else.	The Nature of Science, Common Themes in Science Identify similarities and differences between a model of an object and the real thing	MI.S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Things in nature and things people make have very different sizes, weights, ages, and speeds and can be compared based on those differences.	The Nature of Science, Common Themes in Science Describe the different sizes, weights, ages, and speeds of things observed	MI.S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade One

UNIT: Ecosystems

NHA Science Content	NHA Objectives	MI GLCE
<p>Simple Food Chains</p> <ul style="list-style-type: none"> Some animals eat plants for food Some animals eat other animals for food Some animals eat both plants and animals for food 	<p>The Living Environment, Food Chains and Webs Classify animals as plant eaters, animal eaters, or both plant and animal eaters and identify their primary food source</p>	<p>MI.L.OL.01.13 Identify the needs of animals.</p>
<p>Changes in Ecosystems</p> <ul style="list-style-type: none"> All organisms interact with the environment and cause change <ul style="list-style-type: none"> E.g. grass and other plants grow, animals eat plants or use plants for shelter or nesting, plants and animals change over seasons, animals immigrate and emigrate, plants and animals give birth and die Change can be fast or very slow, very noticeable or only slightly noticeable 	<p>The Living Environment, Ecosystems Describe evidence that all environments change, and often as a result of the organisms living there</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to</p>	<p>The Nature of Science, Common Themes in Science Identify and record instances of things that change and the different ways they change</p>	<p>MI.S.IP.01.16 Construct simple charts from data and observations.</p>

notice while they are taking place.		
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade One

UNIT: Animal Adaptations

NHA Science Content	NHA Objectives	MI GLCE
<p>Anatomical Structures that Aid in Survival</p> <ul style="list-style-type: none"> • Body covering, different types of appendages, special features such as stingers, and teeth <p>Seasonal Adaptation Features</p> <ul style="list-style-type: none"> • Changing color • Changing body covering • Hibernation • Migration • Dormancy 	<p>The Living Environment, Plant and Animal Adaptations Describe the physical characteristics of a variety of North American animals that help them survive in their particular environments</p>	<p>MI.L.OL.01.13 Identify the needs of animals.</p>
<p>Variations in traits of animals and plants in a species, including people</p>	<p>The Living Environment, Plant and Animal Adaptations Identify the similarities and differences in features and characteristics of animals of the same species</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Changes in Species Over Time</p> <ul style="list-style-type: none"> • Extinction of organisms (e.g. trilobites, dinosaurs, mammoths, saber-toothed tigers) • Fossils <ul style="list-style-type: none"> – Evidence of kinds of animals that lived long ago that have become extinct 	<p>The Nature of Science, Common Themes in Science Identify similarities and differences between a model of an object and the real thing</p>	<p>MI.S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>

	The Living Environment, Fossils and Extinction Describe fossils as evidence that there are kinds of animals that lived long ago that are no longer found on Earth	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to notice while they are taking place.	The Nature of Science, Common Themes in Science Identify and record instances of things that change and the different ways they change	MI.S.IP.01.16 Construct simple charts from data and observations.
Many toys are like real things in some ways but not others and would be considered models of the real thing. They may not be the same size, are missing many details, or are not able to do all of the same things. A model of something is different from the real thing but can be used to learn something about the real thing. One way to describe something is to say how it is and isn't like something else.	The Living Environment, Genetics and Heredity Describe similarities and differences between offspring and parents of a variety of animals	MI.L.HE.01.11 Identify characteristics (for example: body coverings, beak shape, number of legs, body parts) that are passed on from parents to young. MI.L.HE.01.12 Classify young animals based on characteristics that are passed on from parents (for example: dogs/puppies, cats/kittens, cows/calves, chicken/chicks).
Things in nature and things people make have very different sizes, weights, ages, and speeds and can be compared based on those differences.	The Nature of Science, Common Themes in Science Describe the different sizes, weights, ages, and speeds of things observed	MI.S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade One

UNIT: Properties (Delta Learning Kit: Properties)

NHA Science Content	NHA Objectives	MI GLCE
	Physical Science, Properties of Materials Explain that objects have properties that can be analyzed and described using the senses	MI.P.PM.02.12 Describe objects and substances according to their properties (color, size, shape, texture, hardness, liquid or solid, sinking or floating).
5 Senses: Explore Properties, Compare and Classify Objects <ul style="list-style-type: none"> • Size <ul style="list-style-type: none"> – Big, little, large, small, tiny • Color <ul style="list-style-type: none"> – ROYGBIV, silver, brown, black, white • Shape <ul style="list-style-type: none"> – Circle, square, triangle, diamond, pointy, round, rectangle • Texture <ul style="list-style-type: none"> – Rough, smooth, sticky, bumpy, scratchy, slippery, soft, hard, greasy • Weight <ul style="list-style-type: none"> – Heavy/light • Density <ul style="list-style-type: none"> – Float or sink in water • Magnetism 	Physical Science, Properties of Materials Describe, compare and classify objects by size, color, shape, texture, weight, magnetism, and ability to float	MI.P.PM.01.11 Demonstrate the ability to sort objects according to observable attributes such as color, shape, size, sinking or floating. MI.P.PM.01.31 Identify materials that are attracted by magnets. MI.P.PM.02.12 Describe objects and substances according to their properties (color, size, shape, texture, hardness, liquid or solid, sinking or floating).
	Engineering and Technology, Engineering Describe the relationship between the properties of a material and its typical uses and determine the best material for a specific use	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
	Engineering and Technology, Engineering Compare and contrast manmade and natural materials	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

Tools such as thermometers, rulers and balances often give more information about things than can be gotten by just using our senses. Construction tools are used to do things better or more easily and to do some things that could not otherwise be done at all.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects	MI.S.IP.01.14 Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.
Science is based on accurate measurement.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments	MI.S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade One

UNIT: Weather (Foss Learning Kit: Air and Weather)

NHA Science Content	NHA Objectives	MI GLCE
<p>The Atmosphere</p> <ul style="list-style-type: none"> Air surrounds us and takes up space Air moves as wind Air interacts with us and other objects on earth 	<p>Earth and Space Science, Atmosphere Explain that air is a substance that surrounds us, takes up space, moves as wind, and interacts with us and objects on earth</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Daily Weather Changes</p> <ul style="list-style-type: none"> Meteorologists <ul style="list-style-type: none"> Study and record daily weather changes Precipitation <ul style="list-style-type: none"> Rain, snow, hail, freezing rain 	<p>Earth and Space Science, Daily Weather Measurement Describe patterns of change in weather over time</p>	<p>MI.E.S.01.21 Compare daily changes in the weather related to temperature (cold, hot, warm, cool); cloud cover (cloudy, partly cloudy, foggy) precipitation (rain, snow, hail, freezing rain); wind (breezy, windy, calm). MI.E.S.01.22 Describe and compare weather related to the four seasons in terms of temperature, cloud cover, precipitation, and wind.</p>
<p>Weather Measurement Tools</p> <ul style="list-style-type: none"> Rain gauge, anemometer, wind vane Graphing and tracking changes 	<p>Earth and Space Science, Daily Weather Measurement Describe various tools that are used in weather measurement</p>	<p>MI.E.S.01.31 Identify the tools that might be used to measure temperature, precipitation, cloud cover and wind.</p>
<ul style="list-style-type: none"> Temperature <ul style="list-style-type: none"> Thermometers used to measure temperature in Fahrenheit degrees <ul style="list-style-type: none"> Words to describe temperature- hot, warm, cool, cold, freezing Sunlight provides the heat to warm the land, air, and water 	<p>Earth and Space Science, Weather and Climate Describe the effect of the Sun's rays on land, air, and water</p>	<p>MI.E.S.01.11 Identify the sun as the most important source of heat which warms the land, air, and water of the Earth MI.E.S.01.12 Demonstrate the importance of sunlight and warmth in plant growth</p>
<ul style="list-style-type: none"> Clouds relationship to weather condition <ul style="list-style-type: none"> Words to describe conditions- cloudy, partly cloudy, foggy Cloud types to identify- Cirrus, Stratus, 	<p>Earth and Space Science, Weather and Climate Compare and contrast cirrus, stratus, and cumulus clouds</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

Cumulus		
<ul style="list-style-type: none"> Severe Weather <ul style="list-style-type: none"> Tornadoes, thunderstorms, blizzards, hurricanes Safety precautions 	Earth and Space Science, Weather and Climate Describe examples of severe weather and appropriate safety precautions	MI.E.ES.01.23 Describe severe weather characteristics. MI.E.ES.01.24 Describe precautions that should be taken for human safety during severe weather conditions (thunder and lightning, tornadoes, strong winds, heavy precipitation).
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Scientists learn about things by observing those things carefully.	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	MI.S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	MI.S.IP.01.12 Generate questions based on observations. MI.S.IP.01.13 Plan and conduct simple investigations. MI.S.IA.01.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	MI.S.RS.01.12 Recognize that science investigations are done more than one time.
People are more likely to believe your ideas if you can back them up with reason or evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	MI.S.IA.01.12 Share ideas about science through purposeful conversation.
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	MI.S.IP.01.16 Construct simple charts from data and observations MI.S.IA.01.12 Share ideas about science through purposeful conversation. MI.S.IA.01.13 Communicate and present findings of observations. MI.S.RS.01.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments	MI.S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.
Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to notice while they are taking place.	The Nature of Science, Common Themes in Science Identify and record instances of things that change and the different ways they change	MI.E.ES.01.32 Observe and collect data of weather conditions over a period of time. MI.S.IP.01.11 Make purposeful observations of the natural world using the appropriate senses.

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade One

UNIT: Earth in Space (Foss Learning Kit: Air and Weather)

NHA Science Content	NHA Objectives	MI GLCE
<p>The Motion of the Earth</p> <ul style="list-style-type: none"> • Basic patterns occurring <ul style="list-style-type: none"> – Sun appears every day and appears to move from East to West – Moon appears sometimes at night and sometimes during the day – Stars are visible at night – Day and night have different characteristics such as temperature and light 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon</p> <p>Compare and contrast day and night by observing and recording differences in temperature, light, and objects visible in the sky</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The Interaction of the Earth and Moon</p> <ul style="list-style-type: none"> • Observe the changing look of the Moon • Observe the changing location of the Moon in the sky 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon</p> <p>Describe the changing look and location of the moon in the day and night sky</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Stars</p> <ul style="list-style-type: none"> • Observations <ul style="list-style-type: none"> – Innumerable – Unevenly dispersed – Unequal brightness 	<p>Earth and Space Science, Characteristics of Objects in Space</p> <p>List observable characteristics of stars (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientists learn about things by observing those things carefully.</p>	<p>The Nature of Science, Common Themes in Science</p> <p>Describe the different sizes, weights, ages, and speeds of things observed</p>	<p>MI.S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses.</p>

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade One

UNIT: The Surface of Earth (Foss Learning Kit: Pebbles, Sand and Silt)

NHA Science Content	NHA Objectives	MI GLCE
Features of the Earth's Surface <ul style="list-style-type: none"> Land/water Mountains/plains Canyons Volcanoes 	Earth and Space Science, The Changing Earth Recall major features of the Earth's surface	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Rocks <ul style="list-style-type: none"> Properties in the form of boulders, pebbles, sand (e.g. size, shape, color, weight, hardness) <ul style="list-style-type: none"> Minerals vs. rock- a rock is a combination of multiple minerals 	Earth and Space Science, Earth Materials and Responsible Use Describe the basic properties of rocks (e.g., color, composition, texture, size)	MI.E.SE.00.11 Identify Earth materials that occur in nature (sand, rocks, soil, water).
Rocks <ul style="list-style-type: none"> Properties in the form of boulders, pebbles, sand (e.g. size, shape, color, weight, hardness) <ul style="list-style-type: none"> Minerals vs. rock- a rock is a combination of multiple minerals 	Earth and Space Science, Earth Materials and Responsible Use Classify rock particles as boulders, cobble, pebbles, gravel, sand, silt, or clay	MI.E.SE.00.11 Identify Earth materials that occur in nature (sand, rocks, soil, water).
Uses of Earth Materials <ul style="list-style-type: none"> Construction uses for rocks and minerals Reduce, reuse, recycle 	Earth and Space Science, Earth Materials and Responsible Use Explain uses for different natural resources based upon their properties	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Soil <ul style="list-style-type: none"> Components Rock fragments, clay, silt, sand, humus	Earth and Space Science, Earth Materials and Responsible Use Compare and contrast soil samples by components	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		

Science is based on accurate measurement.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments	MI.S.IP.01.15 Make accurate measurements with appropriate (non-standard) units for the measurement tool.
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade One

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Personal Appearance</p> <ul style="list-style-type: none"> • Hygiene <ul style="list-style-type: none"> - Caring for: teeth, gums, eyes, ears, nose, skin, hair, and nails - Bathing • Importance of having good hygiene <ul style="list-style-type: none"> - Avoiding illness - Sanitation • Clothing <ul style="list-style-type: none"> - Wearing appropriate clothing for weather - Tying shoes <p>Healthy Diet</p> <ul style="list-style-type: none"> • Nutrition <ul style="list-style-type: none"> - How our body uses food - Eating a variety of food - Importance of water - Healthy vs. unhealthy food <ul style="list-style-type: none"> • Healthy snacks - Food Pyramid <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Safety <ul style="list-style-type: none"> - Traffic/pedestrian safety - Playground/classroom safety - Bicycle safety - Appropriate touch <ul style="list-style-type: none"> • Responding to inappropriate touch - Strangers - Recognition of dangerous objects and substances <ul style="list-style-type: none"> • Weapons, cleaning products/chemicals, medicine • Emergency Situations <ul style="list-style-type: none"> - Routines for fire drills/tornado drills - Calling 911 	<p>Strand 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Describe the benefits of eating healthy snacks.</p> <p>1.2 Describe the benefits of being physically active.</p> <p>1.3 Describe the health benefits of drinking water, compared to other beverages.</p> <p>1.4 Classify foods according to the food groups.</p> <p>1.5 Describe how physical activity, rest, and sleep help a person stay healthy.</p> <p>Standard 3: Health Behaviors</p> <p>1.6 Explain the importance of eating a variety of foods from all of the food groups.</p> <p>1.7 Suggest a food from each of the food groups that could be eaten as a healthy snack.</p> <p>Strand 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Identify household products that are harmful if touched, ingested, or inhaled.</p> <p>2.2 Describe ways that over-the-counter and prescription medicines can be helpful or harmful.</p> <p>2.3 Explain the differences between over-the-counter and prescription medicines and illicit drugs.</p> <p>2.4 State that all forms of tobacco products contain harmful chemicals, including the drug nicotine.</p> <p>Standard 2: Access Information</p> <p>2.5 Identify trustworthy adults who are sources of accurate information about potentially poisonous household products.</p> <p>2.6 Apply knowledge of product label warnings to gain accurate information about potentially poisonous household products.</p> <p>Standard 3: Health Behaviors</p> <p>2.7 Apply rules for handling household products and avoiding poisons.</p> <p>2.8 Describe how to safely use medicines.</p> <p>2.9 Apply strategies to hypothetical situations to avoid exposure to</p>

- Community Service Providers
 - Police officers/fire fighters / paramedics

Healthy Practices

- Benefits of Exercise
- Appropriate television use
- Healthy sleeping habits
- Avoidance of dangerous substances
 - Drugs/alcohol/ tobacco products

Healthy Minds

- Interacting with family/friends
 - Sharing feelings
 - Coping with change
 - Importance of manners
- Building relationships/making friends
 - Listening/paying attention
- Making decisions and solving problems

secondhand smoke.

Strand 3: Safety

Standard 1: Core Concepts

3.1 Describe fire and burn hazards.

3.2 Describe wheeled recreation hazards.

Standard 2: Access Information

3.3 Demonstrate the procedure for using 911 to get help in emergencies.

Standard 3: Health Behaviors

3.4 Apply strategies to prevent fires and burns to hypothetical situations.

3.5 Demonstrate actions to take in a fire emergency.

3.6 Describe situations that are dangerous, destructive, and disturbing and that need to be reported to an adult.

3.7 Practice escaping unsafe situations by getting away, leaving, and telling an adult.

3.8 Apply strategies and rules for safe wheeled recreation, including the proper use of safety gear.

Strand 4: Social and Emotional Health

Standard 1: Core Concepts

4.1 Describe ways family members and friends help each other.

4.2 Explain the role of listening and paying attention in building and maintaining friendships.

Standard 3: Health Behaviors

4.3 Apply skills to find out how others are feeling.

4.4 Apply skills to predict the potential feelings of others.

Standard 6: Decision Making

4.5 Describe characteristics of people who can help make decisions and solve problems.

4.6 Explain the decision making and problem solving steps.

4.7 Apply the steps to making a decision or solving a problem.

Standard 7: Social Skills

4.8 Apply effective listening and attending skills.

4.9 Demonstrate giving and accepting a compliment or statement of appreciation.

4.10 Apply “please,” “thank you,” “excuse me,” and “I am sorry” to appropriate situations.

Strand 5: Personal Health and Wellness

Standard 1: Core Concepts

5.1 Explain the importance of taking care of teeth.

Standard 3: Health Behaviors

5.2 Demonstrate proper tooth brushing techniques.

NHA Science Michigan Alignment
Grade One

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade K

MI.L.OL.01.21 Describe the life cycle of animals including the following stages: egg, young, adult; egg, larva, pupa, adult. (Introduction to Animals Unit)

MI.P.PM.01.32 Observe that like poles of a magnet repel and unlike poles of a magnet attract. (Magnets Unit)

NHA Grade 2

MI.P.PM.01.21 Demonstrate that water as a solid keeps its own shape (ice). (Matter, Mixtures and Changes Unit)

MI.P.PM.01.22 Demonstrate that water as a liquid takes on the shape of various containers. (Matter, Mixtures and Changes Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.



GRADE TWO

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 2ND GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Common Themes in Science</p> <p>The Living Environment Needs of Organisms Life Cycles of Plants and Animals Plant Structures and Function</p> <p>Physical Science Properties of Materials Physical States and Changes Mixtures and Solutions Energy Resources Forms of Energy and Their Interactions Forces Effect on Motion Measuring Motion Simple Machines</p> <p>Earth and Space Science Water on Earth</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Properties of Matter Physical Properties Material Composition</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Life Requirements Life Cycles Standard: Heredity Observable Characteristics</p> <p>Discipline 4: Earth Science Standard: Solid Earth Surface Changes Standard: Fluid Earth Water Water Movement</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Two

UNIT: Introduction to Science

NHA Science Content	NHA Objectives	MI GLCE
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	S.RS.02.13 Recognize that when a science investigation is done the way it was done before, similar results are expected.
People are more likely to believe your ideas if you can back them up with reason or evidence. In science it is critical to based ideas on evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	S.IA.02.12 Share ideas about science through purposeful conversation. S.IA.02.13 Communicate and present findings of observations. S.RS.02.15 Use evidence when communicating scientific ideas.
Scientists learn about things by observing those things carefully.	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses. S.IP.02.12 Generate questions based on observations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	S.IP.02.13 Plan and conduct simple investigations. S.IP.02.12 Generate questions based on observations. S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	S.IP.02.16 Construct simple charts and graphs from data and observations. S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Tools such as thermometers, rulers and balances often give more information about things than can be gotten by just using our senses. Construction tools are used to do things better or more easily and to do some things that could not otherwise be done at all.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects	S.IP.02.14 Manipulate simple tools (ruler, meter stick, measuring cups, hand lens, thermometer, balance) that aid observation and data collection. S.RS.02.16 Identify technology used in everyday life.
Tools such as thermometers, rulers and balances often give more information about things than can be gotten by just using our senses. Construction tools are used to do things better or more easily and to do some things that could not otherwise be done at all.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments	MI.P.PM.02.13 Measure the length of objects using rulers (centimeters) and meter sticks (meters) . MI.P.PM.02.14 Measure the volume of liquids using common measuring tools (measuring cups, measuring spoons). MI.P.PM.02.15 Compare the weight of objects using balances. S.IP.02.15 Make accurate measurements with appropriate units (meter, centimeter) for the measurement tool.
Most things are made of parts. Something may not work if some of its parts are missing. When parts are put together, they can do things that they couldn't do by themselves.	The Nature of Science, Common Themes in Science Identify the parts of things and how one part connects to and affects another	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to notice while they are taking place.	The Nature of Science, Common Themes in Science Identify and record instances of things that change and the different ways they change	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Many toys are like real things in some ways but not others and would be considered models of the real thing. They may not be the same size, are missing many details, or are not able to do all of the same things. A model of something is different from the real thing but can be used to learn something about the real thing. One way to describe something is to say how it is and isn't like something else.	The Nature of Science, Common Themes in Science Identify similarities and differences between a model of an object and the real thing	S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Things in nature and things people make have very different sizes, weights, ages, and speeds and can be compared based on those differences.	The Nature of Science, Common Themes in Science Describe the different sizes, weights, ages, and speeds of things observed	MI.P.FM.00.34 Observe how shape (for example: cone, cylinder, sphere), size, and weight of an object can affect motion.
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Two

UNIT: Plants (Foss Learning Kit: New Plants)

NHA Science Content	NHA Objectives	MI GLCE
Plant Needs <ul style="list-style-type: none"> Water, air, sunlight, nutrients 	The Living Environment, Needs of Organisms Describe evidence that plants are alive and need air, water, light, and nutrients to grow	MI.L.OL.02.14 Identify the needs of plants. MI.E.SE.00.12 Describe how Earth materials contribute to the growth of plant and animal life
Plant Life Cycles <ul style="list-style-type: none"> There are differences in development and growth of different plants Plants have a life cycle that includes seed, seedling or young plant, adult plant, flower, fruit and seed. 	The Living Environment, Life Cycles of Plants and Animals Describe the changes observed in plants as they progress through their life cycle	MI.L.OL.02.22 Describe the life cycle of familiar flowering plants including the following stages: seed, plant, flower, and fruit.
Plant Diversity <ul style="list-style-type: none"> Plants vary widely in structure according to species and location <ul style="list-style-type: none"> Flowering plants Grasses Plants vary in life processes (e.g. germination rates, length of life cycle) Plants vary in reaction to environmental influences (e.g. being mowed, receiving varying amounts of water, sunlight, or nutrients)	The Living Environment, Plant Structures and Function Compare and contrast flowering plants and grasses of different species in structure, life processes, and reaction to environmental influences	(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
New Plant Growth <ul style="list-style-type: none"> Stems <ul style="list-style-type: none"> Plants can reproduce vegetatively by growing roots and leaves on stems Nodes 	The Living Environment, Plant Structures and Function Describe the structure and function of the stem, bulbs, and roots in the growth of new plants	MI.L.HE.02.13 Identify characteristics of plants (for example: leaf shape, flower type, color, size) that are passed on from parents to young

<ul style="list-style-type: none"> • Bulbs <ul style="list-style-type: none"> – Bulbs are alive – Bulbs need water to start a new plant growth • Roots <ul style="list-style-type: none"> – Some parts of roots will grow into new plants, others won't 		
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Scientists learn about things by observing those things carefully	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses. S.IP.02.12 Generate questions based on observations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	S.IP.02.13 Plan and conduct simple investigations. S.IP.02.12 Generate questions based on observations. S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	S.RS.02.13 Recognize that when a science investigation is done the way it was done before, similar results are expected.
People are more likely to believe your ideas if you can back them up with reason or evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	S.IA.02.12 Share ideas about science through purposeful conversation. S.IA.02.13 Communicate and present findings of observations. S.RS.02.15 Use evidence when communicating scientific ideas.
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	S.IP.02.16 Construct simple charts and graphs from data and observations. S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Objects change in some ways and stay the same in some ways. People can keep track of some things that change, seeing where they come from and where they go. An object can change in various ways, such as in size, weight, color, or temperature. Small changes can sometimes be detected by comparing counts or measurements at different times. Some things change so slowly or so quickly that the changes are hard to notice while they are taking place.	The Nature of Science , Common Themes in Science Identify and record instances of things that change and the different ways they change	MI.L.OL.02.22 Describe the life cycle of familiar flowering plants including the following stages: seed, plant, flower, and fruit.
Things in nature and things people make have very different sizes, weights, ages, and speeds and can be compared based on those differences.	The Nature of Science , Common Themes in Science Describe the different sizes, weights, ages, and speeds of things observed	MI.P.FM.00.34 Observe how shape (for example: cone, cylinder, sphere), size, and weight of an object can affect motion.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Two

UNIT: Matter, Mixtures, and Changes (Foss Learning Kit: Solids and Liquids)

NHA Science Content	NHA Objectives	MI GLCE
<p>States of Matter</p> <ul style="list-style-type: none"> • Solids <ul style="list-style-type: none"> – Definite shape and volume – Words to describe solids include hard, flexible, rigid, rough, smooth, transparent, opaque, etc. – Technology connection- engineers use knowledge of properties to select construction materials 	<p>Physical Science, Properties of Materials Compare and contrast the characteristics of various solid objects</p>	<p>MI.P.PM.01.21 Demonstrate that water as a solid keeps its own shape (ice).</p>
<p>States of Matter</p> <ul style="list-style-type: none"> • Liquids <ul style="list-style-type: none"> – Words to describe liquids include bubbly, colorless, flow, foams, pour, shake, surface, translucent, and viscous – Properties <ul style="list-style-type: none"> • No definite shape, but definite volume • Liquids pour and flow • Liquids take the shape of their container • Surface of liquid is level with respect to the floor 	<p>Physical Science, Physical States and Changes Describe basic characteristics and properties of liquids</p>	<p>MI.P.PM.01.22 Demonstrate that water as a liquid takes on the shape of various containers.</p>
<p>Physical Changes</p> <ul style="list-style-type: none"> • Bending, breaking, twisting, cutting, etc. • Phase changes (melting, flowing freezing) • Not all materials respond the same way to what is done to them <ul style="list-style-type: none"> – Some materials bend without breaking, some can be twisted and others crack, etc. 	<p>Physical Science, Physical States and Changes Explain how different materials react to change (e.g. in temperature, pressure, forces)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<ul style="list-style-type: none"> Everything melts and freezes but at different temperatures. Ex. Rock turns to lava, ice to water, but the sun won't melt a rock 		
<p>Mixtures</p> <ul style="list-style-type: none"> Liquid and liquid, liquid and solid, solid and solid (e.g. oil and water, salt and water, sand and water, iron filings and sand) Separation Techniques <ul style="list-style-type: none"> Magnets, filters, evaporation Dissolving tests (types of solids, and conditions under which they will dissolve in water) e.g. milk, baking soda, corn syrup, cooking oil, liquid detergent, powdered drink mix, sugar, salt, chalk, cookies, raisins, candy, rice, beans, sand, oil, soil 	<p>Physical Science, Mixtures and Solutions Describe how mixtures can be created and separated using various tools</p>	<p>MI.P.PM.02.41 Recognize that some objects are composed of a single substance (water, sugar, salt) and others are composed of more than one substance (salt and pepper, mixed dry beans).</p>
	<p>Physical Science, Mixtures and Solutions Describe characteristics of solutions</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments</p>	<p>MI.P.PM.02.13 Measure the length of objects using rulers (centimeters) and meter sticks (meters) .</p> <p>MI.P.PM.02.14 Measure the volume of liquids using common measuring tools (measuring cups, measuring spoons).</p> <p>MI.P.PM.02.15 Compare the weight of objects using balances.</p> <p>S.IP.02.15 Make accurate measurements with appropriate units (meter, centimeter) for the measurement tool.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Two

UNIT: Motion and Forces (Foss Learning Kit: Balance and Motion)

NHA Science Content	NHA Objectives	MI GLCE
<p>Balance</p> <ul style="list-style-type: none"> Stability or instability of objects and the relationship to forces acting on the object <ul style="list-style-type: none"> Equilibrium 	<p>Physical Science, Forces Effect on Motion Describe balance as a function of position and weight/counterweight</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Forces Affect Motion</p> <ul style="list-style-type: none"> Isaac Newton's 1st Law of Motion <ul style="list-style-type: none"> An object at rest will remain at rest and an object in motion will remain in motion, in a straight line, unless a force acts on them This means that anytime an object starts moving or stops moving or moves in any way other than a straight line, there is a force causing that change in motion Forces <ul style="list-style-type: none"> Pushes and pulls on objects (e.g. by anything in visible contact with an object as well as wind, earthquakes or other natural forces) 	<p>Physical Science, Forces Effect on Motion Describe the effects that pushing or pulling have on the motion of objects</p>	<p>MI.P.FM.00.31 Demonstrate pushes and pulls. MI.P.FM.00.32 Observe that objects initially at rest will move in the direction of the push or pull. MI.P.FM.00.33 Observe how pushes and pulls can change the speed or direction of moving objects</p>
<ul style="list-style-type: none"> Forces <ul style="list-style-type: none"> Gravity pulls on objects: objects near the Earth fall to the ground unless something holds them up 	<p>Physical Science, Forces Effect on Motion Describe the observable effects of gravity on objects</p>	<p>MI.P.FM.00.21 Observe how objects fall toward the earth.</p>
<ul style="list-style-type: none"> Position of an object relative to another object or background <ul style="list-style-type: none"> Over/under In/out Above/below Left/right 	<p>Physical Science, Measuring Motion Describe the position of an object relative to another object or background</p>	<p>MI.P.FM.00.11 Compare the position of an object (for example: above, below, in front of, behind, on) in relation to other objects around it. MI.P.FM.00.12 Describe the motion of an object (for example: away from or closer to) from different observers' views.</p>

<ul style="list-style-type: none"> • Motion of an object <ul style="list-style-type: none"> – Moving, stopped, straight, zigzag, vibrate, spin, rotate, curved, circular, back-and-forth/vibrating, fast, slow, speeding up, slowing down 	Physical Science, Measuring Motion Compare and contrast the motion of different objects	MI.P.FM.00.34 Observe how shape (for example: cone, cylinder, sphere), size, and weight of an object can affect motion.
Simple Machines <ul style="list-style-type: none"> • Inclined plane <ul style="list-style-type: none"> – E.g. stairs • Screw • Lever • Pulley • Wheel and axle • Gears • Inclined plane • Wedge • Screw 	Physical Science, Simple Machines Describe simple machines and their purpose	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Scientists learn about things by observing those things carefully	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses. S.IP.02.12 Generate questions based on observations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	S.IP.02.13 Plan and conduct simple investigations. S.IP.02.12 Generate questions based on observations. S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	S.RS.02.13 Recognize that when a science investigation is done the way it was done before, similar results are expected.

People are more likely to believe your ideas if you can back them up with reason or evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	S.IA.02.12 Share ideas about science through purposeful conversation. S.IA.02.13 Communicate and present findings of observations. S.RS.02.15 Use evidence when communicating scientific ideas.
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	S.IP.02.16 Construct simple charts and graphs from data and observations. S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Many toys are like real things in some ways but not others and would be considered models of the real thing. They may not be the same size, are missing many details, or are not able to do all of the same things. A model of something is different from the real thing but can be used to learn something about the real thing. One way to describe something is to say how it is and isn't like something else	The Nature of Science, Common Themes in Science Identify similarities and differences between a model of an object and the real thing	S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Things in nature and things people make have very different sizes, weights, ages, and speeds and can be compared based on those differences.	The Nature of Science, Common Themes in Science Describe the different sizes, weights, ages, and speeds of things observed	MI.P.FM.00.34 Observe how shape (for example: cone, cylinder, sphere), size, and weight of an object can affect motion.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Two

UNIT: Energy

NHA Science Content	NHA Objectives	MI GLCE
<p>Energy all around us</p> <ul style="list-style-type: none"> Electrical energy is used in our houses and cars to make things work Batteries store energy Cars use energy from gas People use energy from food The sun's energy lights and heats the earth 	<p>Physical Science, Energy Resources Describe how energy is used in the household, in transportation, in toys, etc.</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
	<p>Physical Science, Energy Resources Identify sources of energy, such as gasoline from oil, electricity, and food</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Energy conservation</p> <ul style="list-style-type: none"> Turning off appliances conserves energy 	<p>Physical Science, Energy Resources Demonstrate practical ways to conserve energy</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Heat production</p> <ul style="list-style-type: none"> Heat is energy and can be generated from a variety of sources (e.g. burning things, rubbing things together, mixing things together, plugging things in or turning things on, etc.) Temperature of objects <ul style="list-style-type: none"> Cold, warm, hot <p>Heat transfer</p> <ul style="list-style-type: none"> Transfer by contact (e.g. spoon in a pot of hot water) Transfer through the air (e.g. standing near a fire is hot, the sun heats the earth) 	<p>Physical Science , Forms of Energy and Their Interactions Investigate and describe various methods for generating and transferring heat energy</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

Scientists learn about things by observing those things carefully	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses. S.IP.02.12 Generate questions based on observations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	S.IP.02.13 Plan and conduct simple investigations. S.IP.02.12 Generate questions based on observations. S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	S.RS.02.13 Recognize that when a science investigation is done the way it was done before, similar results are expected.
People are more likely to believe your ideas if you can back them up with reason or evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	S.IA.02.12 Share ideas about science through purposeful conversation. S.IA.02.13 Communicate and present findings of observations. S.RS.02.15 Use evidence when communicating scientific ideas.
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	S.IP.02.16 Construct simple charts and graphs from data and observations. S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Two

UNIT: The Water Cycle

NHA Science Content	NHA Objectives	MI GLCE
Precipitation <ul style="list-style-type: none"> Falls from the sky Water takes the form of ice, snow, rainwater, sleet, hail 	Earth and Space Science, Water on Earth Analyze precipitation such as snow, ice, rain, hail, and sleet as forms of water resulting from different conditions	MI.E.FE.02.13 Describe the properties of water as a liquid (visible, flowing, shape of container and recognize rain, dew, and fog as water in its liquid state). MI.E.FE.02.14 Describe the properties of water as a solid (hard, visible, frozen, cold) and recognize ice, snow, and hail as water in its solid state.
Groundwater <ul style="list-style-type: none"> Water poured onto sand or soil disappears unless the ground is saturated Water poured on rocks or concrete runs off if there is a slope, or puddles 	Earth and Space Science, Water on Earth Compare and contrast the effect that surface type has on whether water seeps into the surface, runs off, or puddles	MI.E.FE.02.21 Describe how rain collects on the surface of the Earth and flows downhill into bodies of water (streams, rivers, lakes, oceans) or into the ground.
Evaporation <ul style="list-style-type: none"> Water in an uncovered cup disappears 	Earth and Space Science, Water on Earth Describe the effect of evaporation	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Water on Earth <ul style="list-style-type: none"> Water exists naturally as a solid and liquid (and gas, but not to be analyzed at this level) on Earth in the forms of glaciers, ice caps, lakes, rivers, oceans, and groundwater 	Earth and Space Science, Water on Earth Describe the locations of solid and liquid water on Earth	MI.E.FE.02.11 Identify water sources (wells, springs, lakes, rivers, oceans). MI.E.FE.02.22 Describe the major bodies of water on the Earth's surface (lakes, ponds, oceans, rivers, streams).
Water on Earth <ul style="list-style-type: none"> Water changes from one form to another with the influence of heat energy <ul style="list-style-type: none"> Amount of water doesn't necessarily change during phase change 	Earth and Space Science, Water on Earth Investigate and explain the changes in state from solid to liquid made by water and the conditions necessary for these changes	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	Earth and Space Science, Water on Earth MI.E.FE.02.12 Identify household uses of water (drinking, cleaning, food preparation).
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Scientists learn about things by observing those things carefully	The Nature of Science, Scientific Inquiry- The Scientific Method Make observations related to the 5 senses about living things, nonliving objects, and events	S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses. S.IP.02.12 Generate questions based on observations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world	S.IP.02.13 Plan and conduct simple investigations. S.IP.02.12 Generate questions based on observations. S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
Describing things accurately is important in science because it enables people to compare their observations with those of others.	The Nature of Science, Scientific Inquiry- Scientific Inquiry- Data Collection and Analysis Inquiry- Data Collection and Analysis Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs	S.IP.02.16 Construct simple charts and graphs from data and observations. S.RS.02.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
People are more likely to believe your ideas if you can back them up with reason or evidence.	The Nature of Science, Scientific Knowledge Communicate a scientific idea using evidence	S.IA.02.12 Share ideas about science through purposeful conversation. S.IA.02.13 Communicate and present findings of observations. S.RS.02.15 Use evidence when communicating scientific ideas.
Because the universe is consistent, when a science investigation is done the same way multiple times, one can expect to get very similar results each time it is performed.	The Nature of Science, Scientific Knowledge Describe the consistency of the results of an experiment conducted multiple times	S.RS.02.13 Recognize that when a science investigation is done the way it was done before, similar results are expected.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Two

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Personal Appearance</p> <ul style="list-style-type: none"> • Hygiene <ul style="list-style-type: none"> - Caring for: teeth, gums, eyes, ears, nose, skin, hair, and nails - Bathing • Importance of having good hygiene <ul style="list-style-type: none"> - Avoiding illness - Recognizing signs of common illnesses - Sanitation <ul style="list-style-type: none"> • Reducing the spread of germs <p>Healthy Diet</p> <ul style="list-style-type: none"> • Nutrition <ul style="list-style-type: none"> - How our body uses food - Eating a variety of food - Importance of water - Healthy vs. unhealthy food <ul style="list-style-type: none"> • Healthy snacks • Limiting intake of unhealthy foods - Food Pyramid <ul style="list-style-type: none"> • Food groups • Developing healthy eating habits <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Safety <ul style="list-style-type: none"> - Traffic/pedestrian safety - Playground/classroom safety - Bicycle/ water safety - Appropriate touch <ul style="list-style-type: none"> • Responding to inappropriate touch - Strangers - Recognition of dangerous objects and substances <ul style="list-style-type: none"> • Weapons, cleaning products/chemicals, medicine 	<p>STRAND 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Explain the importance of eating a variety of foods from all of the food groups.</p> <p>1.2 Classify foods into the food groups.</p> <p>1.3 Describe the characteristics of combination foods.</p> <p>1.4 Describe the characteristics of foods and beverages that should be limited.</p> <p>Standard 3: Health Behaviors</p> <p>1.5 Provide examples of combination foods.</p> <p>1.6 Provide examples of foods and beverages that should be limited.</p> <p>1.7 Generate examples of a variety of physical activities that can be enjoyed when in or near the water.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Explain that all forms of tobacco products contain harmful chemicals, including the drug nicotine.</p> <p>2.2 Describe the impact of using tobacco, including that it is addictive.</p> <p>2.3 Describe the impact of consuming food or beverages that contain caffeine.</p> <p>2.4 Describe the impact of using alcohol, including that it changes how a person feels, thinks, and acts.</p> <p>Standard 3: Health Behaviors</p> <p>2.5 Suggest alternative foods and beverages that are caffeine free.</p> <p>2.6 Demonstrate strategies to avoid exposure to secondhand smoke.</p> <p>STRAND 3: Safety</p> <p>Standard 1: Core Concepts</p> <p>3.1 Describe safety precautions when in or near water.</p> <p>3.2 Identify appropriate and inappropriate touch.</p> <p>3.3 Explain that a child is not at fault if someone touches him or her in an inappropriate way.</p> <p>Standard 2: Access Information</p>

<ul style="list-style-type: none"> Emergency Situations <ul style="list-style-type: none"> Routines for fire drills/tornado drills Calling 911 Community Service Providers <ul style="list-style-type: none"> Police officers/fire fighters / paramedics <p>Healthy Practices</p> <ul style="list-style-type: none"> Benefits of Exercise Appropriate television use Healthy sleeping habits Avoidance/affects of dangerous substances <ul style="list-style-type: none"> Drugs/alcohol/ tobacco products Products containing caffeine <p>Healthy Minds</p> <ul style="list-style-type: none"> Interacting with family/friends <ul style="list-style-type: none"> Positive touch Sharing/recognizing feelings of self and others Coping with change Managing emotions (anger) Building relationships/making friends <ul style="list-style-type: none"> Listening/paying attention Making decisions and solving problems 	<p>3.4 Demonstrate how to ask a trusted adult for help.</p> <p>Standard 3: Health Behaviors</p> <p>3.5 Apply wheeled recreation rules.</p> <p>3.6 Demonstrate the use of wheeled recreation safety gear.</p> <p>3.7 Apply strategies to avoid personally unsafe situations.</p> <p>3.8 Demonstrate strategies to get away in cases of inappropriate touching or abduction.</p> <p>STRAND 4: Social and Emotional Health</p> <p>Standard 1: Core Concepts</p> <p>4.1 Describe the characteristics of touch which is caring and important to positive relationships.</p> <p>4.2 Analyze the importance of identifying and expressing feelings to maintain personal health and healthy relationships.</p> <p>4.3 Describe situations that may elicit mixed emotions.</p> <p>Standard 2: Access Information</p> <p>4.4 Identify people who can help make decisions and solve problems.</p> <p>Standard 6: Decision Making</p> <p>4.5 Explain the decision making and problem solving steps.</p> <p>4.6 Demonstrate the ability to make a decision or solve a problem using the steps.</p> <p>Standard 7: Social Skills</p> <p>4.7 Demonstrate ways to show respect for feelings, rights, and property of others.</p> <p>4.8 Demonstrate effective listening and attending skills.</p> <p>4.9 Recognize and express appropriately a variety of personal feelings.</p> <p>4.10 Demonstrate the ability to manage strong feelings, including anger.</p> <p>STRAND 5: Personal Health and Wellness</p> <p>Standard 3: Health Behaviors</p> <p>5.1 Demonstrate skills throughout the day to reduce the spread of germs.</p>
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NHA Science Michigan Alignment
Grade Two

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 1

MI.E.SE.02.21 Describe the major landforms of the surface of the Earth (mountains, plains, plateaus, valleys, hills). (Surface of Earth Unit)

MI.P.PM.02.12 Describe objects and substances according to their properties (color, size, shape, texture, hardness, liquid or solid, sinking or floating).
(Properties Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.



GRADE THREE

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 3RD GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Scientific Enterprise – Science and Society Common Themes in Science</p> <p>Engineering and Technology Technology</p> <p>The Living Environment Classification</p> <p>Physical Science Sound Light Measuring Motion Forces Effect on Motion</p> <p>Earth and Space Science The Changing Earth Earth Materials and Responsible Use Characteristics of Objects in Space Interaction of the Sun, Earth, and Moon</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Force and Motion Gravity Force Speed Standard: Energy Forms of Energy Light Properties Sound Standard: Properties of Matter Conductive and Reflective Properties</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Structures and Functions Classification</p> <p>Discipline 4: Earth Science Standard: Earth Systems Natural Resources Human Impact Standard: Solid Earth Earth Materials Surface Changes Using Earth Materials</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Three

UNIT: Introduction to Science

NHA Science Content	NHA Objectives	MI GLCE
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.
Scientists' explanations about what happens in the world come partly from what they observe (evidence) and partly from how they interpret (inference) their observations. Sometimes scientists have different explanations for the same set of observations which usually leads to their making more observations to resolve the differences.	The Nature of Science, Scientific Knowledge Differentiate between observation and inference in scientific explanations	MI.S.IP.03.11 Make purposeful observation of the natural world using the appropriate senses.

Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	MI.S.IA.03.11 Summarize information from charts and graphs to answer scientific questions. MI.S.RS.03.15 Use evidence when communicating scientific ideas. MI.S.IA.03.13 Communicate and present findings of observations and investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.RS.03.14 Use data/samples as evidence to separate fact from opinion.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens	The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)	MI.S.IP.03.12 Generate questions based on observations. MI.S.IP.03.13 Plan and conduct simple and fair investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.14 Develop research strategies and skills for information gathering and problem solving.
Simple tools aid observation and data collection and may include a hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beakers.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use appropriate tools and simple equipment to gather scientific data and extend the senses	MI.S.IP.03.14 Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer).
It is imperative in science to make accurate measurements.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.03.13 Communicate and present findings of observations and investigations.

Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.03.16 Construct simple charts and graphs from data and observations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.13 Communicate and present findings of observations and investigations.
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise- Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.
In something that consists of many parts, the parts usually influence one another. Something may not work well (or at all) if a part of it is missing, broken, worn out, mismatched, or misconnected.	The Nature of Science, Common Themes in Science Describe how the parts of a system work together	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.	The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change	MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Models (e.g., physical, conceptual, mathematical models, computer simulations) are very useful for communicating ideas and predicting changes in objects, events, and processes. When using a model to communicate about something, it is important to keep in mind how it is different from the thing being modeled	The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes	MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.RS.03.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Finding the largest and the smallest values of something is often as informative as knowing what the usual value is.	The Nature of Science, Common Themes in Science Identify objects that are at the extremes in sizes, weights, ages, and speeds	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Three

UNIT: Classification

NHA Science Content	NHA Objectives	MI GLCE
Different ways in which living things can be grouped <ul style="list-style-type: none"> Plants/animals <ul style="list-style-type: none"> Flowering/non flowering plants Bones/no bones <ul style="list-style-type: none"> Endoskeleton/exoskeleton Land animal/water animal 	The Living Environment, Classification Classify organisms based on physical and environmental characteristics	MI.L.OL.03.42 Classify animals on the basis of observable physical characteristics (backbone, body coverings, limbs).
Vertebrate Characteristics <ul style="list-style-type: none"> Mammals Fish Birds Reptiles Amphibians Invertebrate Characteristics <ul style="list-style-type: none"> Comparing insects and spiders 	The Living Environment, Classification Classify vertebrates and invertebrates on the basis of observable physical characteristics	MI.L.OL.03.42 Classify animals on the basis of observable physical characteristics (backbone, body coverings, limbs).

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

<p>Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions</p>	<p>MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.</p>
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NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Three

UNIT: Sound (Delta Learning Kit: Sound)

NHA Science Content	NHA Objectives	MI GLCE
Vibrations Plus a Medium Equals Sound <ul style="list-style-type: none"> • Mediums <ul style="list-style-type: none"> - Solids, liquids, gas 	Physical Science, Sound Explain how sound energy travels through solids, liquids, and gas	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Characteristics of Sound <ul style="list-style-type: none"> • Amplitude <ul style="list-style-type: none"> - Loudness- size of vibration doesn't change the pitch • Pitch <ul style="list-style-type: none"> - Relationship to other variables <ul style="list-style-type: none"> - Length of vibrating objects - Thickness of vibrating object - String tension - Height of liquid in a bottle - Length of a pipe or wind instrument 	Physical Science, Sound Compare and contrast sounds produced by various objects in terms of pitch and amplitude	MI.P.EN.03.32 Distinguish the effect of fast or slow vibrations as pitch.
Characteristics of Sound <ul style="list-style-type: none"> • Amplitude <ul style="list-style-type: none"> - Loudness- size of vibration doesn't change the pitch • Pitch <ul style="list-style-type: none"> - Relationship to other variables <ul style="list-style-type: none"> - Length of vibrating objects - Thickness of vibrating object - String tension - Height of liquid in a bottle - Length of a pipe or wind instrument 	Physical Science, Sound Describe the variables that affect pitch	MI.P.EN.03.32 Distinguish the effect of fast or slow vibrations as pitch.
The Ear <ul style="list-style-type: none"> • Structure and function 	The Living Environment, Animal Body Structures and Functions Describe the parts of the ear and their functions	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

<ul style="list-style-type: none"> Sound safety 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)</p>	<p>MI.S.IP.03.12 Generate questions based on observations. MI.S.IP.03.13 Plan and conduct simple and fair investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.14 Develop research strategies and skills for information gathering and problem solving.</p>
<p>It is imperative in science to make accurate measurements.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)</p>	<p>MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.</p>
<p>Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them</p>	<p>MI.S.IA.03.13 Communicate and present findings of observations and investigations.</p>
<p>Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots</p>	<p>MI.S.IP.03.16 Construct simple charts and graphs from data and observations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.13 Communicate and present findings of observations and investigations.</p>
<p>Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the</p>	<p>The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies</p>	<p>MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.</p>

investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.		
Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	MI.S.IA.03.11 Summarize information from charts and graphs to answer scientific questions. MI.S.RS.03.15 Use evidence when communicating scientific ideas. MI.S.IA.03.13 Communicate and present findings of observations and investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.RS.03.14 Use data/samples as evidence to separate fact from opinion.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Three

UNIT: Light

NHA Science Content	NHA Objectives	MI GLCE
<p>Visible Light</p> <ul style="list-style-type: none"> Shadows <ul style="list-style-type: none"> Light travels in a straight line until it strikes an object Producing vs. not producing light Interaction with matter <ul style="list-style-type: none"> Transparent, translucent, opaque objects Refraction and reflection 	<p>Physical Science, Light Describe the refraction, reflection, transmission, and/or absorption of light as it interacts with objects that are transparent, translucent, and opaque</p>	<p>MI.P.EN.03.21 Demonstrate that light travels in a straight path and that shadows are made by placing an object in a path of light MI.P.EN.03.22 Observe what happens to light when it travels from air to water (a straw half in the water and half in the air looks bent). MI.P.PM.03.52 Explain how we need light to see objects: light from a source reflects off objects and enters our eyes. P.PM.03.51 Demonstrate how some materials are heated more than others by light that shines on them.</p>
<p>Visible Light</p> <ul style="list-style-type: none"> Light and color <ul style="list-style-type: none"> Prisms/diffraction gratings ROYGBIV 	<p>Physical Science, Light Describe the visible spectrum of light</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions</p>	<p>MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.</p>

NHA Science Exemplar: Physical Science

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Grade Three

UNIT: Motion and Forces

NHA Science Content	NHA Objectives	MI GLCE
Describing and Graphing Motion <ul style="list-style-type: none"> Direction of motion Describing change in motion Change direction, speeding up, slowing down	Physical Science, Measuring Motion Describe the position and change in position (motion) of an object in comparison to a reference point	MI.P.FM.03.41 Describe the motion of objects in terms of direction. MI.P.FM.03.42 Identify changes in motion (change direction, speeding up, slowing down).
Describing and Graphing Motion <ul style="list-style-type: none"> Speed, time, distance Objects move at different rates, some very slowly and some too quickly to see	Physical Science, Measuring Motion Calculate the speed of objects based on the distance traveled divided by the time it took to travel the distance	MI.P.FM.03.43 Relate the speed of an object to the distance it travels in a standard amount of time.
Forces <ul style="list-style-type: none"> Looking at forces on an object <ul style="list-style-type: none"> Examples of forces at this level- the pushes and pulls by any object, pushes and pulls by magnets and electrically charged objects such as a balloon with static charge, gravity, forces of nature such as wind, etc. 	Physical Science, Forces Effect on Motion Analyze changing motion of objects and identify forces acting on the object to cause change in motion	MI.P.FM.03.22 Identify the force that pulls objects towards the Earth. MI.P.FM.03.35 Describe how a push or a pull is a force.
Relationship between Force and Motion <ul style="list-style-type: none"> Isaac Newton's 1st Law of Motion <ul style="list-style-type: none"> How forces cause change in motion (speeding up, slowing down, changing direction) Unbalanced forces cause change in motion- an object can have multiple forces acting on it and not change its motion because the forces are balanced Isaac Newton's 2nd Law of Motion <ul style="list-style-type: none"> How the size of a force and mass of an object affect what kind of change in motion there will be 	Physical Science, Forces Effect on Motion Explain how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object	MI.P.FM.03.36 Relate a change in motion of an object to the force that caused the change of motion. MI.P.FM.03.37 Demonstrate how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object. MI.P.FM.03.38 Demonstrate when an object does not move in response to a force, it is because another force is acting on it.

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.	The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change	MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
It is imperative in science to make accurate measurements.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.03.13 Communicate and present findings of observations and investigations.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)	MI.S.IP.03.12 Generate questions based on observations. MI.S.IP.03.13 Plan and conduct simple and fair investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.14 Develop research strategies and skills for information gathering and problem solving.

Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.03.16 Construct simple charts and graphs from data and observations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.13 Communicate and present findings of observations and investigations.
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.03.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.
Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	MI.S.IA.03.11 Summarize information from charts and graphs to answer scientific questions. MI.S.RS.03.15 Use evidence when communicating scientific ideas. MI.S.IA.03.13 Communicate and present findings of observations and investigations. MI.S.IA.03.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.RS.03.14 Use data/samples as evidence to separate fact from opinion.

NHA Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Three

UNIT: Rocks and Minerals (Foss Learning Kit: Earth Materials)

NHA Science Content	NHA Objectives	MI GLCE
Earth Materials <ul style="list-style-type: none"> Differentiating between mineral, rock, clay, boulder, gravel, sand, soil 	Earth and Space Science, Earth Materials and Responsible Use Compare and contrast types of earth materials	MI.E.SE.03.13 Recognize and describe different types of Earth materials (mineral, rock, clay, boulder, gravel, sand, soil, water, and air)
Minerals <ul style="list-style-type: none"> Commonly seen minerals- quartz, feldspar, hornblende, mica, halite, fluoride, pyrite (fool's gold) Basic properties of minerals- color, hardness, reaction to acid Relationship to rocks- rocks are composed of different combinations of minerals 	Earth and Space Science, Earth Materials and Responsible Use Describe properties used to identify minerals and determine the mineral makeup of rocks	MI.E.SE.03.14 Recognize that rocks are made up of minerals
Rocks <ul style="list-style-type: none"> Rock identification <ul style="list-style-type: none"> Mineral content and texture comparison (color due to presence of light or dark minerals and size of minerals due to cooling time) Process of formation <ul style="list-style-type: none"> Igneous <ul style="list-style-type: none"> "Fire rock"- rock that is the result of the cooling and hardening of hot liquid magma or lava, either above ground or below Identification and classification by key- granite, gabbro, basalt Sedimentary <ul style="list-style-type: none"> Rock that is formed from the consolidation of sediment over time Identification and classification by key- sandstone, limestone, siltstone, 	Earth and Space Science, Earth Materials and Responsible Use Compare and contrast the observable features and formation processes of igneous, sedimentary, and metamorphic rocks	MI.E.SE.03.13 Recognize and describe different types of Earth materials (mineral, rock, clay, boulder, gravel, sand, soil, water, and air)

<ul style="list-style-type: none"> shale, conglomerate • Metamorphic <ul style="list-style-type: none"> – Preexisting rock that has been physically altered by heat and/or pressure – Identification and classification by key- gneiss, marble, quartzite, slate 		
<p>Rocks</p> <ul style="list-style-type: none"> • Rock identification <ul style="list-style-type: none"> – Mineral content and texture comparison (color due to presence of light or dark minerals and size of minerals due to cooling time) – Process of formation <ul style="list-style-type: none"> • Igneous <ul style="list-style-type: none"> – “Fire rock”- rock that is the result of the cooling and hardening of hot liquid magma or lava, either above ground or below – Identification and classification by key- granite, gabbro, basalt • Sedimentary <ul style="list-style-type: none"> – Rock that is formed from the consolidation of sediment over time – Identification and classification by key- sandstone, limestone, siltstone, shale, conglomerate • Metamorphic <ul style="list-style-type: none"> – Preexisting rock that has been physically altered by heat and/or pressure – Identification and classification by key- gneiss, marble, quartzite, slate 	<p>Earth and Space Science, Earth Materials and Responsible Use Describe the identifying properties of common rock samples</p>	<p>MI.E.SE.03.13 Recognize and describe different types of Earth materials (mineral, rock, clay, boulder, gravel, sand, soil, water, and air)</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		

Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.	The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change	MI.S.IP.03.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.

NHA Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Three

UNIT: The Changing Surface of Earth (Foss Learning Kit: Landforms- OPTIONAL PURCHASE)

NHA Science Content	NHA Objectives	MI GLCE
Features of the Earth's Surface <ul style="list-style-type: none"> • Exploring Earth's Surface <ul style="list-style-type: none"> – Mountains, plains, valleys, deserts, hills, valleys, peninsulas, rivers, waterfalls, plateaus 	Earth and Space Science, The Changing Earth Compare and contrast major features of the earth's surface	MI.E.SE.02.21 Describe the major landforms of the surface of the Earth (mountains, plains, plateaus, valleys, hills).
Weathering and Erosion <ul style="list-style-type: none"> • Erosion and deposition <ul style="list-style-type: none"> – Runoff – Rivers (e.g. deltas, floodplains, meanders, oxbow lakes) – Waves <ul style="list-style-type: none"> • Sandbars, beaches – Glaciers <ul style="list-style-type: none"> • Movement of earth materials – Gravity <ul style="list-style-type: none"> • Landslides – Wind <ul style="list-style-type: none"> • Dunes • Our changing Earth due to these forces <ul style="list-style-type: none"> – Valleys, hills, lakes, widened rivers, mountains, cracks, movement of earth materials • Weathering <ul style="list-style-type: none"> – Physical/mechanical <ul style="list-style-type: none"> • Frost action, water, wind • Cracks in sidewalks 	Earth and Space Science, The Changing Earth Describe the variety of forces involved in weathering, erosion and deposition	MI.E.SE.03.22 Identify and describe natural causes of change in the Earth's surface (erosion, glaciers, volcanoes, landslides, and earthquakes).
Weathering and Erosion <ul style="list-style-type: none"> • Erosion and deposition <ul style="list-style-type: none"> – Runoff – Rivers (e.g. deltas, floodplains, meanders, 	Earth and Space Science, The Changing Earth Describe how physical/mechanical weathering (e.g., wind, water, ice, and gravity) causes change to the Earth's surface over time	MI.E.SE.03.22 Identify and describe natural causes of change in the Earth's surface (erosion, glaciers, volcanoes, landslides, and earthquakes).

<ul style="list-style-type: none"> oxbow lakes) - Waves <ul style="list-style-type: none"> • Sandbars, beaches - Glaciers <ul style="list-style-type: none"> • Movement of earth materials - Gravity <ul style="list-style-type: none"> • Landslides - Wind <ul style="list-style-type: none"> • Dunes • Our changing Earth due to these forces <ul style="list-style-type: none"> - Valleys, hills, lakes, widened rivers, mountains, cracks, movement of earth materials • Weathering <ul style="list-style-type: none"> - Physical/mechanical <ul style="list-style-type: none"> • Frost action, water, wind • Cracks in sidewalks 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.</p>	<p>The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change</p>	<p>MI.E.SE.03.22 Identify and describe natural causes of change in the Earth's surface (erosion, glaciers, volcanoes, landslides, and earthquakes).</p>
<p>Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions</p>	<p>MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.</p>

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Three

UNIT: Earth in Space (Delta Learning Kit: Solar System)

NHA Science Content	NHA Objectives	MI GLCE
<p>The Solar System</p> <ul style="list-style-type: none"> • Characteristics of the planets, Sun, Moon <ul style="list-style-type: none"> – Size comparison (relative size- How many Earths could fit in the sun, etc.) – Color – Producing vs. reflecting light (the Sun is the only object producing light in the Solar System) – Composition (rock or gas) 	<p>Earth and Space Science , Characteristics of Objects in Space Describe the major characteristics of the Sun, Moon, and planets</p>	<p>MI.E.ST.04.11 Identify common objects in the sky, such as the sun and the moon. MI.E.ST.04.12 Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life.</p>
<p>The Solar System</p> <ul style="list-style-type: none"> • Motion of the planets <ul style="list-style-type: none"> – Orbits – Position in the Solar System (order from closest to the Sun to farthest assuming orbits are aligned) 	<p>Earth and Space Science , Characteristics of Objects in Space Describe the motion and relative distance of the planets around the Sun</p>	<p>MI.E.ST.04.12 Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life.</p>
<p>Stars</p> <ul style="list-style-type: none"> • Patterns of apparent motion • Comparison to the Sun (size, brightness, distances from each other) • Social Studies connection- Constellations 	<p>Earth and Space Science , Characteristics of Objects in Space Describe characteristics of stars</p>	<p>MI.E.ST.04.11 Identify common objects in the sky, such as the sun and the moon.</p>

<p>The Motion of Earth</p> <ul style="list-style-type: none"> • Rotation and Revolution <ul style="list-style-type: none"> – Day, night, seasons cycling – Length of rotation and revolution • Actual and apparent motion of Sun <ul style="list-style-type: none"> – Sun appears to move East to West 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Describe the correlation between the rotation and revolution of the Earth and our days, nights, and years</p>	<p>MI.E.ST.04.21 Describe the orbit of the Earth around the sun as it defines a year. MI.E.ST.04.22 Explain that the spin of the Earth creates day and night. MI.E.ST.04.25 Describe the apparent movement of the sun and moon across the sky through day/night and the seasons.</p>
<p>Moon Phases</p> <ul style="list-style-type: none"> • Changing location • Changing appearance • The Moon revolves around/orbits the Earth once monthly and rotates on its axis once monthly 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Describe the pattern of changes in the appearance of the moon throughout the cycle</p>	<p>MI.E.ST.04.23 Describe the motion of the moon around the Earth. MI.E.ST.04.24 Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month.</p>
<p>Moon Phases</p> <ul style="list-style-type: none"> • Changing location • Changing appearance • The Moon revolves around/orbits the Earth once monthly and rotates on its axis once monthly 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Describe the rotation and revolution of the Moon around Earth</p>	<p>MI.E.ST.04.23 Describe the motion of the moon around the Earth.</p>
<p>Space Technology</p> <ul style="list-style-type: none"> • Telescopes are used to magnify distant objects in the sky • Space Shuttles travel to the moon • Mars Rover- travels to Mars and takes pictures • Satellites • Space Stations- allow astronauts to live and conduct lengthy experiments in space 	<p>Engineering and Technology, Technology Describe some of the technologies that have advanced our knowledge of objects in space</p>	<p>MI.S.RS.03.16 Identify technology used in everyday life. MI.S.RS.03.17 Identify current problems that may be solved through the use of technology.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of</p>	<p>The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change</p>	<p>MI.E.ST.04.24 Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month.</p>

objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.		
Models (e.g., physical, conceptual, mathematical models, computer simulations) are very useful for communicating ideas and predicting changes in objects, events, and processes. When using a model to communicate about something, it is important to keep in mind how it is different from the thing being modeled	The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes	MI.E.ST.04.23 Describe the motion of the moon around the Earth.
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	MI.S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Three

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • Illness prevention <ul style="list-style-type: none"> – Food choices – Personal Hygiene <ul style="list-style-type: none"> • Strategies to keep the body clean – Sanitation <ul style="list-style-type: none"> • Reducing the spread of germs <p>Healthy Diet</p> <ul style="list-style-type: none"> • Nutritional value of various foods • Healthy eating habits <ul style="list-style-type: none"> – Importance of breakfast – Diet including a variety of foods – Nutritious snacks – Importance of water – Limiting intake of unhealthy foods • Affects of advertising on food choices <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Community health care <ul style="list-style-type: none"> – Public health clinics – Mental health clinics – HMO's • Safety Rules <ul style="list-style-type: none"> – Wearing a seatbelt/helmet, use of a booster seat – Protecting ears from excessive noise – Appropriate clothing/protective sports equipment – Use of sunscreen – Recognizing and avoiding threatening situations • First aid procedures <ul style="list-style-type: none"> – How/when to get help – Minor burns/cuts/ poison • Conflict resolution <ul style="list-style-type: none"> – Positive and negative behaviors 	<p>STRAND 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Explain the benefits of healthy eating and being physically active.</p> <p>1.2 Describe the importance of choosing a variety of ways to be physically active.</p> <p>Standard 4: Influences</p> <p>1.3 Explain strategies used to advertise food and beverage products.</p> <p>1.4 Analyze how food advertising impacts eating behaviors related to eating when not hungry.</p> <p>Standard 5: Goal Setting</p> <p>1.5 Describe the elements of a physical activity plan.</p> <p>1.6 Develop a personal plan to be physically active.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Describe the short- and long-term effects of alcohol use, including addiction.</p> <p>2.2 Describe the short- and long-term effects of using tobacco, including addiction.</p> <p>Standard 3: Health Behaviors</p> <p>2.3 Describe actions that need to be followed to avoid accidental poisoning by household cleaning and paint products.</p> <p>2.4 Describe actions to take in a poison emergency.</p> <p>2.5 Explain rules for safe use of medicines and household products, including those that can be inhaled.</p> <p>Standard 4: Influences</p> <p>2.6 Explain how family and peers can influence choices about using alcohol and other drugs.</p> <p>2.7 Analyze various strategies used in the media that encourage or discourage tobacco use.</p> <p>Standard 7: Social Skills</p> <p>2.8 Demonstrate verbal and non-verbal ways to refuse alcohol.</p> <p>2.9 Demonstrate verbal and non-verbal ways to refuse tobacco use.</p>

- Non-violent strategies

Healthy Practices

- Major influences on a person's health (both positive and negative aspects)
 - Food choices
 - Exercise
 - Development of a physical activity plan
 - Sleep
 - Activity/ recreation
 - Awareness of personal habits
 - Anything put into your body
 - Drugs
 - Proper use of medication
- Alcohol, tobacco, and other drugs
 - Effects including addiction
 - Effect of media on use
- Effects of family on health
 - Importance of a supportive family
 - Participating in family activities
 - Taking on responsibilities at home

Healthy Minds

- Negative effects of media
 - Television
 - Movies
 - Video games
 - Advertising/magazines
- Stress management for children
- Social interactions
 - Maintaining positive friendships
 - Managing moods and emotions (anger)
 - Communicating care and respect to others
 - Respecting differences
- Peer pressure
 - Strategies to respond
 - How it effects others

STRAND 3: Safety

Standard 1: Core Concepts

3.1 Explain why the back seat is the safest place for young people to ride in a vehicle equipped with air bags.

3.2 Explain how booster seats and safety belts help passengers to stay safe.

3.3 Describe characteristics of safe and unsafe places.

Standard 2: Access Information

3.4 Describe how to access help when feeling threatened.

Standard 3: Health Behaviors

3.5 Describe safe and unsafe behaviors of occupants in vehicles.

3.6 Demonstrate the proper wearing of a safety belt.

3.7 Describe dangerous, destructive, and disturbing situations that need to be reported to an adult.

3.8 Analyze environments to determine whether they are safe places.

Standard 4: Influences

3.9 Analyze how one can influence safety belt and booster seat use of others.

STRAND 4: Social and Emotional Health

Standard 1: Core Concepts

4.1 Explain the benefits of positive friendships.

4.2 Describe the characteristics of positive role models.

4.3 Recognize that each person has unique talents and skills.

Standard 3: Health Behaviors

4.4 Describe ways people help each other.

4.5 Describe a unique talent or skill of oneself and one other person.

4.6 Explain ways to show acceptance of differences.

Standard 4: Influences

4.7 Analyze how friends influence others' behavior and well-being.

Standard 7: Social Skills

4.8 Demonstrate ways to express appreciation.

4.9 Demonstrate strategies for keeping positive friends.

4.10 Demonstrate how to confront annoying behavior.

Standard 8: Advocacy

4.11 Demonstrate the ability to support and respect people with differences.

STRAND 5: Personal Health and Wellness

Standard 1: Core Concepts

5.1 Explain the physical, emotional, and social importance of keeping the body clean.

Standard 3: Health Behaviors

5.2 Describe strategies to keep the body clean.

Standard 5: Goal Setting

	5.3 Develop a plan to keep the body clean.
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NHA Science Michigan Alignment
Grade Three

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 4

MI.P.EN.03.11 Identify light and sound as forms of energy. (Energy Unit)

MI.L.EV.03.11 Relate characteristics and functions of observable parts in a variety of plants that allow them to live in their environment (for example: leaf shape, thorns, odor, color). (Plant Unit)

MI.L.OL.03.31 Describe the function of the following plant parts: flower, stem, root and leaf. (Plant Unit)

MI.L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers). (Plant Unit)

MI.E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable and non-renewable resources). (Ecosystems Unit)

MI.L.OL.03.32 Identify and compare structures in animals used for controlling body temperature, support, movement, food-getting, and protection (for example: fur, wings, teeth, scales). (Animal Adaptations Unit)

MI.L.EV.03.12 Relate characteristics and functions of observable body parts to the ability of animals to live in their environment (for example: sharp teeth, claws, color, body covers). (Animal Adaptations Unit)

MI.E.SE.03.31 Identify Earth materials used to construct some common objects (bricks, buildings, roads, glass). (Conservation of Natural Resources Unit)

MI.E.SE.03.32 Describe how materials taken from the Earth can be used as fuels for heating and transportation. (Conservation of Natural Resources Unit)

MI.E.ES.03.41 Identify natural resources (metals, fuels, fresh water, fertile soil, and forests). (Conservation of Natural Resources Unit)

MI.E.ES.03.42 Classify renewable (fresh water, fertile soil, forests) and non-renewable (fuels, metals) resources. (Conservation of Natural Resources Unit)

MI.E.ES.03.43 Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal). (Conservation of Natural Resources Unit)

MI.E.ES.03.44 Recognize that paper, metal, glass, and some plastics can be recycled. (Conservation of Natural Resources Unit)

MI.E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry). (Conservation of Natural Resources Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.



GRADE FOUR

Science Grade Level Content

Michigan Alignment

NATIONAL HERITAGE ACADEMIES CURRICULUM

MICHIGAN 4TH GRADE ALIGNMENT

SCIENCE

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry, The Scientific Method Scientific Inquiry, Data Collection and Analysis Scientific Enterprise, Science and Society Common Themes in Science</p> <p>The Living Environment Food Chains and Webs Needs of Organisms Ecosystems Genetics and Heredity Plant and Animal Adaptations Fossils and Extinction Plant Structures and Function Life Cycles of Plants and Animals Animal Body Structures and Functions</p> <p>Physical Science Properties of Materials Forms of Energy and Their Interactions Physical States and Changes Electricity Magnetism</p> <p>Earth and Space Science Earth Materials and Responsible Use</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Energy Forms of Energy Energy and Temperature Electrical Circuits Standard: Properties of Matter Physical Properties States of Matter Magnets Conductive and Reflective Properties Standard: Changes in Matter Changes in State</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Life Requirements Standard: Evolution Environmental Adaptation Survival Standard: Ecosystems Interactions Changed Environment Effects</p> <p>Discipline 4: Earth Science Standard: Earth in Space and Time Characteristics of Objects in the Sky Patterns of Objects in the Sky Fossils</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Four

UNIT: Introduction to Science

NHA Science Content	NHA Objective	MI GLCE
<p>Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.</p>	<p>The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies</p>	<p>MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.</p>
<p>Scientists' explanations about what happens in the world come partly from what they observe (evidence) and partly from how they interpret (inference) their observations. Sometimes scientists have different explanations for the same set of observations which usually leads to their making more observations to resolve the differences.</p>	<p>The Nature of Science, Scientific Knowledge Differentiate between observation and inference in scientific explanations</p>	<p>MI.S.IP.04.11 Make purposeful observation of the natural world using the appropriate senses.</p>
<p>Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.</p>	<p>The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations</p>	<p>MI.S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. MI.S.RS.04.14 Use data/samples as evidence to separate fact from opinion. MI.S.RS.04.15 Use evidence when communicating scientific ideas.</p>

Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens. Scientists use different kinds of investigations depending on the questions they are trying to answer. Types of investigations include describing objects, events, and organisms; classifying them; and doing a fair test (experimenting).	The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)	MI.S.IP.04.12 Generate questions based on observations. MI.S.IP.04.13 Plan and conduct simple and fair investigations. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups.
Simple tools aid observation and data collection and may include a hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beakers.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use appropriate tools and simple equipment to gather scientific data and extend the senses	MI.S.IP.04.14 Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker).
It is imperative in science to make accurate measurements.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.13 Communicate and present findings of observations and investigations
Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.04.16 Construct simple charts and graphs from data and observations

Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	MI.S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.
In something that consists of many parts, the parts usually influence one another. Something may not work well (or at all) if a part of it is missing, broken, worn out, mismatched, or misconnected.	The Nature of Science, Common Themes in Science Describe how the parts of a system work together	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.	The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Models (e.g., physical, conceptual, mathematical models, computer simulations) are very useful for communicating ideas and predicting changes in objects, events, and processes. When using a model to communicate about something, it is important to keep in mind how it is different from the thing being modeled.	The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes	MI.S.RS.04.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Finding the largest and the smallest values of something is often as informative as knowing what the usual value is.	The Nature of Science, Common Themes in Science Identify objects that are at the extremes in sizes, weights, ages, and speeds	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	Engineering and Technology, Technology S.RS.04.16 Identify technology used in everyday life. S.RS.04.17 Identify current problems that may be solved through the use of technology.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Four

UNIT: Ecosystems (Delta Learning Kit: Food Chains and Webs)

NHA Science Content	NHA Objectives	MI GLCE
Plant Needs <ul style="list-style-type: none"> - Soil properties (e.g. color, texture, capacity to retain water, ability to support plant growth) - Soil components (e.g. rock fragments, clay, silt, sand, humus) 	Earth and Space Science, Earth Materials and Responsible Use Compare the components and properties of various soil types	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Plant Needs <ul style="list-style-type: none"> • Plant needs are foundational to animal needs because plants begin the food chain • Green plants make their own food (producers) 	The Living Environment, Food Chains and Webs Analyze the role of plants in food chains and webs	MI.L.EC.04.11 Identify organisms as part of a food chain or food web. MI.L.OL.04.15 Determine that plants require air, water, light, and a source of energy and building material for growth and repair.
Food Chains and Webs <ul style="list-style-type: none"> • Some animals eat plants for energy (herbivores/primary consumers) • Some animals eat other animals for energy (carnivores/secondary consumers) • Some animals eat both plants and animals for energy (omnivores) • Some organisms eat the remains of long-dead animals for energy (decomposers) 	The Living Environment, Food Chains and Webs Classify various organisms as producers, herbivores, carnivores, omnivores, or decomposers	MI.L.EC.04.11 Identify organisms as part of a food chain or food web.
Food Chains and Webs <ul style="list-style-type: none"> • Some animals eat plants for energy (herbivores/primary consumers) • Some animals eat other animals for energy (carnivores/secondary consumers) • Some animals eat both plants and animals for 	The Living Environment, Food Chains and Webs Compare and contrast simple food chains and food webs	MI.L.EC.04.11 Identify organisms as part of a food chain or food web.

energy (omnivores) Some organisms eat the remains of long-dead animals for energy (decomposers)		
Animal Needs <ul style="list-style-type: none"> • Food for energy <ul style="list-style-type: none"> - Every living thing needs food to live - Food is the source of growth in plants and animals - Food is the source of an animal's ability to do anything 	The Living Environment, Needs of Organisms Explain the necessity of food for the survival, growth, and repair of animals	MI.L.OL.04.16 Determine that animals require air, water, and a source of energy and building material for growth and repair.
Animal Needs <ul style="list-style-type: none"> • Behavior is dependent on a variety of factors in an environment <ul style="list-style-type: none"> - Kinds and numbers of other organisms present - Availability of food - Abiotic factors such as temperature, light, amount of water, soil composition, etc. • An ecosystem can only support a certain number and certain types of organisms according to their needs 	The Living Environment, Ecosystems Describe components of an ecosystem that have an effect on the behavior and types of organisms in the ecosystem	(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Populations and Communities <ul style="list-style-type: none"> • Competition <ul style="list-style-type: none"> - Predator/prey relationships • Symbiotic relationships <ul style="list-style-type: none"> - Common species interactions in an ecosystem (e.g. pollination by bees, deer and ticks, etc.) 	The Living Environment, Ecosystems Classify the interaction of organisms in an ecosystem (e.g., predator/prey, beneficial to both organisms, beneficial to one and harmful to another, or beneficial to one and neither harmful nor helpful to another)	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Changes in Ecosystems <ul style="list-style-type: none"> • Natural events <ul style="list-style-type: none"> - E.g. Disease, fire, flood, erosion, drought - Succession 	The Living Environment, Ecosystems Describe changes to an ecosystem from natural causes (e.g., disease, fire, flood, erosion, drought, and succession)	MI.L.EC.04.21 Explain how environmental changes can produce a change in the food web.

<p>Changes in Ecosystems</p> <ul style="list-style-type: none"> • Human activities and technology <ul style="list-style-type: none"> - Use of natural resources - Pollution - Construction - Land development - Mining - Hunting 	<p>The Living Environment, Ecosystems Describe changes to an ecosystem from human causes</p>	<p>MI.E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable and non-renewable resources).</p>
<p>Changes in Ecosystems</p> <ul style="list-style-type: none"> • Changes caused by animals <ul style="list-style-type: none"> - Animals that use plants and animals for nesting or shelter - Effects of overpopulation and lack of food - Animals that have behaviors with large impact <ul style="list-style-type: none"> • E.g. Beaver ponds , earthworm burrows 	<p>The Living Environment, Ecosystems Describe changes (beneficial, neutral or detrimental) caused by organisms in the ecosystem</p>	<p>MI.L.EC.04.21 Explain how environmental changes can produce a change in the food web.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions</p>	<p>MI.S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Four

UNIT: Plants

NHA Science Content	NHA Objectives	MI GLCE
Plant Parts and Function <ul style="list-style-type: none"> • Roots <ul style="list-style-type: none"> – Root hairs – Root types • Stem <ul style="list-style-type: none"> – Xylem and phloem • Leaves <ul style="list-style-type: none"> – Photosynthesis creates food using air, water and sunlight for energy • Flowers <ul style="list-style-type: none"> – Pistil, stamen, petals, ovules – Pollination – Seeds <ul style="list-style-type: none"> • Seed types and seed dispersion methods • Germination 	The Living Environment, Plant Structure and Function Explain the function of each of the plant parts	MI.L.OL.03.31 Describe the function of the following plant parts: flower, stem, root and leaf.
	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	The Living Environment, Plant Structure and Function MI.L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers).
Plant Adaptations to Different Environments <ul style="list-style-type: none"> • Desert <ul style="list-style-type: none"> – E.g. cacti with needles instead of leaves reduces water loss and protect plants from animals that eat the plant for water • Grasslands <ul style="list-style-type: none"> – E.g. grasses that grow from base instead of tip protects against grazing animals or fire 	The Living Environment, Plant and Animal Adaptation Describe the adaptive features of plants native to habitats around the world	MI.L.EV.03.11 Relate characteristics and functions of observable parts in a variety of plants that allow them to live in their environment (for example: leaf shape, thorns, odor, color).

<ul style="list-style-type: none"> • Rainforests <ul style="list-style-type: none"> – E.g. plants that grow on top of others in order to reach the sunlight • Deciduous forests <ul style="list-style-type: none"> – E.g. many trees with thick bark to protect against cold winters • Tundra <ul style="list-style-type: none"> – E.g. plants that grow close and low to the ground to resist the cold and reduce damage caused by snowy winds • Water <ul style="list-style-type: none"> – E.g. plants with air spaces in stems to keep the plant afloat 		
<p>Plant Life Cycles</p> <ul style="list-style-type: none"> • Annuals (e.g. corn, lettuce, pea, cauliflower, tomatoes, watermelon, bean) <ul style="list-style-type: none"> – Completes life cycle in one growing season – Seed, germination, growth of roots and stem, leaves, flower, more seeds produced, death • Biennials (e.g. beets, Brussel sprouts, cabbage, celery, parsley, carrots) <ul style="list-style-type: none"> – Completes life cycle in two growing seasons • Perennials (e.g. roses, trees) <ul style="list-style-type: none"> – Herbaceous <ul style="list-style-type: none"> • Stems • Bulbs – Woody plants 	<p>The Living Environment, The Life Cycle of Plants and Animals Compare the life cycles of common annuals, biennials, and perennials</p>	<p>(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.</p>	<p>The Nature of Science, The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)</p>	<p>MI.S.IP.04.12 Generate questions based on observations. MI.S.IP.04.13 Plan and conduct simple and fair investigations. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative</p>

		groups.
It is imperative in science to make accurate measurements.	The Nature of Science, Science Inquiry and Data Collection Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Science Inquiry and Data Collection Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.04.16 Construct simple charts and graphs from data and observations
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Science Inquiry and Data Collection Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.13 Communicate and present findings of observations and investigations
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.

<p>Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.</p>	<p>The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations</p>	<p>MI.S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. MI.S.RS.04.14 Use data/samples as evidence to separate fact from opinion. MI.S.RS.04.15 Use evidence when communicating scientific ideas.</p>
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Four

UNIT: Animal Adaptations

NHA Science Content	NHA Objectives	MI GLCE
<p>Anatomical Structures that Aid in Survival</p> <ul style="list-style-type: none"> • Eyes, nose, ears, tongue, and skin aid animals in sensing surroundings • Claws, shells, spines, feathers, fur, scales, or body color that help meet needs of animals <p>Defenses that Aid in Survival</p> <ul style="list-style-type: none"> • Camouflage <ul style="list-style-type: none"> – Mimicry <ul style="list-style-type: none"> • E.g. moth caterpillar, king snake – Disruptive coloration <ul style="list-style-type: none"> • E.g. tiger, zebra, leopard – Concealing coloration <ul style="list-style-type: none"> • E.g. snowshoe hare, polar bear, chameleon – Disguise <ul style="list-style-type: none"> • E.g. walking stick, treehopper, katydid • Weapons and other defense mechanisms <ul style="list-style-type: none"> – Animals with horns, tusks, sharp teeth, or claws – E.g. skunks, porcupines, toxic frogs, animals that sting, snakes <p>Behaviors that Aid in Survival</p> <ul style="list-style-type: none"> • Influenced by internal cues (e.g. instincts) <ul style="list-style-type: none"> – Salmon swimming upstream – Dormancy – Hibernation – Migration – Staying in herds • Influenced by external cues (e.g. changes in 	<p>The Living Environment, Animal Body Structures and Functions</p> <p>Identify the external structures of a variety of animals from around the world that perform particular functions critical to the survival of the animals</p>	<p>MI.L.OL.03.32 Identify and compare structures in animals used for controlling body temperature, support, movement, food-getting, and protection (for example: fur, wings, teeth, claws).</p>

<p>environment)</p> <ul style="list-style-type: none"> - Bears foraging in state parks or dumps 		
<p>Animal Life Cycles</p> <ul style="list-style-type: none"> • Development of animal from birth to growth, reproduction, death and how it fits with the needs of the animals <ul style="list-style-type: none"> - Butterflies, moths, crickets, ants, meal worms, frogs • Human life cycles <ul style="list-style-type: none"> - Embryo, fetus, newborn, infancy, childhood, adolescence, adulthood, old age 	<p>The Living Environment, Life Cycles of Plants and Animals</p> <p>Explain ways that the stages of an animal's life cycle (including humans) contribute to the survival of the animal</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Animals and their Habitats</p> <ul style="list-style-type: none"> • Desert <ul style="list-style-type: none"> - Animals that are adept at conserving water and maintaining safe body temperatures through avoidance or dissipation of heat (e.g. desert toads, Kangaroo Rats, roadrunner, lizard, tortoise, skunk, fox, owl) • Prairie <ul style="list-style-type: none"> - Animals that burrow, graze, and are camouflaged for grasses (e.g. prairie dogs, rabbits, mice and other rodents) • Rainforest <ul style="list-style-type: none"> - With half of all animals living here, camouflage and defense mechanisms are critical (E.g. poisonous snakes, scorpions and spiders, leopards, anteaters, sloths, and insects) • Deciduous forest <ul style="list-style-type: none"> - Many mammals and birds with fur and feathers to keep warm during winter, or animals that migrate or hibernate (E.g. deer, bear, elk, rodents, bobcats, coyotes, chipmunks and squirrels) • Tundra <ul style="list-style-type: none"> - Animals that are adapted to long cold winters and very little precipitation or hibernate or 	<p>The Living Environment, Plant and Animal Adaptations</p> <p>Identify the adaptive features (e.g. camouflage, behaviors, weapons) of animals native to common habitats around the world</p>	<p>MI.L.EV.03.12 Relate characteristics and functions of observable body parts to the ability of animals to live in their environment (for example: sharp teeth, claws, color, body covers).</p>

<ul style="list-style-type: none"> migrate to escape the harsh conditions (e.g. Arctic wolf, brown bear, Musk Ox, Ptarmigan) Savannah <ul style="list-style-type: none"> Because of the lengthy dry season, animals that migrate or don't need much water and can run fast, fly, or burrow to avoid frequent fires (e.g. elephants, warthogs, gazelles, hyenas, cheetahs, lions) 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)	MI.S.IP.04.12 Generate questions based on observations. MI.S.IP.04.13 Plan and conduct simple and fair investigations. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups.
It is imperative in science to make accurate measurements.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.04.16 Construct simple charts and graphs from data and observations
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.13 Communicate and present findings of observations and investigations

<p>Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.</p>	<p>The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies</p>	<p>MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.</p>
<p>Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.</p>	<p>The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations</p>	<p>MI.S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. MI.S.RS.04.14 Use data/samples as evidence to separate fact from opinion. MI.S.RS.04.15 Use evidence when communicating scientific ideas.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Four

UNIT: Species over Time

NHA Science Content	NHA Objectives	MI GLCE
<p>Looking at Traits</p> <ul style="list-style-type: none"> • Inherited vs. Acquired Traits <ul style="list-style-type: none"> – Traits inherited from parents (e.g. eye color, ability to roll tongue or wiggle ears, height, shape of nose, eyes, etc., flower color) <p>Traits resulting from the environment (e.g. table manners, # of scars, weight, hair style)</p>	<p>The Living Environment, Genetics and Heredity Differentiate between those traits shared between parents and offspring that are inherited and those that are learned</p>	<p>MI.L.EV.04.21 Identify individual differences (color, leg length, size, wing size, leaf shape) in organisms of the same kind.</p>
	<p>The Living Environment, Plant and Animal Adaptations Identify individual differences in organisms from the same population that could give them an advantage or disadvantage in the competition for resources and reproduction</p>	<p>MI.L.EV.04.21 Identify individual differences (color, leg length, size, wing size, leaf shape) in organisms of the same kind. MI.L.EV.04.22 Identify how variations in physical characteristics of individual organisms give them an advantage for survival and reproduction.</p>
<p>NOTE- As a courtesy to parents who may disagree with the content of this objective, please send a notice home with this information prior to teaching this objective.</p>	<p>The Living Environment, Fossils and Extinction Analyze organisms and environmental conditions of the past using fossil evidence</p>	<p>MI.E.ST.04.31 Explain how fossils provide evidence of the history of the Earth.</p>
<p>Fossils</p> <ul style="list-style-type: none"> • Definition, types, etc. • Relationship to evidence of change in species <ul style="list-style-type: none"> – Provide evidence about the plants and animals and environmental conditions of the past – Used to compare past and present animals 	<p>The Living Environment, Fossils and Extinction Compare fossils with each other and with living organisms to determine similarities and differences</p>	<p>MI.E.ST.04.32 Compare and contrast life forms found in fossils and organisms that exist today.</p>

<p>Extinction of Species</p> <ul style="list-style-type: none"> • Human related causes • Natural events 	<p>The Living Environment, Fossils and Extinction Describe processes that can lead to the extinction of a species</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.</p>	<p>The Scientific Environment, Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions</p>	<p>MI.S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Four

UNIT: Properties of Materials (Delta Learning Kit: Measuring)

NHA Science Content	NHA Objectives	MI GLCE
<p>It is imperative in science to make accurate measurements.</p> <p>Measurement Tools</p> <ul style="list-style-type: none"> Length, height, width, distance, area (use of a meter stick, millimeters, centimeter, meters) Capacity- <ul style="list-style-type: none"> Nonstandard measurement- cupfuls Customary measurement- teaspoon, tablespoon, cups, gallons, quarts, pints, fluidounces Metric measurement- liter, milliliter Volume- the size of an object, substance, or space Mass- amount of matter in an object (use of a balance, grams, kilograms) Weight- amount of attraction between earth and an object (use of a spring scale, pounds or Newtons) Temperature (use of a thermometer, Fahrenheit or Celsius) 	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis</p> <p>Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)</p>	<p>MI.P.PM.04.16 Measure the weight (spring scale) and mass (balances in grams or kilograms) of objects.</p> <p>MI.P.PM.04.17 Measure volumes of liquids in milliliters and liters.</p> <p>MI.P.PM.04.18 Demonstrate the use of centimeter cubes poured into a container to estimate the container's capacity.</p> <p>MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.</p>

<p>Properties of Objects</p> <ul style="list-style-type: none"> • Color • Texture • Flexibility • Density- amount of matter in the space an object fills <ul style="list-style-type: none"> – Sink or float in water • Magnetism • Melting point/boiling point • Conductivity <ul style="list-style-type: none"> – Heat and/or electrical energy <ul style="list-style-type: none"> • Dense solids are generally the best conductors of heat, gasses the worst • Metals are the best conductors of electrical energy • Technology connection- Materials, whether human made or natural have different levels of conductivity. Materials are often chosen in design and construction based on conductivity <p>Technology connection- the properties of objects are dependent on the materials from which they are made, either human made or natural</p>	<p>Physical Science, Properties of Materials Explain how the material make-up of an object determines some of the properties of the object</p>	<p>MI.P.PM.02.12 Describe objects and substances according to their properties (color, size, shape, texture, hardness, liquid or solid, sinking or floating).</p>
<p>Models (e.g., physical, conceptual, mathematical models, computer simulations) are very useful for communicating ideas and predicting changes in objects, events, and processes. When using a model to communicate about something, it is important to keep in mind how it is different from the thing being modeled.</p>	<p>The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes</p>	<p>MI.S.RS.04.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Four

UNIT: States of Matter

NHA Science Content	NHA Objectives	MI GLCE
Solids, Liquids, Gases <ul style="list-style-type: none"> • Solids- definite shape and volume • Liquids- no definite shape but definite volume • Gases do not hold definite shape or volume 	Physical Science, Physical States and Changes Compare and contrast the three states of matter by observable characteristics	MI.P.PM.04.23 Compare and contrast the states (solids, liquids, gases) of matter
	Physical Science, Physical States and Changes Explain the relationship between the temperature of an object and its state	MI.P.CM.04.11 Explain how matter can change from one state (liquid, solid, gas) to another by heating and cooling
Physical Changes of Matter <ul style="list-style-type: none"> • Phase changes of common matter (melting, freezing, evaporation, condensation, sublimation) <ul style="list-style-type: none"> - Temperature and relationship to phase changes <ul style="list-style-type: none"> • Thermometers • Celsius, Fahrenheit • Conservation of mass in physical changes 	Physical Science, Physical States and Changes Describe the unique properties of water (expansion and contraction) as it is heated and cooled	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Four

UNIT: Energy

NHA Science Content	NHA Objectives	MI GLCE
<p>S-C-R-E-A-M (+H)</p> <ul style="list-style-type: none"> • Sound energy <ul style="list-style-type: none"> – Vibration through a medium • Chemical energy <ul style="list-style-type: none"> – Molecules and chemical changes release energy • Radiant energy <ul style="list-style-type: none"> – Light waves • Electrical energy • Atomic energy • Mechanical energy <ul style="list-style-type: none"> – Energy of motion- kinetic 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Describe forms of energy and provide a real-life example of each</p>	<p>MI.P.EN.03.11 Identify light and sound as forms of energy.</p> <p>MI.P.EN.04.12 Identify heat and electricity as forms of energy.</p>
<p>S-C-R-E-A-M (+H)</p> <ul style="list-style-type: none"> • Heat transfer <ul style="list-style-type: none"> – Things that give off light often give off heat – Heat can move between things that are and aren't touching 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Describe how heat spreads from one object or place to another (e.g., conduction, convection, radiation)</p>	<p>MI.P.EN.04.41 Demonstrate how temperature can be increased in a substance by adding energy.</p>
<p>S-C-R-E-A-M (+H)</p> <ul style="list-style-type: none"> • Heat conduction in common materials <ul style="list-style-type: none"> – Equilibrium – Touching something hot to a cold item will heat up the cool item and cool down the hot item – Conductors and insulators 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Investigate different materials to determine which are better conductors and which are better insulators of heat</p>	<p>MI.P.PM.04.53 Identify objects that are good conductors or poor conductors of heat and electricity.</p>

<p>Energy Transformations in Common Objects</p> <ul style="list-style-type: none"> E.g., A fan transforms electrical energy to mechanical energy, a toaster transforms electrical energy to heat energy, a T.V. transforms electrical energy to light and sound energy Heat as a Byproduct of Energy Transformations <ul style="list-style-type: none"> Household appliances such as the T.V. Digestion of food Rubbing things together generally produces heat 	<p>Physical Science, Forms of Energy and Their Interactions Describe the transformation of energy from one form to another</p>	<p>MI.P.EN.04.42 Describe heat as the energy produced when substances burn, certain kinds of materials rub against each other, and when electricity flows through wire. MI.P.EN.04.43 Describe how heat is produced through electricity, rubbing, and burning.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)</p>	<p>MI.S.IP.04.12 Generate questions based on observations. MI.S.IP.04.13 Plan and conduct simple and fair investigations. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups.</p>
<p>It is imperative in science to make accurate measurements.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)</p>	<p>MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.</p>
<p>Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them</p>	<p>MI.S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.13 Communicate and present findings of observations and investigations</p>

Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.04.16 Construct simple charts and graphs from data and observations
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.
Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	MI.S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. MI.S.RS.04.14 Use data/samples as evidence to separate fact from opinion. MI.S.RS.04.15 Use evidence when communicating scientific ideas.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Four

UNIT: Electricity and Magnetism (Delta Learning Kit: Electrical Circuits)

NHA Science Content	NHA Objectives	MI GLCE
<p>Circuits</p> <ul style="list-style-type: none"> • Simple, series, and parallel circuits <ul style="list-style-type: none"> - Words to distinguish between in discussing circuits- electricity, electrical energy, current, resistance - Open and closed circuits • Circuit components <ul style="list-style-type: none"> - Dry cells - Switches - Fuses - Bulbs and wires • Insulators and conductors <p>Electrical Energy</p> <ul style="list-style-type: none"> • Electrical energy is converted to produces light, heat and sound 	<p>Physical Science, Electricity Construct simple circuits and describe the interaction of the circuit components</p>	<p>MI.P.EN.04.51 Demonstrate how electrical energy is transferred and changed through the use of a simple circuit.</p>
<p>Circuits</p> <ul style="list-style-type: none"> • Simple, series, and parallel circuits <ul style="list-style-type: none"> - Words to distinguish between in discussing circuits- electricity, electrical energy, current, resistance - Open and closed circuits • Circuit components <ul style="list-style-type: none"> - Dry cells - Switches - Fuses - Bulbs and wires • Insulators and conductors <p>Electrical Energy</p> <ul style="list-style-type: none"> • Electrical energy is converted to produces light, heat and sound 	<p>Physical Science, Electricity Compare and contrast series and parallel circuits</p>	<p>MI.P.EN.04.51 Demonstrate how electrical energy is transferred and changed through the use of a simple circuit.</p>

	Physical Science, Electricity Categorize substances and/or objects as conductors or nonconductors of electricity based on tests	MI.P.PM.04.53 Identify objects that are good conductors or poor conductors of heat and electricity.
Electrical Currents Generate Magnetic Fields <ul style="list-style-type: none"> Electromagnets <ul style="list-style-type: none"> The relationship between the number of coils of wire, the amount of voltage and amperes, and the strength of the electromagnet 	Physical Science, Electricity Create a simple electromagnet and investigate variables affecting its strength	MI.P.EN.04.52 Demonstrate magnetic effects in a simple electric circuit.
Properties of Magnets <ul style="list-style-type: none"> Attraction vs. repelling of other magnets and objects made from cobalt, nickel, or iron Action at a distance North and south poles Magnetic field/flux lines <ul style="list-style-type: none"> Iron filings are used to indicate flux lines Magnetism and the Earth <ul style="list-style-type: none"> Earth's magnetic field <ul style="list-style-type: none"> Compasses 	Physical Science, Magnetism Describe the properties of magnets	MI.P.PM.04.33 Demonstrate magnetic field by observing the patterns formed with iron filings using a variety of magnets. MI.P.PM.04.34 Demonstrate that non-magnetic objects are affected by the strength of the magnet and the distance away from the magnet. MI.E.SE.06.61 Describe the Earth as a magnet and compare the magnetic properties of the Earth to that of a natural or man-made magnet. MI.E.SE.06.62 Explain how a compass works using the magnetic field of the Earth, and how a compass is used for navigation on land and sea.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise- Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	MI.S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.
Scientists learn about things by observing those things carefully but sometimes they can learn more by doing something to the things and observing what happens.	The Nature of Science, Scientific Inquiry- The Scientific Method Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions)	MI.S.IP.04.12 Generate questions based on observations. MI.S.IP.04.13 Plan and conduct simple and fair investigations. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups.

It is imperative in science to make accurate measurements.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	MI.S.IP.04.15 Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots	MI.S.IP.04.16 Construct simple charts and graphs from data and observations
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	MI.S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.13 Communicate and present findings of observations and investigations
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	MI.S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. MI.S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.
Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	MI.S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. MI.S.RS.04.14 Use data/samples as evidence to separate fact from opinion. MI.S.RS.04.15 Use evidence when

backed up with evidence that can be confirmed, along with a logical argument.		communicating scientific ideas.
	The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes	MI.S.RS.04.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

NHA Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Four

UNIT: Conservation of Natural Resources

NHA Science Content	NHA Objectives	MI GLCE
<p>Green Living</p> <ul style="list-style-type: none"> Uses of Earth materials 	<p>Earth and Space Science, Earth Materials and Responsible Use</p> <p>Classify manufactured products according to the Earth materials from which they are made</p>	<p>MI.E.SE.03.31 Identify Earth materials used to construct some common objects (for example: bricks, buildings, roads, glass).</p> <p>MI.E.SE.03.32 Describe how materials taken from the Earth can be used as fuels for heating and transportation.</p>
<p>Green Living</p> <ul style="list-style-type: none"> Reduce, Reuse, Recycle Ways to preserve the environment and delay depletion of natural resources <ul style="list-style-type: none"> Recycling, energy conservation, water conservation 	<p>Earth and Space Science, Earth Materials and Responsible Use</p> <p>Demonstrate and describe the practices of reducing, reusing and recycling and other conservation measures</p>	<p>MI.E.ES.03.43 Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal).</p> <p>MI.E.ES.03.44 Recognize that paper, metal, glass, and some plastics can be recycled.</p> <p>MI.E.ES.03.44 Recognize that paper, metal, glass, and some plastics can be recycled.</p>
	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Earth Materials and Responsible Use</p> <p>S.RS.04.18 Describe the effect humans and other organisms have on the balance of the natural world</p> <p>MI.E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry)</p> <p>MI.E.ES.03.41 Identify natural resources (metals, fuels, fresh water, farmland, and forests)</p> <p>MI.E.ES.03.42 Classify renewable (fresh water, farmland, forests) and non-renewable (fuels, metals) resources</p>

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.

**The Nature of Science, Scientific Enterprise-
Science and Society**
Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

MI.S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Four

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • The human body <ul style="list-style-type: none"> - Structures and functions • Illness prevention <ul style="list-style-type: none"> - Personal Hygiene - Immunizations - Regular doctor visits - Sanitation <ul style="list-style-type: none"> • Reducing the spread of germs • HIV/AIDS Prevention <ul style="list-style-type: none"> - Transmission of disease <ul style="list-style-type: none"> • Not through touch or close proximity - Strategies for protection <ul style="list-style-type: none"> • Not touching blood or used needles <p>Healthy Diet</p> <ul style="list-style-type: none"> • Healthy eating habits <ul style="list-style-type: none"> - Diet including a variety of foods - Nutritionally balanced meals and snacks - Eating regularly to maintain energy - Media influence on food choices • Food groups <ul style="list-style-type: none"> - Eating moderate portion sizes <ul style="list-style-type: none"> • Portion control with packaged foods or restaurants • Influences on food choices <ul style="list-style-type: none"> - Activity level - Peers/age - Culture/religion <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Health information/products <ul style="list-style-type: none"> - Provided/recommended by health care professionals 	<p>STRAND 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Describe the food groups, including recommended portions to eat from each group.</p> <p>1.2 Analyze the relationship of physical activity, rest, and sleep.</p> <p>1.3 Explain why some food groups have a greater number of recommended portions than other food groups.</p> <p>1.4 Associate recommended food portions to the sizes of common items.</p> <p>1.5 Compare the quantity of restaurant or packaged foods to the quantities of food needed to keep the body healthy.</p> <p>Standard 3: Health Behaviors</p> <p>1.6 Assess one's ability to include physical activity, rest, and sleep in one's daily routine.</p> <p>1.7 Describe strategies people use to consume the recommended portions of food to meet their individual nutrient needs.</p> <p>Standard 4: Influences</p> <p>1.8 Analyze examples of food advertising.</p> <p>Standard 5: Goal Setting</p> <p>1.9 Develop a one-day plan for eating the recommended portions of food from each food group.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Describe the short- and long-term physical effects of being exposed to tobacco smoke.</p> <p>2.2 Analyze possible reasons why individuals choose to use or to not use alcohol.</p> <p>2.3 Explain the positive outcomes of not using alcohol.</p> <p>Standard 3: Health Behaviors</p> <p>2.4 Demonstrate the ability to avoid exposure to secondhand smoke.</p> <p>Standard 4: Influences</p> <p>2.5 Explain how family and peers can influence decisions about using alcohol</p>

- Community health care facilities
- Safety Rules
 - Car safety
 - Home safety
 - Emergency plans
 - Sports safety
 - Outdoor safety
 - Recognizing and avoiding threatening situations
 - Appropriate vs. inappropriate touch
 - Being home alone
 - Internet safety
- First aid procedures
 - How/when to get help
 - Calling 911
 - Minor injuries
- Conflict resolution
 - Positive and negative behaviors
 - Non-violent strategies

Healthy Practices

- Major influences on a person's health (both positive and negative aspects)
 - Food choices
 - Exercise
 - Sleep
 - Activity/ recreation
 - Awareness of personal habits
 - Anything put into your body
 - Drugs
 - Proper use of medication
- Effects of family on health
 - Physical, psychological, social
 - How health problems impact the entire family
- Safe, risky, and harmful behaviors
 - How they affect self and others
- Alcohol, tobacco, and other drugs
 - Reasons people use or avoid
 - Effects including addiction
 - Second hand smoke
 - Impact of use on relationships
 - Effect of media on use
 - Influence of peer pressure on use

Healthy Minds

and other drugs.
2.6 Explain how decisions about alcohol use will impact relationships with friends and family.
2.7 Analyze various strategies used in the media that encourage and discourage the use of alcohol and tobacco.

Standard 7: Social Skills

2.8 Demonstrate verbal and non-verbal ways to refuse alcohol.

STRAND 3: SAFETY

Standard 1: Core Concepts

3.1 Describe safety hazards, including those related to fire, dangerous objects and weapons, being home alone, and using the Internet.

3.2 Explain the importance of respecting personal space and boundaries.

3.3 Describe the characteristics of appropriate and inappropriate touch.

3.4 Explain that a child is not at fault if someone touches him or her in an inappropriate way.

Standard 2: Access Information

3.5 Demonstrate how to ask a trusted adult for help.

3.6 Demonstrate how to access emergency services, such as calling "911," including what to say when accessing such services.

Standard 3: Health Behaviors

3.7 Apply strategies to prevent fires and burns.

3.8 Develop and practice a home fire escape plan.

3.9 Apply strategies to stay safe and prevent injury when home alone.

3.10 Explain a rule and demonstrate actions to use when dangerous objects or weapons are present.

3.11 Apply strategies to stay safe when using the Internet.

3.12 Apply strategies to avoid personally unsafe situations.

3.13 Demonstrate strategies to get away in cases of inappropriate touching or abduction.

Standard 4: Influences

3.14 Analyze how one influences the safety of others when adult supervision is not present.

STRAND 4: Social and Emotional Health

Standard 1: Core Concepts

4.1 Describe the effect of teasing and bullying on others.

Standard 2: Access Information

4.2 Describe the characteristics of people who can help make decisions and solve problems.

Standard 3: Health Behaviors

4.3 Apply the use of positive self-talk to manage feelings.

4.4 Describe strategies to manage strong feelings, including anger.

<ul style="list-style-type: none"> • Negative effects of media <ul style="list-style-type: none"> - Television - Movies - Video games - Advertising/magazines • Physical vs. mental health • Stress management for children <ul style="list-style-type: none"> - Managing moods and emotions (anger) - Conflict resolution strategies • Social interactions <ul style="list-style-type: none"> - How behaviors affect others <ul style="list-style-type: none"> • Responding to the behavior of others - Listening skills <ul style="list-style-type: none"> • How it affect relationships/friendships • Handling peer pressure <ul style="list-style-type: none"> - Teasing/bullying - Strategies to handle bullying/peer pressure 	<p>Standard 6: Decision Making</p> <p>4.5 Explain the decision making and problem solving steps.</p> <p>4.6 Apply the steps to make a decision or solve a problem, using criteria to evaluate solutions.</p> <p>Standard 7: Social Skills</p> <p>4.7 Describe characteristics and steps of conflict resolution.</p> <p>4.8 Apply the steps of conflict resolution.</p> <p>4.9 Demonstrate non-violent conflict resolution strategies.</p> <p>4.10 Explain what to do if you or someone else is being teased or bullied.</p> <p>4.11 Express intentions to stop bullying as a bystander, perpetrator, or victim.</p> <p>4.12 Demonstrate the ability to confront bullying and teasing.</p> <p>STRAND 5: Personal Health and Wellness</p> <p>Standard 3: Health Behaviors</p> <p>5.1 Demonstrate skills throughout the day to reduce the spread of germs.</p> <p>STRAND 6: HIV Prevention</p> <p>Standard 1: Core Concepts</p> <p>6.1 Define HIV and AIDS.</p> <p>6.2 Explain that it is safe to be a friend of someone who is living with HIV or AIDS.</p> <p>6.3 Explain how HIV is and is not transmitted.</p> <p>Standard 3: Health Behaviors</p> <p>6.4 Describe how people can protect themselves from infection with serious blood-borne communicable diseases, including not touching blood and not touching used needles</p>
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NHA Science Michigan Alignment
Grade Four

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 3

MI.E.ST.04.11 Identify the sun and moon as common objects in the sky. (Earth In Space Unit)

MI.E.ST.04.12 Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life. (Earth In Space Unit)

MI.E.ST.04.21 Describe the orbit of the Earth around the sun as it defines a year. (Earth In Space Unit)

MI.E.ST.04.22 Explain that the spin of the Earth creates day and night. (Earth In Space Unit)

MI.E.ST.04.25 Describe the apparent movement of the sun and moon across the sky through day/night and the seasons. (Earth In Space Unit)

MI.E.ST.04.23 Describe the motion of the moon around the Earth. (Earth In Space Unit)

MI.E.ST.04.24 Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month. (Earth In Space Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English, Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.



GRADE FIVE

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 5TH GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Scientific Enterprise – Science and Society Common Themes in Science</p> <p>Engineering and Technology Engineering Technology</p> <p>The Living Environment Animal Body Structures and Functions Plant and Animal Adaptations Fossils and Extinction</p> <p>Physical Science Mixtures and Solutions Chemical Changes Forces Effect on Motion Measuring Motion</p> <p>Earth and Space Science Weather and Climate Water on Earth Characteristics of Objects in Space Interaction of the Sun, Earth, and Moon</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Force and Motion Force Interactions Force Speed</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Animal Systems Standard: Heredity Inherited and Acquired Traits Standard: Evolution Species Adaptation and Survival Relationships Among Organisms</p> <p>Discipline 4: Earth Science Standard: Earth Systems Seasons Standard: Earth in Space and Time Solar System Solar System Motion</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Five

UNIT: Introduction to Science (Foss Learning Kit: Variables)

NHA Science Content	NHA Objective	MI GLCE
Scientific investigations generally work the same way regardless of time, place, or experimenter so when an investigation is repeated a similar result is expected. However, similar scientific investigations seldom produce exactly the same results, which may differ due to differences in whatever is being investigated, differences in the methods or circumstances of the investigation, or observational ambiguity. It is not always easy to tell which but because we expect science investigations that are done the same way to produce the same results, when they do not, it is important to try to figure out why.	The Nature of Science, Scientific Knowledge Compare the results of similar experiments and determine reasons for any inconsistencies	S.IA.05.14 Draw conclusions from sets of data from multiple trials of a scientific investigation. S.RS.05.12 Describe limitations in personal and scientific knowledge. S.RS.05.11 Evaluate the strengths and weaknesses of claims, arguments, and data.
Scientists' explanations about what happens in the world come partly from what they observe (evidence) and partly from how they interpret (inference) their observations. Sometimes scientists have different explanations for the same set of observations which usually leads to their making more observations to resolve the differences	The Nature of Science, Scientific Knowledge Differentiate between observation and inference in scientific explanations	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

Scientists seek better reasons for believing something than "Everyone knows that..." or "I just know" and discount such reasons when given by others. Scientists do not pay much attention to claims about how something they know about works unless the claims are backed up with evidence that can be confirmed, along with a logical argument.	The Nature of Science, Scientific Knowledge Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations	S.IA.05.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.05.13 Communicate and defend findings of observations and investigations using evidence. S.IA.05.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data. S.RS.05.13 Identify the need for evidence in making scientific decisions.
Scientists use different kinds of investigations depending on the questions they are trying to answer. Types of investigations include describing objects, events, and organisms; classifying them; and doing a fair test (experimenting).	The Nature of Science, Scientific Inquiry- The Scientific Method Propose and test independent and dependent variables in a controlled experiment	S.IP.05.11 Generate scientific questions based on observations, investigations, and research. S.IP.05.12 Design and conduct scientific investigations.
Simple tools aid observation and data collection and may include a hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beakers.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Safely use appropriate tools and simple equipment to gather scientific data and extend the senses	S.IP.05.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations. S.IP.05.14 Use metric measurement devices in an investigation.
It is imperative in science to make accurate measurements	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes)	S.IP.05.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations S.IP.05.14 Use metric measurement devices in an investigation.
Clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas and experiments to evaluation and retesting by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Communicate the results of investigations and describe the investigations in ways that enable others to repeat them	S.IA.05.12 Evaluate data, claims, and personal knowledge through collaborative science discourse. S.IA.05.13 Communicate and defend findings of observations and investigations using evidence.
Geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and oral and written descriptions can be used to represent objects, events, and processes in the real world. Graphical	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display and interpret data from observations and investigations in simple bar	S.IP.05.15 Construct charts and graphs from data and observations. S.IP.05.16 Identify patterns in data.

displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.	graphs, line plots, line graphs, and/or stem-and-leaf plots	
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
In something that consists of many parts, the parts usually influence one another. Something may not work well (or at all) if a part of it is missing, broken, worn out, mismatched, or misconnected.	The Nature of Science, Common Themes in Science Describe how the parts of a system work together	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Some features of things may stay the same even when other features change. Things change in steady, repetitive, or erratic ways—or sometimes in more than one way at the same time. Often the best way to tell which kinds of change are happening is to make a table or graph of measurements. Some things, such as a person's age, change in only one direction and other things in nature have a repeating pattern. The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.	The Nature of Science, Common Themes in Science Identify and measure things that change and describe the different ways they change	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Models (e.g., physical, conceptual, mathematical models, computer simulations) are very useful for communicating ideas and predicting changes in objects, events, and processes. When using a model to communicate about something, it is important to keep in mind how it is different from the thing being modeled.	The Nature of Science, Common Themes in Science Explain the role of models in studying objects, events, and processes	S.RS.05.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Finding the largest and the smallest values of something is often as informative as knowing what the usual value is.	The Nature of Science, Common Themes in Science Identify objects that are at the extremes in sizes, weights, ages, and speeds	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.

NHA Science Exemplar: Engineering and Technology

The student will study the strategies and practices used in engineering and technology, as well as the relationship between science and technology. They will apply problem solving skills as they model the steps of design and experiment with materials and tools involved in inventions.

Grade Five

UNIT: Technological Design

NHA Science Content	NHA Objectives	MI GLCE
<p>Engineering Design</p> <ul style="list-style-type: none"> • The nature of inventions and steps in designing a device to fill a need <ul style="list-style-type: none"> - Designers of mechanical systems often draw inspiration from natural systems that serve similar purposes (e.g., a bird's wings as compared to an airplane's) <p>Engineering Design</p> <ul style="list-style-type: none"> • Identifying need <ul style="list-style-type: none"> - Researching problem - Designing solution - Building prototypes 	<p>Engineering and Technology, Engineering</p> <p>Describe examples of mechanical systems that are designed to serve purposes similar to natural systems</p>	<p>MI.S.RS.05.16 Design solutions to problems using technology.</p>
<p>Engineering Design</p> <ul style="list-style-type: none"> • The nature of inventions and steps in designing a device to fill a need <ul style="list-style-type: none"> - Designers of mechanical systems often draw inspiration from natural systems that serve similar purposes (e.g., a bird's wings as compared to an airplane's) <p>Engineering Design</p> <ul style="list-style-type: none"> • Identifying need <ul style="list-style-type: none"> - Researching problem - Designing solution - Building prototypes 	<p>Engineering and Technology, Engineering</p> <p>Design and construct something useful out of a variety of materials using a variety of tools</p>	<p>MI.S.RS.05.16 Design solutions to problems using technology.</p>

	Engineering and Technology, Engineering Evaluate the usefulness of inventions and suggest ways that the product could be changed or improved	MI.S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
Materials & Tools <ul style="list-style-type: none"> • Human-made vs. natural <ul style="list-style-type: none"> - Wood, paper, cardboard, metal, plastic, glass, cotton • Properties of materials determine usefulness in design and construction <ul style="list-style-type: none"> - Hardness - Strength - Toughness - Stiffness - Elasticity - Plasticity - Absorbency - Waterproof - Malleability - Ductility - Conductivity • Tools <ul style="list-style-type: none"> - Hammer, screwdriver, pliers, tape measure, screws, nails 	Engineering and Technology, Engineering Describe properties of materials that make them useful in design and construction	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
The Nature of Technology <ul style="list-style-type: none"> • Technological developments influence and are influenced by society • Technology can have positive and negative effects on the environment and on society 	Engineering and Technology, Technology Describe positive and negative effects of technology on the environment and society	MI.S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Five

UNIT: Body Systems

NHA Science Content	NHA Objectives	MI GLCE
<p>Body Systems</p> <ul style="list-style-type: none"> • Skeletal and muscular systems <ul style="list-style-type: none"> - Function is locomotion • Digestive system <ul style="list-style-type: none"> - Function is to breakdown food for energy • Circulatory system <ul style="list-style-type: none"> - Function is to move materials between cells • Respiratory system <ul style="list-style-type: none"> - Function is to provide oxygen so energy can be released, and remove carbon dioxide • Excretory system <ul style="list-style-type: none"> - Function is to dispose of waste • Nervous system <ul style="list-style-type: none"> - Function is to coordinate the skeletal and muscular systems • Endocrine system <ul style="list-style-type: none"> - Function is to regulate body processes and maintain equilibrium in systems 	<p>The Living Environment, Animal Body Structures and Functions Describe the functions of human body systems and major organs of the body (e.g., heart, lungs, skin)</p>	<p>MI.L.OL.05.41 Identify the general purpose of selected animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive).</p>
	<p style="color: red;">There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>The Living Environment, Animal Body Structures and Functions MI.L.OL.05.42 Explain how animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive) work together to perform selected activities</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		

Science is an adventure that people everywhere can take part in, as they have for many centuries. Doing science involves many different kinds of work and engages men and women of all ages and backgrounds.	The Nature of Science, Scientific Enterprise-Science and Society Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions	S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
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NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Five

UNIT: Species Over Time

NHA Science Content	NHA Objectives	MI GLCE
<p>Behaviors that Aid in Survival</p> <ul style="list-style-type: none"> • Influenced by internal cues (e.g. instincts) <ul style="list-style-type: none"> - Salmon swimming upstream - Dormancy - Hibernation - Migration - Staying in herds • Influenced by external cues (e.g. changes in environment) <ul style="list-style-type: none"> - Perspiration, blinking, shivering, heart rate, salivation - Animals moving from place to place - Bears foraging in state parks or dumps <p>Defenses that Aid in Survival</p> <ul style="list-style-type: none"> • Camouflage <ul style="list-style-type: none"> - Mimicry • E.g. moth caterpillar, king snake <ul style="list-style-type: none"> - Disruptive coloration • E.g. tiger, zebra, leopard <ul style="list-style-type: none"> - Concealing coloration • E.g. snowshoe hare, polar bear, chameleon <ul style="list-style-type: none"> - Disguise • E.g. walking stick, treehopper, katydid • Weapons and other defense mechanisms <ul style="list-style-type: none"> - Animals with horns, tusks, sharp teeth, or claws - E.g. skunks, porcupines, toxic frogs, animals that sting, snakes 	<p style="color: red;">There is no NHA Objective that aligns with these GLCE. Include these objective in your unit.</p>	<p>The Living Environment, Plant and Animal Adaptations</p> <p>MI.L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment</p> <p>MI.L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.</p>

<p>Anatomical Structures that Aid in Survival</p> <ul style="list-style-type: none"> • Eyes, nose, ears, tongue, and skin aid animals in sensing surroundings • Claws, shells, spines, feathers, fur, scales, or body color that help meet needs of animals 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>The Living Environment, Plant and Animal Adaptations MI.L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.</p>
<p>Traits of Organisms</p> <ul style="list-style-type: none"> • Inherited vs. Acquired Traits <ul style="list-style-type: none"> - Traits inherited from parents (e.g. eye color, leg length, wing size, height, color of fur, shape of nose, eyes, etc., flower color) - Traits resulting from the environment (e.g. # of scars, weight, etc.) 	<p>There is no NHA Objective that aligns with these GLCE. Include these objective in your unit.</p>	<p>The Living Environment, Plant and Animal Adaptations MI.L.HE.05.11 Explain that the traits of an individual are influenced by both the environment and the genetics of the individual. The Living Environment, Plant and Animal Adaptations MI.L.HE.05.12 Distinguish between inherited and acquired traits.</p>
	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>The Living Environment, Plant and Animal Adaptations MI.L.EV.05.21 Relate degree of similarity in anatomical features to the classification of contemporary organisms.</p>
<p>Extinction of Species</p> <ul style="list-style-type: none"> • Human related causes • Natural events 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>The Living Environment, Fossils and Extinction MI.L.EV.05.14 Analyze the relationship of environmental change and catastrophic events (for example: volcanic eruption, floods, asteroid impacts, tsunami) to species extinction.</p>
<p>Fossils</p> <ul style="list-style-type: none"> • Definition, types, etc. • Relationship to evidence of change in species <ul style="list-style-type: none"> - Provide evidence about the plants and animals and environmental conditions of the past 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>The Living Environment, Fossils and Extinction MI.L.EV.05.13 Describe how fossils provide evidence about how living things and environmental conditions have changed.</p>

- Used to compare past and present animals		
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NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Five

UNIT: Motion and Forces

NHA Science Content	NHA Objectives	MI GLCE
<p>Forces</p> <ul style="list-style-type: none"> • Direct contact <ul style="list-style-type: none"> - Normal - Friction - Pushes and pulls • Non-contact <ul style="list-style-type: none"> - Magnetic force - Electrical force - Gravitational force 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Physical Science, Forces Effect on Motion P.FM.05.21 Distinguish between contact forces and non-contact forces. P.FM.05.22 Demonstrate contact and non-contact forces to change the motion of an object.</p>
<p>Isaac Newton's 1st and 2nd Laws of Motion</p> <ul style="list-style-type: none"> • 1st Law- Objects at rest remain at rest and objects in motion remain in motion in a straight line unless acted on by an unbalanced/net force <ul style="list-style-type: none"> - If the forces acting on an object are balanced, then there will be no change in motion of that object (it won't speed up, slow down, or change direction) - Direction and magnitude of forces acting on an object - Balanced forces (equilibrium), Unbalanced forces, Net force - A force is NOT needed to keep an object in motion 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Physical Science, Forces Effect on Motion P.FM.05.31 Describe what happens when two forces act on an object in the same or opposing directions. P.FM.05.32 Describe how constant motion is the result of balanced (zero net) forces P.FM.05.33 Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force.</p>
<ul style="list-style-type: none"> • 2nd Law- An object's change in motion (change in direction, speeding up or slowing down, starting or stopping) is dependent on the size of the net force acting on it and how much mass the object has <ul style="list-style-type: none"> - $F=ma$ • Real world applications of Newton's Laws 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Physical Science, Forces Effect on Motion P.FM.05.34 Relate the size of change in motion to the strength of unbalanced forces and the mass of the object.</p>

- Sports, transportation, human body, motion of objects in space, etc.		
<p>Measuring Motion</p> <ul style="list-style-type: none"> • Describing and graphing motion <ul style="list-style-type: none"> - Position and frame of reference - Direction of motion - Speed • Speed = Distance/Time ($S=D/T$), average speed= change in distance/change in time • Velocity- average velocity= displacement/time <ul style="list-style-type: none"> - vectors • Acceleration- average acceleration= change in velocity/time 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Physical Science, Measuring Motion P.FM.05.34 Relate the size of change in motion to the strength of unbalanced forces and the mass of the object. P.FM.05.41 Explain the motion of an object relative to its point of reference. P.FM.05.42 Describe the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects. P.FM.05.43 Illustrate how motion can be measured and represented on a graph.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Five

UNIT: Mixtures and Solutions (Foss Learning Kit: Mixtures and Solutions)

NHA Science Content	NHA Objectives	MI GLCE
Separation Techniques <ul style="list-style-type: none"> • Use of filters, sieves, magnets, evaporation, separation by density • Tools (e.g. funnels, filters, beakers, sieves, magnets, heat sources) 	Physical Science, Mixtures and Solutions Determine the appropriate tools and processes needed to separate various mixtures	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for chemistry studies in 7 th .
Types of Mixtures <ul style="list-style-type: none"> • Homogeneous <ul style="list-style-type: none"> - Solutions <ul style="list-style-type: none"> • Solute and solvent • Dissolving • Saturation <ul style="list-style-type: none"> - Influenced by the kind of material in the solute and the temperature of the solvent 	Physical Science, Mixtures and Solutions Describe factors that influence saturation in a solution	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for chemistry studies in 7 th .
Types of Mixtures <ul style="list-style-type: none"> • Heterogeneous • Homogeneous <ul style="list-style-type: none"> - Solutions <ul style="list-style-type: none"> • Solute and solvent • Dissolving • Concentration 	Physical Science, Mixtures and Solutions Describe the appropriate tools and senses needed to compare and contrast the concentration levels of various solutions	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for chemistry studies in 7 th .
Chemical Reactions in Mixtures <ul style="list-style-type: none"> • Identifying properties of changes that can't be reversed by physical means (i.e. chemical changes) <ul style="list-style-type: none"> - Presence of color change, odor, light or heat emission, and/or gas 	Physical Science, Chemical Changes Classify reactions as chemical or not based on the presence of color change, odor, light or heat emission, and/or gas	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for chemistry studies in 7 th .

NHA Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Five

UNIT: Earth In Space

NHA Science Content	NHA Objectives	MI GLCE
<p>The Solar System</p> <ul style="list-style-type: none"> Sun, moon, and planets (e.g. temperatures, pressure conditions, surface features, gravitational pull, position in the Solar System, atmospheric conditions, actual and apparent motion, and ability to support life) Meteors, asteroids, and comets 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Characteristics of Objects in Space MI.E.ST.05.11 Design a model of the solar system that shows the relative order and scale of the planets, dwarf planets, comets, and asteroids to the sun.</p>
<p>Earth's Rotation and Revolution</p> <ul style="list-style-type: none"> The plane of the Earth and Sun and Earth's tilt on its axis Latitude and longitude lines and relationship to earth in space <ul style="list-style-type: none"> Tropic of Cancer Tropic of Capricorn 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity.</p>
	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ES.05.61 Demonstrate and explain seasons using a model.</p>
<p>Earth's Rotation and Revolution</p> <ul style="list-style-type: none"> The plane of the Earth and Sun and Earth's tilt on its axis Latitude and longitude lines and relationship to earth in space <ul style="list-style-type: none"> Tropic of Cancer Tropic of Capricorn 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ES.05.62 Explain how the revolution of the Earth around the sun defines a year.</p>
<p>Phases of the Moon</p> <ul style="list-style-type: none"> First quarter, second quarter, new moon, 3rd quarter, full moon 	<p>There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.</p>	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ST.05.22 Explain the phases of the moon.</p>

<ul style="list-style-type: none"> waxing vs. waning Gibbous vs. crescent 		
Eclipses <ul style="list-style-type: none"> Solar eclipses Lunar eclipses 	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ST.05.24 Explain lunar and solar eclipses.
Tides <ul style="list-style-type: none"> Neap and spring tides High and low tides 	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	Earth and Space Science, Interaction of the Sun, Earth, and Moon MI.E.ST.05.25 Explain the tides of the oceans as they relate to the gravitational pull and orbit of the moon.
Stars <ul style="list-style-type: none"> Distances and basic properties (e.g. sizes, life cycles) Actual and apparent motion of stars <ul style="list-style-type: none"> Big Dipper around Polaris <ul style="list-style-type: none"> Astrolabes and orienteering using Polaris 	There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.	Earth and Space Science, Characteristics of Objects in Space MI.E.ST.05.23 Explain the apparent motion of the stars (constellations) and the sun across the sky.

NHA Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Five

UNIT: Weather and Water (Delta Learning Kit: Weather Instruments)

NHA Science Content	NHA Objectives	MI GLCE
<p>Weather Measurement and Recording</p> <ul style="list-style-type: none"> Air as a substance that surrounds us, has weight, and takes up space Air pressure <ul style="list-style-type: none"> High and low pressure air masses <ul style="list-style-type: none"> Use of barometers Heat differentiation in the atmosphere and the resulting phenomena <ul style="list-style-type: none"> Convection cells and wind Precipitation (use of a rain gauge) Wind direction and speed (Use of wind vanes and an anemometer) Temperature (use of a thermometer) 	<p>Earth and Space Science, Weather and Climate Measure, record, and explain daily weather phenomena using the appropriate tools</p>	<p>Teach this objective if time. Though there aren't 5th grade GLCE that align, this unit will better prepare students for weather studies in 7th.</p>
<ul style="list-style-type: none"> Water storage in the atmosphere <ul style="list-style-type: none"> Condensation Clouds <ul style="list-style-type: none"> Cirrus, stratus, cumulus, and cumulonimbus Relationship to weather conditions From air to ground <ul style="list-style-type: none"> Types of precipitation 	<p>Earth and Space Science, Weather and Climate Correlate cloud types with general weather conditions</p>	<p>Teach this objective if time. Though there aren't 5th grade GLCE that align, this unit will better prepare students for weather studies in 7th.</p>
<p>Adverse Weather Conditions</p> <ul style="list-style-type: none"> Thunderstorms, hurricanes, tornadoes, drought <ul style="list-style-type: none"> Conditions under which they occur <p>Weather safety</p>	<p>Earth and Space Science, Weather and Climate Describe a variety of storm types, the weather conditions associated with each, and explain when they occur</p>	<p>Teach this objective if time. Though there aren't 5th grade GLCE that align, this unit will better prepare students for weather studies in 7th.</p>
	<p>Earth and Space Science, Weather and Climate</p>	<p>Teach this objective if time. Though there aren't 5th grade GLCE that align, this unit will better</p>

	Compile and use weather data to determine climate trends	prepare students for weather studies in 7 th .
Climate <ul style="list-style-type: none"> Climate patterns of the world Effect of geography on weather and climate (e.g., mountains, sea breezes, water bodies)	Earth and Space Science, Weather and Climate Describe the effects geography can have on weather and climate	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for weather studies in 7 th .
<ul style="list-style-type: none"> Solid, liquid, gas states (e.g. glaciers, snow on mountains, polar ice caps, icebergs, lakes, oceans, seas, groundwater, water vapor) Freshwater vs. saltwater 	Earth and Space Science, Water on Earth Analyze the distribution, location, and state of water on Earth	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for weather studies in 7 th .
The Water Cycle <ul style="list-style-type: none"> 3 things water does after precipitation <ul style="list-style-type: none"> Infiltration, runoff, evaporation Runoff vs. infiltration <ul style="list-style-type: none"> Permeability Saturation Pore space 	Earth and Space Science, Water on Earth Describe the processes of infiltration, runoff, evaporation, condensation, and precipitation as they relate to movement of water in the water cycle	Teach this objective if time. Though there aren't 5 th grade GLCE that align, this unit will better prepare students for weather studies in 7 th .

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Five

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • The human body <ul style="list-style-type: none"> - Changes that occur during puberty • Illness prevention <ul style="list-style-type: none"> - Personal Hygiene <ul style="list-style-type: none"> • Importance of keeping the body clean - Sanitation • Treatment of illnesses <ul style="list-style-type: none"> - Proper use of medication/prescriptions - Importance of following recommendations of parents or doctors • HIV/AIDS Prevention <ul style="list-style-type: none"> - Transmission of disease <ul style="list-style-type: none"> • Not through touch or close proximity - Strategies for protection <ul style="list-style-type: none"> • Not touching blood or used needles <p>Healthy Diet</p> <ul style="list-style-type: none"> • Healthy eating habits <ul style="list-style-type: none"> - Nutritionally balanced meals and snacks <ul style="list-style-type: none"> • Essential nutrients <ul style="list-style-type: none"> - Reading food labels - Food Pyramid – guidelines for healthy eating - Eating regularly to maintain energy - Relationship between food choices and growth - Advantages of drinking water compared to other beverages • Influences on food choices <ul style="list-style-type: none"> - Media/advertising - Money/economics - Convenience - Environment • Food quality and safety <ul style="list-style-type: none"> - Healthy food preparation methods - Healthy food handling practices 	<p>STRAND 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Describe the essential nutrients the body needs to stay healthy.</p> <p>1.2 Describe guidelines to follow for healthy eating.</p> <p>1.3 Identify calcium and vitamin D intake and physical activity as protectors from developing osteoporosis.</p> <p>1.4 Explain the importance of choosing water rather than other beverages for the purpose of keeping the body hydrated.</p> <p>Standard 2: Access Information</p> <p>1.5 Interpret information provided on food labels.</p> <p>Standard 3: Health Behaviors</p> <p>1.6 Choose a snack using specific criteria such as fat, carbohydrate, fiber, calcium, and calorie content of foods.</p> <p>1.7 Plan a meal using specific criteria such as fat, carbohydrate, fiber, calcium, and calorie content of foods.</p> <p>STRAND 2: Alcohol , Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Describe poison safety rules for household products.</p> <p>2.2 Describe the short- and long- term physical effects of using tobacco and inhalants.</p> <p>2.3 Describe health benefits of abstaining from or stopping tobacco use.</p> <p>2.4 Recognize that it is hard to stop using tobacco.</p> <p>2.5 Compute the economic cost of tobacco use.</p> <p>2.6 Explain school policies and community laws related to the sale and use of tobacco products.</p> <p>2.7 Describe how use of alcohol and other drugs impairs safe driving.</p> <p>Standard 3: Health Behaviors</p> <p>2.8 Apply effective strategies to avoid exposure to inhalants.</p> <p>2.9 Apply strategies to avoid riding with an impaired driver.</p> <p>Standard 4: Influences</p> <p>2.10 Analyze the accuracy of information conveyed in the media about tobacco use.</p> <p>2.11 Explain how decisions about alcohol and tobacco use will impact</p>

<p>Healthy Decisions</p> <ul style="list-style-type: none"> • Community health care facilities • Skills to enhance personal safety <ul style="list-style-type: none"> - Safety in sun, water, and cold weather - Recognizing and avoiding threatening situations <ul style="list-style-type: none"> • Appropriate vs. inappropriate touch • Respecting personal space/boundaries • Being home alone • First aid procedures <ul style="list-style-type: none"> - Obtaining help - Breathing and choking - Handling blood - Poison <p>Healthy Practices</p> <ul style="list-style-type: none"> • Major influences on a person's health (both positive and negative aspects) <ul style="list-style-type: none"> - Food choices - Exercise - Sleep - Activity/ recreation - Awareness of personal habits • Effects of society and science on health <ul style="list-style-type: none"> - Culture - Technology • Effects of family on health <ul style="list-style-type: none"> - Physical, psychological, social - How health problems impact the entire family • Importance of health-based goals <ul style="list-style-type: none"> - Target habits that hinder personal health - Develop goals to work on those habits - Monitor progress • Drug, alcohol, & other drugs <ul style="list-style-type: none"> - Influences that promote use <ul style="list-style-type: none"> • Peer pressure <ul style="list-style-type: none"> - Strategies to refuse use • Adult/peer modeling • Advertising/media • Availability/cost - Tools to avoid use <ul style="list-style-type: none"> • Self-control • Role play of refusal situations • Responding to negative social influence and peer pressure 	<p>relationships with friends and family.</p> <p>2.12 Analyze how families and peers may influence choices about using tobacco and inhalants.</p> <p>Standard 6: Decision Making</p> <p>2.13 Analyze the positive and negative choices one can make about using tobacco and alcohol.</p> <p>Standard 7: Social Skills</p> <p>2.14 Demonstrate verbal and non-verbal ways to refuse tobacco, alcohol, inhalant, and other drug use.</p> <p>STRAND 3: Safety</p> <p>Standard 1: Core Concepts</p> <p>3.1 Explain the importance of respecting personal space and boundaries.</p> <p>3.2 Describe the characteristics of appropriate and inappropriate touch.</p> <p>3.3 Explain that a child is not at fault if someone touches him or her in an inappropriate way.</p> <p>3.4 Describe hazards related to sun, water, and ice.</p> <p>Standard 2: Access Information</p> <p>3.5 Demonstrate how to ask a trusted adult for help.</p> <p>Standard 3: Health Behaviors</p> <p>3.6 Analyze situations to predict safety hazards when home alone and in public places.</p> <p>3.7 Apply strategies to avoid personally unsafe situations.</p> <p>3.8 Apply strategies to be safe in the sun and when around water and ice.</p> <p>Standard 5: Goal Setting</p> <p>3.9 Develop plans to stay safe when home alone and in public places.</p> <p>Standard 7: Social Skills</p> <p>3.10 Demonstrate strategies to get away in cases of inappropriate touching or abduction.</p> <p>STRAND 4: Social and Emotional Health</p> <p>Standard 1: Core Concepts</p> <p>4.1 Describe the harmful impact of harassing behaviors to both the perpetrator and the victim.</p> <p>Standard 2: Access Information</p> <p>4.2 Describe how to get help from an adult when someone is in danger of hurting self or others.</p> <p>Standard 3: Health Behaviors</p> <p>4.3 Demonstrate strategies to manage strong feelings.</p> <p>4.4 Predict situations that might lead to trouble, including violence.</p> <p>4.5 Demonstrate strategies to avoid situations that might lead to trouble.</p> <p>4.6 Demonstrate the ability to manage harassment, including getting help from</p>
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<ul style="list-style-type: none"> - Effects of use <ul style="list-style-type: none"> • Alcohol and impaired driving • Health benefits to avoiding use • Difficulty of fighting addictions • Negative effects on relationships - Use vs. misuse of prescription drugs <p>Healthy Minds</p> <ul style="list-style-type: none"> • Negative effects of media <ul style="list-style-type: none"> - Self-image • Physical vs. mental health • Stress management • Decision making and problem solving skills • Social interactions <ul style="list-style-type: none"> - Managing moods and emotions - Communicating care and respect to others - How behaviors affect others <ul style="list-style-type: none"> • Responding to the behavior of others - Listening skills <ul style="list-style-type: none"> • How it affect relationships/friendships • Peer pressure <ul style="list-style-type: none"> - Strategies to respond - How it effects others - Bullying/harassment • Conflict resolution <ul style="list-style-type: none"> - Positive and negative behaviors - Non-violent strategies 	<p>a trusted adult.</p> <p>Standard 5: Goal Setting 4.7 Set a personal goal and plan the steps necessary to achieve the goal.</p> <p>Standard 6: Decision Making 4.8 Describe the characteristics of people who can help make decisions and solve problems. 4.9 Explain the decision making and problem solving steps. 4.10 Demonstrate making a decision or solving a problem using criteria to evaluate solutions.</p> <p>Standard 7: Social Skills 4.11 Demonstrate effective listening strategies. 4.12 Demonstrate how to communicate assertively. 4.13 Apply the steps of conflict resolution to a real or hypothetical situation.</p> <p>Standard 8: Advocacy 4.14 Advocate for a caring school environment.</p> <p>STRAND 5: Personal Health and Wellness Standard 1: Core Concepts 5.1 Analyze the physical, emotional, mental, and social importance of keeping the body clean. Standard 4: Influences 5.2 Analyze media influences related to hygiene products. Standard 5: Goal Setting 5.3 Develop a plan to keep the body clean.</p> <p>STRAND 6: HIV Prevention Standard 1: Core Concepts 6.1 Define HIV and AIDS. 6.2 Explain that it is safe to be a friend of someone who is living with HIV or AIDS. 6.3 Describe how HIV is and is not transmitted. Standard 3: Health Behaviors 6.4 Describe ways people can protect themselves from infection with serious blood borne communicable diseases, including not touching blood, not touching used needles, and not having sex.</p> <p>STRAND 7: Growth and Development <i>(Note: State law makes whether to offer sexuality education a local district decision. Course content must be reviewed by the district's Sex Education Advisory Board to determine whether it is consistent with the district's board policies and approved sexuality education curriculum. If the</i></p>
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	<p><i>district chooses to offer sexuality education, certain content must be included in an age-appropriate fashion in the K-12 instructional program. This content is integrated into these content expectations. For the specific language of the law, see Sections 380.1507, 1507a, and 1507b of the Michigan Compiled Laws at www.michiganlegislature.org.)</i></p> <p>Standard 1: Core Concepts</p> <p>7.1 Explain that males and females develop at different rates, and there are wide variations within each sex.</p> <p>7.2 Explain social changes during puberty (e.g., changes in friendships, crushes/attractions, and changing expectations of parents/adults).</p> <p>7.3 Explain emotional changes during puberty (e.g., mood shifts).</p> <p>7.4 Explain physical changes that occur during puberty (e.g., body hair, body odor, voice, body shape, strength, hormones, and menstruation).</p> <p>Standard 2: Access Information</p> <p>7.10 Describe criteria to determine whether resources provide accurate information about puberty; and apply these criteria to identify valid resources.</p> <p>Standard 4: Influences</p> <p>7.11 Explain how culture, media, and others influence what one thinks about oneself and relationships.</p>
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GRADE SIX

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 6TH GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Scientific Enterprise – Science and Society Common Themes in Science</p> <p>Engineering and Technology Engineering Technology</p> <p>The Living Environment Food Chains and Webs Ecosystems Animal Body Structures and Functions</p> <p>Physical Science Forms of Energy and Their Interactions Energy Resources Sound Light</p> <p>Earth and Space Science The Changing Earth Earth Materials and Responsible Use</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Energy Kinetic and Potential Energy Energy Transfer Standard: Changes in Matter Changes in State</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Producers, Consumers, and Decomposers Standard: Ecosystems Interactions of Organisms Relationships of Organisms Biotic and Abiotic Factors Environmental Impact of Organisms</p> <p>Discipline 4: Earth Science Standard: Solid Earth Soil Rock Formation Plate Tectonics Magnetic Field of Earth Standard: Earth in Space and Time Fossils Geologic Time</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Six

UNIT: Introduction to Science

NHA Science Content	NHA Objectives	MI GLCE
When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.	The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables	S.IA.06.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.
Although all scientific ideas are tentative and subject to change and improvement in principle, for most major ideas in science, there is much experimental and observational confirmation. Those ideas are not likely to change greatly in the future. Some of these ideas and knowledge are very old and still applicable. Scientists do and have changed their ideas about nature when they encounter new experimental evidence that does not match their existing explanations. When new experimental results are inconsistent with existing, well established ideas, scientists pursue further experimentation to determine whether the results are flawed or the existing ideas require modification.	The Nature of Science, Scientific Knowledge Trace the development of an idea to a scientific theory	(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of	The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically	S.IP.06.11 Generate scientific questions based on observations, investigations, and research.

<p>morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.</p>		
<p>Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time</p>	<p>S.IP.06.12 Design and conduct scientific investigations.</p>
<p>It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science</p>	<p>S.RS.06.12 Describe limitations in personal and scientific knowledge. S.RS.06.13 Identify the need for evidence in making scientific decisions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.</p>

Technology used (safely) to gather data enhances accuracy and allows scientists to analyze and quantify results of investigations.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results	S.IP.06.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens, thermometer, models, sieves, microscopes) appropriate to scientific investigations. S.IP.06.14 Use metric measurement devices in an investigation.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures	S.IP.06.12 Design and conduct scientific investigations.
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)	S.IP.06.15 Construct charts and graphs from data and observations.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.IP.06.16 Identify patterns in data. S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data. S.IA.06.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.

	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports</p>	<p>S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.06.13 Communicate and defend findings of observations and investigations using evidence. S.RS.06.14 Evaluate scientific explanations based on current evidence and scientific principles. S.IA.06.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.</p>
<p>People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe the diverse nature of science and scientists past and present</p>	<p>S.RS.06.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.</p>
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.06.18 Describe what science and technology can and cannot reasonably contribute to society. S.RS.06.17 Describe the effect humans and other organisms have on the balance of the natural world.</p>
<p>A system can include processes as well as things. Thinking about things as systems means looking for how every part relates to others. The output from one part of a system (which can include material, energy, or information) can become the input to other parts. Such feedback can serve to control what goes on in the system as a whole. Any system is usually connected to</p>	<p>The Nature of Science, Common Themes in Science Analyze the parts, subsystems and interactions of a system</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<p>other systems, both internally and externally. Thus a system may be thought of as containing subsystems and as being a sub-system of a larger system. Some portion of the output of a system may be fed back to that system's input. Systems are defined by placing boundaries around collections of interrelated things to make them easier to study. Regardless of where the boundaries are placed, a system still interacts with its surrounding environment. Therefore, when studying a system, it is important to keep track of what enters or leaves the system. A system may stay the same because nothing is influencing it or the influences on it are balanced. Many systems contain feedback mechanisms that serve to keep changes within certain limits.</p>		
<p>Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.</p>	<p>The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events</p>	<p>S.IP.06.16 Identify patterns in data.</p>

<p>Some properties of an object depend on its length, some depend on its area, and some depend on its volume (for instance, cooling rates of different-sized containers of water, strength of different-sized constructions from the same material, flight characteristics of different-sized model airplanes). As the complexity of any system increases, gaining an understanding of it depends increasingly on summaries, such as averages and ranges, and on descriptions of typical examples of that system. Natural phenomena often involve sizes, durations, and speeds that are extremely small or extremely large. These phenomena may be difficult to appreciate because they involve magnitudes far outside human experience.</p>	<p>The Nature of Science, Common Themes in Science Compare and contrast the properties of objects as they change in scale</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
	<p>The Nature of Science, Common Themes in Science Construct physical and conceptual models that mimic the characteristics of an unknown system and compare the model to the system</p>	<p>S.RS.06.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>

NHA Science Exemplar: Engineering and Technology

The student will study the strategies and practices used in engineering and technology, as well as the relationship between science and technology. They will apply problem solving skills as they model the steps of design and experiment with materials and tools involved in inventions.

Grade Six

UNIT: Models and Design (Foss Learning Kit: Models and Designs)

NHA Science Content	NHA Objectives	MI GLCE
<p>Models</p> <ul style="list-style-type: none"> • Use of models in Science <ul style="list-style-type: none"> • For understanding and explanations of unknown systems <ul style="list-style-type: none"> • “Black boxes” • Conceptual and physical models • Sometimes processes can’t be observed directly because they happen too slowly or quickly, are too small or large, or are too dangerous • Use of models in design <ul style="list-style-type: none"> • Prototypes 	<p>The Nature of Science, Common Themes in Science Construct physical and conceptual models that mimic the characteristics of an unknown system and compare the model to the system</p>	<p>S.RS.06.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities. S.RS.07.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>
<ul style="list-style-type: none"> • Usefulness depends on how closely model behavior imitates what is being modeled which requires comparison studies • Models can be used to get ideas about how the thing being modeled works, but there is no guarantee that these ideas are correct if based on the model alone 	<p>The Nature of Science, Common Themes in Science Evaluate the usefulness of the model as a comparison tool</p>	<p>S.RS.06.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.</p>
<p>Technological Design</p> <ul style="list-style-type: none"> • Steps in the Design Process <ul style="list-style-type: none"> • Identifying need • Researching problem • Designing solution • Building prototypes • Testing solution <p>Redesigning as necessary</p>	<p>Engineering and Technology, Engineering Develop a product that fulfills a set of requirements using a product development approach (i.e. design, construction of prototype, tests, evaluation of design, redesign)</p>	<p>S.RS.06.13 Identify the need for evidence in making scientific decisions. S.RS.06.16 Design solutions to problems using technology. S.RS.07.16 Design solutions to problems using technology.</p>

<p>The Influence of Technology on Society</p> <ul style="list-style-type: none"> • Drawbacks and benefits •E.g., the use of pesticides 	<p>Engineering and Technology, Technology Evaluate various technologies in terms of drawbacks and benefits to society</p>	<p>S.RS.06.17 Describe the effect humans and other organisms have on the balance of the natural world. S.RS.06.18 Describe what science and technology can and cannot reasonably contribute to society.</p>
<p>Influence of Society on Technological Development</p> <ul style="list-style-type: none"> • Agriculture • Manufacturing • Sanitation • Medicine • Warfare • Transportation • Information processing • Communication 	<p>Engineering and Technology, Technology Explain how societies influence what types of technology are developed and used in a variety of fields</p>	<p>S.RS.06.16 Design solutions to problems using technology.</p>
<p>Scientific Inquiry Compared to Technological Design</p> <ul style="list-style-type: none"> • Similarities and differences <ul style="list-style-type: none"> •Scientists propose explanations that evolve and change; engineers propose solutions relating to human problems, needs, and aspirations •Both depend on accurate scientific information and they cannot contravene scientific law 	<p>Engineering and Technology, Technology Describe the similarities and differences between scientific inquiry and technological design</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically</p>	<p>S.IP.06.11 Generate scientific questions based on observations, investigations, and research.</p>

Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.	The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time	S.IP.06.12 Design and conduct scientific investigations.
It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.	The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science	S.RS.06.12 Describe limitations in personal and scientific knowledge. S.RS.06.13 Identify the need for evidence in making scientific decisions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.
When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.	The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables	S.IA.06.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)	S.IP.06.15 Construct charts and graphs from data and observations.

	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports	S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.06.13 Communicate and defend findings of observations and investigations using evidence. S.RS.06.14 Evaluate scientific explanations based on current evidence and scientific principles. S.IA.06.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Six

UNIT: Ecosystems (Foss Learning Kit: Populations and Ecosystems (OPTIONAL PURCHASE))

NHA Science Content	NHA Objectives	MI GLCE
<p>Energy Pyramid</p> <ul style="list-style-type: none"> Producers Consumers <ul style="list-style-type: none"> Herbivores Carnivores Omnivores Decomposers <p>Two main Interconnected Global Food Webs</p> <ul style="list-style-type: none"> Aquatic food webs (freshwater and oceanic) Land food web 	<p>The Living Environment, Food Chains and Webs</p> <p>Describe the flow of energy through an ecosystem</p> <p>Analyze the food webs formed by the interactions of producers, carnivores, herbivores and decomposers in an ecosystem</p>	<p>L.OL.06.51 Classify producers, consumers, and decomposers based on their source of food (the source of energy and building materials.)</p> <p>L.OL.06.52 Distinguish between the ways in which consumers and decomposers obtain energy.</p> <p>L.EC.06.23 Predict how changes in one population might affect other populations based upon their relationships in the food web.</p>
<ul style="list-style-type: none"> Photosynthesis on a cellular level as the start of the energy chain 	<p>The Living Environment, Food Chains and Webs</p> <p>Describe the process of photosynthesis</p>	<p>L.OL.07.61 Recognize the need for light to provide energy for the production of carbohydrates, proteins and fats</p> <p>L.OL.07.62 Explain that carbon dioxide and water are used to produce carbohydrates, proteins, and fats.</p> <p>L.OL.07.63 Describe evidence that plants make, use and store food.</p> <p>P.EN.07.43 Explain how light energy is transferred to chemical energy through the process of photosynthesis.</p>
<p>Cycle of Matter in a Food Web</p> <ul style="list-style-type: none"> Nitrogen Carbon Phosphorous Conservation of matter 	<p>The Living Environment, Food Chains and Webs</p> <p>Describe the cycle of nitrogen, carbon, and phosphorous in an ecosystem</p>	<p>L.EC.06.31 Identify the living (biotic) and nonliving (abiotic) components of an ecosystem.</p>

<ul style="list-style-type: none"> Amount of material cycling remains constant 		
<p>Interaction Among Populations</p> <ul style="list-style-type: none"> Niches Competition <ul style="list-style-type: none"> Predator/prey dynamics Symbiotic relationships <ul style="list-style-type: none"> Parasitism Mutualism Commensalism <p>Factors Affecting Organisms/Ecosystems</p> <ul style="list-style-type: none"> Biotic resources Abiotic factors Population Dynamics <ul style="list-style-type: none"> Population density Birth and death rates Carrying capacity Immigration and emigration Homeostasis in an ecosystem 	<p>The Living Environment, Ecosystems Analyze and describe the relationships among biotic and abiotic factors and their effects on populations of terrestrial and aquatic ecosystems</p>	<p>L.EC.06.32 Identify the factors in an ecosystem that influence changes in population size.</p>
<p>Detrimental and Beneficial Changes in Ecosystems</p> <ul style="list-style-type: none"> Natural events <ul style="list-style-type: none"> E.g. Disease, flood, drought Human activities <ul style="list-style-type: none"> Use of natural resources Pollution Construction Land development Mining Introduction of non-native species Overpopulation 	<p>The Living Environment, Ecosystems Analyze natural changes and human-caused changes in an ecosystem to evaluate, with evidential support, whether they are detrimental or beneficial to the survival of populations in that ecosystem</p>	<p>L.EC.06.41 Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance in ecosystems. E.ES.07.41 Explain how human activities (surface mining, deforestation, overpopulation, construction and urban development, farming, dams, landfills, and restoring natural areas) change the surface of the Earth and affect the survival of organisms. L.EC.06.42 Predict possible consequences of overpopulation of organisms, including humans, (for example: species extinction, resource depletion, climate change, pollution).</p>
<p>Ecological Succession</p> <ul style="list-style-type: none"> Pond succession Dune succession Wetland succession Jack pine succession 	<p>The Living Environment, Ecosystems Analyze the ecological succession of a variety of environments</p>	<p>L.EC.06.32 Identify the factors in an ecosystem that influence changes in population size. L.EC.06.23 Predict how changes in one population might affect other populations based upon their relationships in the food web.</p>

<ul style="list-style-type: none"> • Forest succession 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>A system can include processes as well as things. Thinking about things as systems means looking for how every part relates to others. The output from one part of a system (which can include material, energy, or information) can become the input to other parts. Such feedback can serve to control what goes on in the system as a whole. Any system is usually connected to other systems, both internally and externally. Thus a system may be thought of as containing subsystems and as being a sub-system of a larger system. Some portion of the output of a system may be fed back to that system's input. Systems are defined by placing boundaries around collections of interrelated things to make them easier to study. Regardless of where the boundaries are placed, a system still interacts with its surrounding environment. Therefore, when studying a system, it is important to keep track of what enters or leaves the system. A system may stay the same because nothing is influencing it or the influences on it are balanced. Many systems contain feedback mechanisms that serve to keep changes within certain limits.</p>	<p>The Nature of Science, Common Themes in Science Analyze the parts, subsystems and interactions of a system</p>	<p>L.EC.06.11 Identify and describe examples of populations, communities, and ecosystems including the Great Lakes Region. L.EC.06.21 Describe common patterns of relationships between and among populations (competition, parasitism, symbiosis, predator/prey). L.EC.06.22 Explain how two populations of organisms can be mutually beneficial and how that can lead to interdependency.</p>
<p>Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic</p>	<p>The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events</p>	<p>S.IP.06.16 Identify patterns in data.</p>

that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.		
Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.	The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically	S.IP.06.11 Generate scientific questions based on observations, investigations, and research.
Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.	The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time	S.IP.06.12 Design and conduct scientific investigations.
It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence,	The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science	S.RS.06.12 Describe limitations in personal and scientific knowledge. S.RS.06.13 Identify the need for evidence in making scientific decisions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.

identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.		
When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.	The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables	S.IA.06.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)	S.IP.06.15 Construct charts and graphs from data and observations.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.IP.06.16 Identify patterns in data. S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data. S.IA.06.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.

	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports</p>	<p>S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.06.13 Communicate and defend findings of observations and investigations using evidence. S.RS.06.14 Evaluate scientific explanations based on current evidence and scientific principles. S.IA.06.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.</p>
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.06.18 Describe what science and technology can and cannot reasonably contribute to society. S.RS.06.17 Describe the effect humans and other organisms have on the balance of the natural world.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Six

UNIT: Energy

NHA Science Content	NHA Objectives	MI GLCE
<p>Potential vs. Kinetic Energy</p> <ul style="list-style-type: none"> Potential energy <ul style="list-style-type: none"> Gravitational Elastic Chemical Kinetic energy <ul style="list-style-type: none"> Energy of motion <p>S-C-R-E-A-M (+H)</p> <ul style="list-style-type: none"> Sound, chemical, radiant, electrical, atomic, mechanical, heat 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Describe the various forms of potential and kinetic energy</p>	<p>P.EN.06.11 Identify kinetic or potential energy in everyday situations (for example: stretched rubber band, objects in motion, ball on a hill, food energy)</p>
<p>Energy Transformations in Common Objects</p> <ul style="list-style-type: none"> E.g. Chemical energy in gasoline transformed into mechanical energy in an engine 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Trace the conversion of energy from one form to another in a system</p>	<p>P.EN.06.41 Explain how different forms of energy can be transferred from one place to another by radiation, conduction, or convection.</p> <p>P.EN.06.12 Demonstrate the transformation between potential and kinetic energy in simple mechanical systems (for example: roller coasters, pendulums).</p>
<ul style="list-style-type: none"> The total amount of energy in an isolated system remains constant Energy is neither created nor destroyed Heat is usually produced as a byproduct of transformations 	<p>Physical Science, Forms of Energy and Their Interactions</p> <p>Explain the law of conservation of energy</p>	<p>P.EN.06.42 Illustrate how energy can be transferred while no energy is lost or gained in the transfer.</p>
<p>Renewable Vs. Non Renewable Energy Resources</p> <ul style="list-style-type: none"> Fossil Fuels Biomass Geothermal Water 	<p>Physical Science, Energy Resources</p> <p>Evaluate energy sources in terms of advantages and disadvantages (e.g. cost, environmental consequences, sustainability)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<ul style="list-style-type: none"> • Solar • Wind • Nuclear energy <ul style="list-style-type: none"> •Fusion •Fission 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.06.18 Describe what science and technology can and cannot reasonably contribute to society. S.RS.06.17 Describe the effect humans and other organisms have on the balance of the natural world.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Six

UNIT: Sound

NHA Science Content	NHA Objectives	MI GLCE
<p>Properties of Waves</p> <ul style="list-style-type: none"> Longitudinal and transverse wave properties Relationship between wavelength, frequency, amplitude, and speed of a wave (speed= wavelength X frequency) Waves and energy transfer Water, sound, light, earthquake waves Direction of wave outward from source 	<p>Physical Science, Sound Compare and contrast the properties of longitudinal and transverse waves and specify examples of each</p>	<p>P.EN.07.31 Identify examples of waves, including sound waves, seismic waves, and waves on water.</p>
<p>Vibrations Through a Medium</p> <ul style="list-style-type: none"> Speed of sound and dissipation of energy through solids, liquids, gas 	<p>Physical Science, Sound Describe the effect of the medium on sound</p>	<p>P.EN.07.32 Describe how waves are produced by vibrations in matter. P.EN.07.33 Demonstrate how waves transfer energy when they interact with matter (for example: tuning fork in water, waves hitting a beach, earthquake knocking over buildings).</p>
	<p>Physical Science, Sound Relate the amplitude of a wave (i.e. sound, seismic, water) to the amount of energy used to create the vibration of the object producing the wave</p>	<p>P.EN.07.31 Identify examples of waves, including sound waves, seismic waves, and waves on water.</p>

<p>Characteristics of Sound</p> <ul style="list-style-type: none"> Pitch, frequency, amplitude, speed of sound Relationship between wavelength, frequency, amplitude, and speed of wave 	<p>Physical Science, Sound Describe the changing pitch of sound in terms of the speed, frequency, and wavelength of the sound waves (speed=wavelength X frequency)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically</p>	<p>S.IP.06.11 Generate scientific questions based on observations, investigations, and research.</p>
<p>Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time</p>	<p>S.IP.06.12 Design and conduct scientific investigations.</p>
<p>It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence,</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science</p>	<p>S.RS.06.12 Describe limitations in personal and scientific knowledge. S.RS.06.13 Identify the need for evidence in making scientific decisions. S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.</p>

identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.		
When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.	The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables	S.IA.06.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)	S.IP.06.15 Construct charts and graphs from data and observations.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.RS.06.11 Evaluate the strengths and weaknesses of claims, arguments, and data.

	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis</p> <p>Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports</p>	<p>S.IA.06.11 Analyze information from data tables and graphs to answer scientific questions.</p> <p>S.IA.06.13 Communicate and defend findings of observations and investigations using evidence.</p> <p>S.RS.06.14 Evaluate scientific explanations based on current evidence and scientific principles.</p> <p>S.IA.06.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.</p>
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NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Six

UNIT: Light

NHA Science Content	NHA Objectives	MI GLCE
<p>The Electromagnetic Spectrum (and uses; listed in order from highest frequency and energy to lowest)</p> <ul style="list-style-type: none"> • Gamma rays <ul style="list-style-type: none"> •Used in radiotherapy for cancer patients; used for sterilizing food; and sterilizing medical equipment • X-rays <ul style="list-style-type: none"> •Used in hospitals; used in security checks to see inside objects • Ultraviolet waves <ul style="list-style-type: none"> •Used by dentists to harden fillings; used for sterilization in hospitals • Visible light <ul style="list-style-type: none"> •Used by our eyes to see objects • Infrared waves <ul style="list-style-type: none"> •Police use devices to detect infrared waves, as do hospitals • Microwaves <ul style="list-style-type: none"> •Used in microwaves; used in cell phones • Radio waves <ul style="list-style-type: none"> •Used in communication devices such as radios and televisions 	<p>Physical Science, Light Compare and contrast waves that make up the electromagnetic spectrum as versions of radiation that differ in wavelengths, frequencies, and energy levels</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The Electromagnetic Spectrum (and uses; listed in order from highest frequency and energy to lowest)</p> <ul style="list-style-type: none"> • Gamma rays <ul style="list-style-type: none"> •Used in radiotherapy for cancer patients; used for sterilizing food; and sterilizing medical equipment • X-rays <ul style="list-style-type: none"> •Used in hospitals; used in security checks to 	<p>Physical Science, Light Describe an everyday application of each of the waves of the electromagnetic spectrum</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<ul style="list-style-type: none"> • see inside objects • Ultraviolet waves <ul style="list-style-type: none"> •Used by dentists to harden fillings; used for sterilization in hospitals • Visible light <ul style="list-style-type: none"> •Used by our eyes to see objects • Infrared waves <ul style="list-style-type: none"> •Police use devices to detect infrared waves, as do hospitals • Microwaves <ul style="list-style-type: none"> •Used in microwaves; used in cell phones • Radio waves <ul style="list-style-type: none"> •Used in communication devices such as radios and televisions 		
<p>Light and Color</p> <ul style="list-style-type: none"> • Light and color <ul style="list-style-type: none"> •Prisms/diffraction gratings •ROYGBIV •Color addition and subtraction 	<p>Physical Science, Light Differentiate between color addition and color subtraction using colored lighting and filters</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Light as a Wave</p> <ul style="list-style-type: none"> • Reflection and mirrors 	<p>Physical Science, Light Compare the reflection of light from various surfaces (e.g., loss of light, angle of reflection, reflected color)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Light as a Wave</p> <ul style="list-style-type: none"> • Refraction and lenses <ul style="list-style-type: none"> •Virtual images created by light bending 	<p>Physical Science, Light Investigate and describe the refraction of light passing through various materials (e.g., prisms, lenses, water)</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<p>Light as a Wave</p> <ul style="list-style-type: none"> • Light and the eye • Structure and function 	<p>The Living Environment, Animal Body Structures and Functions</p> <p>Analyze the form and function of the human eye</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
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NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Six

UNIT: Geology (Delta Learning Kit: Earth Processes)

NHA Science Content	NHA Objectives	MI GLCE
<p>Earth's Surface</p> <ul style="list-style-type: none"> Continents <ul style="list-style-type: none"> Continental drift (Pangaea) <ul style="list-style-type: none"> Alfred Wagner (first proposed theory) Landforms Earth Maps <ul style="list-style-type: none"> Computer mapping Topographical and raised relief maps Continental and ocean floor maps 	<p>Earth and Space Science, The Changing Earth Analyze and describe Earth's surface features using maps</p>	<p>(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)</p>
<p>Layers Within Earth</p> <ul style="list-style-type: none"> Physical properties comparison (density, temperature, state, composition) <ul style="list-style-type: none"> Crust Mantle Outer core Inner Core 	<p>Earth and Space Science, The Changing Earth Compare the physical properties of the interior layers of Earth</p>	<p>E.SE.06.53 Describe layers of the Earth as a lithosphere (crust and upper mantle), convecting mantle, and dense metallic core.</p>
<p>Weathering</p> <ul style="list-style-type: none"> Chemical <ul style="list-style-type: none"> Acid rain, acid secretions by fungi and lichens Physical/mechanical <ul style="list-style-type: none"> Frost action, water, wind Cracks in sidewalks and potholes 	<p>Earth and Space Science, The Changing Earth Describe agents of physical and chemical weathering and explain their connection to the formation of soil and sediment</p>	<p>E.SE.06.11 Explain how physical and chemical weathering lead to erosion and the formation of soils and sediments. E.SE.06.12 Explain how waves, wind, water, and glacier movement, shape and reshape the land surface of the Earth by eroding rock in some areas and depositing sediments in other areas.</p>

<p>Erosion</p> <ul style="list-style-type: none"> • Runoff • Rivers (e.g. deltas, floodplains, alluvial fans, meanders, oxbow lakes, dams) • Waves <ul style="list-style-type: none"> • Sandbars, beaches, spits • Glaciers <ul style="list-style-type: none"> • Erosional landforms (e.g. cirques, glacial horns, U-shaped valleys, kettle lakes) • Depositional landforms (e.g. moraines) • Wind • Dunes 	<p>Earth and Space Science, The Changing Earth Analyze how physical/mechanical weathering (e.g. waves, wind, water, and glacier movements) shape and reshape Earth's surface over time</p>	<p>E.SE.06.11 Explain how physical and chemical weathering lead to erosion and the formation of soils and sediments. E.SE.06.12 Explain how waves, wind, water, and glacier movement, shape and reshape the land surface of the Earth by eroding rock in some areas and depositing sediments in other areas.</p>
<p>Plate Tectonics</p> <ul style="list-style-type: none"> • Visible Earth processes related to forces in the Earth <ul style="list-style-type: none"> • Mountain building <ul style="list-style-type: none"> • Folded, dome, fault mountains • Earthquakes <ul style="list-style-type: none"> • Richard Dixon Oldham <ul style="list-style-type: none"> • Using seismic waves to learn about Earth layers • Wave types and energy transfer • History of seismology • Volcanic activity <ul style="list-style-type: none"> • Ring of Fire • Forces driving plate movement • Isostasy • Convection currents in the mantle 	<p>Earth and Space Science, The Changing Earth Describe major geological events (mountain building, earthquakes, volcanic eruptions) as processes resulting from heat flow and movement of material within Earth</p>	<p>E.SE.06.51 Explain plate tectonic movement and how the lithospheric plates move centimeters each year. E.SE.06.52 Demonstrate how major geological events (earthquakes, volcanic eruptions, mountain building) result from these plate motions.</p>
<p>Plate Tectonics</p> <ul style="list-style-type: none"> • Plates Boundaries • Convergent boundaries <ul style="list-style-type: none"> • Collision zones • Subduction zones • Trenches • Divergent boundaries <ul style="list-style-type: none"> • Sea floor spreading 	<p>Earth and Space Science, The Changing Earth Describe the three primary types of plate boundaries and the landforms associated with each</p>	<p>E.SE.06.52 Demonstrate how major geological events (earthquakes, volcanic eruptions, mountain building) result from these plate motions.</p>

<ul style="list-style-type: none"> •Mid-ocean ridges •Rift valleys •Transform boundaries <ul style="list-style-type: none"> • Strike-slip faults 		
<p>The Age of Earth</p> <ul style="list-style-type: none"> • Scientific laws and the relationship between past and present events • Relative time <ul style="list-style-type: none"> •Fossils •Superposition •Crosscutting relations • Absolute time • Radioactive decay 	<p>Earth and Space Science, The Changing Earth Describe ways scientists learn about Earth's geologic history (e.g., seismographs, ground penetrating radar, core drillers, observations)</p>	<p>E.ST.06.31 Explain how rocks and fossils are used to understand the age and geological history of the Earth (timelines and relative dating, rock layers). E.ST.06.42 Describe how fossils provide important evidence of how life and environmental conditions have changed. E.ST.06.41 Explain how Earth processes (erosion, mountain building, and glacier movement) are used for the measurement of geologic time through observing rock layers.</p>
<p>Earth Materials</p> <ul style="list-style-type: none"> • Soil <ul style="list-style-type: none"> •Components (e.g. rock fragments, clay, silt, sand, humus) •Soil properties (e.g. color, horizon profile, infiltration, soil temperature, structure, consistency, texture, particle size, pH, fertility and soil moisture) •Variables that influence soil texture, fertility and resistance to erosion (e.g. plant roots, bacteria, fungi, worms, rodents) •Soil conservation 	<p>Earth and Space Science, Earth Materials and Responsible Use Analyze observable and measurable soil properties to predict soil quality</p>	<p>E.SE.06.13 Describe how soil is a mixture made up of weather eroded rock and decomposed organic material. E.SE.06.14 Compare different soil samples based on particle size and texture.</p>
<p>Earth Materials</p> <ul style="list-style-type: none"> • Rocks <ul style="list-style-type: none"> •Mineral content and texture comparison (color due to presence of quartz, feldspar, calcite, mica and size of minerals due to cooling time) •Process of formation <ul style="list-style-type: none"> • Sedimentary <ul style="list-style-type: none"> •Clastic •Non-clastic • Igneous 	<p>Earth and Space Science, Earth Materials and Responsible Use Classify sedimentary, igneous and metamorphic rocks</p>	<p>E.SE.06.41 Compare and contrast the formation of rock types (igneous, metamorphic, and sedimentary) and demonstrate the similarities and differences using the rock cycle model.</p>

<ul style="list-style-type: none"> •Extrusive •Intrusive • Metamorphic •Foliated •Unfoliated •The rock cycle 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.06.18 Describe what science and technology can and cannot reasonably contribute to society. S.RS.06.17 Describe the effect humans and other organisms have on the balance of the natural world.</p>
<p>Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.</p>	<p>The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events</p>	<p>S.IP.06.16 Identify patterns in data.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Six

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • Illness/disease prevention <ul style="list-style-type: none"> - Awareness of risk factors <ul style="list-style-type: none"> • Lifestyle • Family history - Sanitation/spread of germs • HIV/AIDS Prevention <ul style="list-style-type: none"> - Transmission of disease <ul style="list-style-type: none"> • Facts vs. myths - Strategies for protection <ul style="list-style-type: none"> • Awareness of risky situations/behaviors • Not touching blood or used needles - Community resources of information/help <p>Healthy Diet</p> <ul style="list-style-type: none"> • Following dietary guidelines • Benefits of having healthy eating habits <ul style="list-style-type: none"> - Dental health • Reduced health risks • Influences on food choices <ul style="list-style-type: none"> - Family/friends - Culture/religion - Media/advertising - Money/economics - Lifestyle/priorities - Emotional eating - Convenience /cost - Environment/food availability • Food quality and safety <ul style="list-style-type: none"> - Food borne illnesses - Proper refrigeration - Hand washing - Proper cooking - Storage temperatures - Sanitation/cleanliness in the kitchen 	<p>STRAND 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Analyze the benefits of healthy eating and being physically active.</p> <p>1.2 Identify the causes of food borne illness.</p> <p>1.3 Explain how weight management is influenced by healthy eating and being physically active.</p> <p>Standard 3: Health Behaviors</p> <p>1.4 Describe the federal dietary guidelines and the amount of physical activity recommended for one's age in order to achieve health benefits.</p> <p>1.5 Describe strategies for dealing with personal preferences, restrictions, and barriers related to healthy eating, adequate sleep, and physical activity.</p> <p>1.6 Describe environmental influences that encourage or discourage physical activity.</p> <p>1.7 Develop a dietary and physical activity plan for a week that is consistent with the dietary guidelines.</p> <p>1.8 Demonstrate the ability to support others to choose healthy foods and be physically active.</p> <p>Standard 1: Core Concepts (Recommended)</p> <p>1.9 Describe the relationship of self perception, body image, body weight, and physical activity.</p> <p>Standard 4: Influences</p> <p>1.10 Analyze how one's own perception of weight influences healthy eating and being physically active.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Explain the short- and long-term effects of alcohol and marijuana use.</p> <p>2.2 Explain school policies and Michigan laws related to the sale and use of tobacco products.</p> <p>2.3 Analyze data that supports that most young people in middle school do not use tobacco, alcohol, or other drugs.</p> <p>2.4 Articulate the benefits of remaining alcohol, tobacco, and drug free.</p> <p>2.5 Analyze how impaired judgment and other effects of alcohol or marijuana use impact personal safety, relationships with friends and families, school success, and attainment of present and future goals.</p> <p>Standard 2: Access Information</p>

- Weight management
 - Influence of weight perception on food choices

Healthy Decisions

- Community health care facilities
 - Availability of health care products/information /services
 - Situations requiring professional health services
 - Health emergencies
 - Asthma, diabetes management
- Injury prevention strategies
 - Home emergency plans
 - Maintaining supplies in readiness of an emergency
 - Identification and removal of safety hazards
- Skills to enhance personal safety
 - Car safety/seatbelts
 - Internet safety
 - Recognizing and avoiding threatening situations
 - Appropriate vs. inappropriate touch
 - Respecting personal space/boundaries
 - Being home alone
 - Strategies to handle threatening situations
 - Presence of weapons/dangerous objects

Healthy Practices

- Personal influences on health
 - Food choices/exercise/sleep /activity
 - Anything put into your body
- Family influences on health
 - Physical, emotional, social
 - Ability of family to provide for its members
- Peer relationships
 - Exclusiveness
 - Discriminating
 - Risk-taking behaviors
 - Name-calling/prejudice
- Drug, alcohol, & other drug use
 - Long-term and short-term effects of use
 - Alcohol and impaired driving
 - Health benefits to avoiding use
 - Difficulty of fighting addictions
 - Negative effects on relationships
 - Effects on athletic performance and weight management
 - Legal perspectives

2.6 Demonstrate the ability to locate school and community resources to assist with problems related to alcohol and other drug use; and assess the validity of the resources.

Standard 3: Health Behaviors

2.7 Make a commitment to be alcohol, tobacco and drug free.

2.8 Recognize behaviors that may indicate alcohol or drug impairment in order to avoid riding with an impaired driver.

2.9 Describe strategies to avoid riding with an impaired driver, and demonstrate the ability to use them.

Standard 4: Influences

2.10 Analyze family, peer, societal, and media influences on tobacco, alcohol, and other drug use.

Standard 7: Social Skills

2.11 Develop personal strategies to resist influences to use tobacco, alcohol, and other drugs.

2.12 Demonstrate verbal and non-verbal ways to refuse alcohol, tobacco, and other drugs. **Grade Six**

Standard 1: Core Concepts (Recommended)

2.13 Describe the negative health effects of caffeine, tobacco, and diet pills on rest, stress, athletic performance, and weight management.

Standard 4: Influences

2.14 Analyze possible reasons why individuals choose to use, or not use, alcohol or marijuana.

2.15 Demonstrate the ability to support friends and family members who are trying to stop using alcohol, tobacco, and other drugs.

Standard 8: Advocacy

2.16 Apply effective persuasion skills for encouraging others not to use tobacco, alcohol, and other drugs.

STRAND 3: Safety

Standard 1: Core Concepts

3.1 Explain how safety belts help passengers to stay safe.

3.2 Describe safety hazards related to using the Internet.

3.3 Describe appropriate and inappropriate touch.

3.4 Explain the importance of respecting personal space and boundaries.

3.5 Explain that a child is not at fault if someone touches him or her in an inappropriate way.

Standard 2: Access Information

3.6 Demonstrate the ability to ask a trusted adult for help when feeling personally threatened or unsafe, including while using the Internet.

Standard 3: Health Behaviors

3.7 Analyze environments and situations, including those where weapons may be present, to determine whether they are safe.

3.8 Describe strategies to avoid unsafe situations.

- Use vs. misuse of prescription drugs
- Influences that promote use
 - Peer pressure
 - Strategies to refuse use
 - Adult/peer modeling
 - Advertising/media
 - Availability/cost
- Tools to avoid use
 - Self-control
 - Role play of refusal situations
 - Responding to negative social influence and peer pressure
- Caffeine, diet pills, and other drugs

Healthy Minds

- Negative effects of media
 - Influence from television, video games, movies, advertising
- Self-Image
 - Importance of healthy perception of weight and body image
- Stress management
 - Talking about problems
 - Understanding that feelings of isolation and depression will pass
 - Examining situation leading to feelings
- Social interactions
 - Recognition of positive self-esteem
 - Interpersonal communication
 - Building positive relationships with peers, parents
 - Safe and risky behaviors in relationships
 - Handling peer pressure
 - Management of feelings and behaviors (anger)
- Decision making and problem solving skills
- Conflict resolution
 - Possible causes of conflict
 - Non-violent strategies to manage conflict
 - Refusal/negotiation

- 3.9** Demonstrate strategies to escape when weapons/dangerous objects are present.
- 3.10** Describe the procedure for reporting the presence of weapons at school.
- 3.11** Demonstrate the ability to escape safety hazards in public places.
- 3.12** Apply school rules and procedures to hypothetical school crisis situations.
- 3.13** Demonstrate strategies to get away in hypothetical cases of inappropriate touching or abduction.
- 3.14** Apply strategies to stay safe when using the Internet.

Standard 4: Influences

- 3.15** Explain how one's behavior, when an occupant of a vehicle, influences the behavior of others.

Standard 8: Advocacy (Recommended)

- 3.16** Advocate for others to practice safe behavior, including the proper use of safety belts, when riding in a car.
- 3.17** Advocate for others to stay safe when using the Internet.

STRAND 4: Social and Emotional Health

Standard 1: Core Concepts

- 4.1** Describe some common causes of stress, and the health effects of stress.

Standard 2: Access Information

- 4.2** Analyze the importance of getting help from an adult when it is needed.
- 4.3** Identify criteria to determine whether another person is able to help one make healthy decisions and solve problems; and apply these criteria to identify people who can provide help.

Standard 3: Health Behaviors

- 4.4** Demonstrate the ability to use practical strategies to manage strong feelings.

Standard 5: Goal Setting

- 4.5** Use practical strategies to develop a personal plan for stress management.

Standard 6: Decision Making

- 4.6** Describe the decision making and problem solving steps.
- 4.7** Demonstrate the ability to make a decision or solve a problem using criteria to evaluate solutions.

Standard 7: Social Skills

- 4.8** Describe the characteristics of conflicts that can be resolved and the steps of effective conflict resolution.
- 4.9** Demonstrate the ability to use the steps of conflict resolution.
- 4.10** Demonstrate effective listening strategies.
- 4.11** Demonstrate the ability to use assertive communication skills appropriately.

Standard 1: Core Concepts (Recommended)

- 4.12** Analyze how friendships may involve positive and negative risks.
- 4.13** Explain the difference between angry feelings and angry behavior.

Standard 7: Social Skills

	<p>4.14 Demonstrate the ability to express appreciation.</p> <p>STRAND 5: Personal Health and Wellness</p> <p>Standard 3: Health Behaviors</p> <p>5.1 Demonstrate skills throughout the day to reduce the spread of germs.</p> <p>STRAND 6: HIV AND STIs Prevention</p> <p>Standard 1: Core Concepts</p> <p>6.1 Explain how HIV is and is not transmitted.</p> <p>6.2 Distinguish between facts and myths regarding HIV infection and AIDS.</p> <p>Standard 2: Access Information</p> <p>6.3 Explain when it is important to get adult, medical, and/or counseling help.</p> <p>6.4 Describe sources of accurate information and assistance in one's community.</p> <p>Standard 3: Health Behaviors</p> <p>6.5 Analyze behaviors and situations that may result in increased risk for HIV and other sexually transmitted infections (STIs).</p> <p>6.6 Analyze situations where assertive communication and refusal skills can be used to avoid and escape risky situations.</p>
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NHA Science Michigan Alignment
Grade Six

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 4

MI.E.SE.06.61 Describe the Earth as a magnet and compare the magnetic properties of the Earth to that of a natural or manufactured magnet

MI.E.SE.06.62 Explain how a compass works using the magnetic field of the Earth, and how a compass is used for navigation on land and sea. (Electricity and Magnetism Unit)

NHA Grade 7

MI.P.CM.06.11 Describe and illustrate changes in state, in terms of the arrangement and relative motion of the atoms or molecules. (Chemistry Unit)

MI.P.CM.06.12 Explain how mass is conserved as a substance changes from state to state in a closed system.

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.



GRADE SEVEN

Science Grade Level Content

Michigan Alignment

**NATIONAL HERITAGE ACADEMIES CURRICULUM
MICHIGAN 7TH GRADE ALIGNMENT
SCIENCE**

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Scientific Enterprise – Science and Society Common Themes in Science</p> <p>The Living Environment Cell Theory Cell Structure and Function Genetics and Heredity</p> <p>Physical Science Properties of Materials Physical States and Changes Mixtures and Solutions Atoms and Molecules Forces Effect on Motion Measuring Motion</p> <p>Earth and Space Science Weather and Climate Atmosphere Water on Earth</p>	<p>Discipline 1: Science Processes Standard: Inquiry Process Standard: Inquiry Analysis and Communication Standard: Reflection and Social Implications</p> <p>Discipline 2: Physical Science Standard: Energy Waves and Energy Energy Transfer Solar Energy Effects Standard: Properties of Matter Chemical Properties Elements and Compounds Standard: Changes in Matter Chemical Changes</p> <p>Discipline 3: Life Science Standard: Organization of Living Things Cell Functions Growth and Development Photosynthesis Standard: Heredity Reproduction</p> <p>Discipline 4: Earth Science Standard: Earth Systems Solar Energy Human Consequences Weather and Climate Water Cycle Standard: Fluid Earth Atmosphere</p>

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Seven

UNIT: Introduction to Science

NHA Science Content	NHA Objectives	MI GLCE
When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.	The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables	S.IA.07.14 Draw conclusions from sets of data from multiple trials of a scientific investigation to draw conclusions.
Although all scientific ideas are tentative and subject to change and improvement in principle, for most major ideas in science, there is much experimental and observational confirmation. Those ideas are not likely to change greatly in the future. Some of these ideas and knowledge are very old and still applicable. Scientists do and have changed their ideas about nature when they encounter new experimental evidence that does not match their existing explanations. When new experimental results are inconsistent with existing, well established ideas, scientists pursue further experimentation to determine whether the results are flawed or the existing ideas require modification.	The Nature of Science, Scientific Knowledge Trace the development of an idea to a scientific theory	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested	The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically	S.IP.07.11 Generate scientific questions based on observations, investigations, and research.

objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.		
Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.	The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time	S.IP.07.12 Design and conduct scientific investigations.
It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.	The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science	S.RS.07.14 Evaluate scientific explanations based on current evidence and scientific principles. S.RS.07.12 Describe limitations in personal and scientific knowledge. S.RS.07.11 Evaluate the strengths and weaknesses of claims, arguments, and data.

Technology used (safely) to gather data enhances accuracy and allows scientists to analyze and quantify results of investigations.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results	S.IP.07.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens, thermometer, models, sieves, microscopes, hot plates, pH meters) appropriate to scientific investigations. S.IP.07.14 Use metric measurement devices in an investigation.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures	There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.
Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)	S.IP.07.15 Construct charts and graphs from data and observations. S.IP.07.16 Identify patterns in data.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.IA.07.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.

	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports</p>	<p>S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse. S.IA.07.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data. S.RS.07.13 Identify the need for evidence in making scientific decisions. S.IA.17.13 Communicate and defend findings of observations and investigations.</p>
<p>People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe the diverse nature of science and scientists past and present</p>	<p>S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.</p>
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.07.17 Describe the effect humans and other organisms have on the balance of the natural world. S.RS.07.18 Describe what science and technology can and cannot reasonably contribute to society.</p>

<p>A system can include processes as well as things. Thinking about things as systems means looking for how every part relates to others. The output from one part of a system (which can include material, energy, or information) can become the input to other parts. Such feedback can serve to control what goes on in the system as a whole. Any system is usually connected to other systems, both internally and externally. Thus a system may be thought of as containing subsystems and as being a sub-system of a larger system. Some portion of the output of a system may be fed back to that system's input. Systems are defined by placing boundaries around collections of interrelated things to make them easier to study. Regardless of where the boundaries are placed, a system still interacts with its surrounding environment. Therefore, when studying a system, it is important to keep track of what enters or leaves the system. A system may stay the same because nothing is influencing it or the influences on it are balanced. Many systems contain feedback mechanisms that serve to keep changes within certain limits.</p>	<p>The Nature of Science, Common Themes in Science Analyze the parts, subsystems and interactions of a system</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like</p>	<p>The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events</p>	<p>S.IP.07.16 Identify patterns in data.</p>

<p>in the future. However, these predictions may not always match what actually happens.</p>		
<p>Some properties of an object depend on its length, some depend on its area, and some depend on its volume (for instance, cooling rates of different-sized containers of water, strength of different-sized constructions from the same material, flight characteristics of different-sized model airplanes). As the complexity of any system increases, gaining an understanding of it depends increasingly on summaries, such as averages and ranges, and on descriptions of typical examples of that system. Natural phenomena often involve sizes, durations, and speeds that are extremely small or extremely large. These phenomena may be difficult to appreciate because they involve magnitudes far outside human experience.</p>	<p>The Nature of Science, Common Themes in Science Compare and contrast the properties of objects as they change in scale</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Seven

UNIT: Heredity (Delta Learning Kit: DNA- From Genes to Proteins)

NHA Science Content	NHA Objective	MI GLCE
<p>Mechanics of Heredity</p> <ul style="list-style-type: none"> •Relationship between genes, proteins, chromosomes, genomes, and DNA and how they relate to body features •Heredity and the environment <ul style="list-style-type: none"> •Cancer •Mutations •Genetic engineering 	<p>The Living Environment, Genetics and Heredity</p> <p>Describe the relationship between genes, proteins, chromosomes, genomes, and DNA and explain their role in the process of heredity</p>	<p>L.HE.07.21 Compare how characteristics of living things are passed on through generations, both asexually and sexually.</p>
<p>Mechanics of Heredity</p> <ul style="list-style-type: none"> •Sexual and Asexual Reproduction <ul style="list-style-type: none"> •In sexual reproduction parents each combine half of their genetic information and the offspring is a combination of traits from both parents •In asexual reproduction, offspring are clones of the single parent 	<p>The Living Environment, Genetics and Heredity</p> <p>Compare how genetic material is transferred to offspring in sexual and asexual reproduction</p>	<p>L.HE.07.21 Compare how characteristics of living things are passed on through generations, both asexually and sexually.</p> <p>L.HE.07.22 Compare and contrast the advantages and disadvantages of sexual vs. asexual reproduction.</p>
<p>Genetic Variation</p> <ul style="list-style-type: none"> •Gregor Mendel and his peapod experiment •Dominant and recessive traits •Trait probability <ul style="list-style-type: none"> •Punnett squares •Phenotypes vs. genotypes •Pedigree charts 	<p>The Living Environment, Genetics and Heredity</p> <p>Use models such as Punnett squares or pedigree charts help determine the probability of traits being expressed</p>	<p>L.HE.07.21 Compare how characteristics of living things are passed on through generations, both asexually and sexually.</p>

The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.

<p>People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Describe the diverse nature of science and scientists past and present</p>	<p>S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.</p>
<p>Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment. Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded.</p>	<p>The Nature of Science, Scientific Enterprise-Science and Society Describe ways in which science and society influence one another</p>	<p>S.RS.07.17 Describe the effect humans and other organisms have on the balance of the natural world. S.RS.07.18 Describe what science and technology can and cannot reasonably contribute to society.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Seven

UNIT: Cells (Delta Learning Kit: DNA- From Genes to Proteins)

NHA Science Content	NHA Objectives	MI GLCE
<p>Historical Perspective</p> <p>Robert Hooke and Anton van Leeuwenhoek (First to use microscopes to observe cells)</p>	<p>The Living Environment, Cell Theory Sequence the major points in the development of the cell theory, including important historical figures and technological advancements associated with the theory</p>	<p>S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.</p>
<p>Cell Theory</p> <ul style="list-style-type: none"> All living things are composed of cells Cells are the smallest unit (structure) of living things that can perform the processes (functions) necessary for life Living cells come only from other living cells 	<p>The Living Environment, Cell Theory Explain the three components of the cell theory</p>	<p>L.OL.07.21 Recognize that all organisms are composed of cells (single cell organisms, multicellular organisms).</p> <p>L.OL.07.31 Describe growth and development in terms of increase of cell number and/or cell size.</p> <p>L.OL.07.22 Explain how cells make up different body tissues, organs, and organ systems.</p>
<p>Organelles</p> <ul style="list-style-type: none"> Form follows function Division of labor Comparison of plant and animal cell organelles <ul style="list-style-type: none"> Observing differences in cell walls, cytoplasm, chloroplast, and nucleus <p>Cellular Organization and Specialization</p> <ul style="list-style-type: none"> Unicellular organisms Multi-cellular organisms <p>Specialized cells → specialized tissue → specialized organs</p>	<p>The Living Environment, Cell Structure and Function</p> <p>Describe the basic functions of cell organelles in plant and animal cells</p>	<p>L.OL.07.24 Recognize that cells function in a similar way in all organisms.</p> <p>L.OL.07.32 Examine how through cell division, cells can become specialized for specific functions.</p>

<ul style="list-style-type: none"> • Osmosis, Active Transport, Diffusion <ul style="list-style-type: none"> – Includes creating and interpreting three-dimensional models and/or illustrations demonstrating the processes involved. Students should be able to analyze the components of these models and diagrams and communicate their observations and conclusions 	The Living Environment, Cell Structure and Function Describe how materials move into and out of cells in the processes of osmosis, diffusion, and active transport	L.OL.07.23 Describe how cells in all multicellular organisms are specialized to take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or organism needs.
Cellular Respiration <ul style="list-style-type: none"> • Releasing energy from food • ATP (“universal energy currency”) 	The Living Environment, Cell Structure and Function Explain how cellular respiration provides cells with the energy needed for them to carry on the functions that sustain life in organisms	L.OL.07.23 Describe how cells in all multicellular organisms are specialized to take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or organism needs.
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.	The Nature of Science, Scientific Enterprise-Science and Society Describe the diverse nature of science and scientists past and present	S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
A system can include processes as well as things. Thinking about things as systems means looking for how every part relates to others. The output from one part of a system (which can include material, energy, or	The Nature of Science, Common Themes in Science Analyze the parts, subsystems and interactions of a system	L.OL.07.22 Explain how cells make up different body tissues, organs, and organ systems.

information) can become the input to other parts. Such feedback can serve to control what goes on in the system as a whole. Any system is usually connected to other systems, both internally and externally. Thus a system may be thought of as containing subsystems and as being a sub-system of a larger system. Some portion of the output of a system may be fed back to that system's input. Systems are defined by placing boundaries around collections of interrelated things to make them easier to study. Regardless of where the boundaries are placed, a system still interacts with its surrounding environment. Therefore, when studying a system, it is important to keep track of what enters or leaves the system. A system may stay the same because nothing is influencing it or the influences on it are balanced. Many systems contain feedback mechanisms that serve to keep changes within certain limits.

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Seven

UNIT: Chemistry (Foss Learning Kit: Chemical Interactions)

NHA Science Content	NHA Objectives	MI GLCE
<p>Properties of Matter</p> <ul style="list-style-type: none"> •Physical properties of matter/substances <ul style="list-style-type: none"> •Length, height, width, surface area (use of a meter stick, millimeters, centimeter, meters) •Mass (use of a balance, grams, kilograms) •Odor •Weight (use of a spring scale, Newtons) •Melting point/boiling point (use of a thermometer, Celsius) •Color •Density (use of graduated cylinders and balances, liters and kilograms) •Solubility •Chemical properties of matter/substances <ul style="list-style-type: none"> •Acidity (use of litmus paper, pH scale) •Combustibility •Reactivity 	<p>Physical Science, Properties of Materials Describe physical and chemical properties of a variety of substances</p>	<p>P.PM.07.24 Describe examples of physical and chemical properties of elements and compounds (boiling point, density, color, conductivity, reactivity). P.PM.07.11 Classify substances by their chemical properties (flammability, pH, and reactivity).</p>
<p>Properties of Matter</p> <ul style="list-style-type: none"> •Classification of Matter <ul style="list-style-type: none"> •Classification keys •Periodic Table <ul style="list-style-type: none"> •Metalloids •Nonmetals •Metals •Inert gases 	<p>Physical Science, Properties of Materials Describe the function of the periodic table in describing and grouping common earth elements by their basic properties (e.g., symbol, reactivity, metal, non-metal or metalloid, natural state, what products contain them)</p>	<p>P.PM.07.21 Identify the smallest component that makes up an element. P.PM.07.22 Describe how the elements within the Periodic Table are organized by similar properties into families (highly reactive metals, less reactive metals, highly reactive nonmetals, and some almost completely non-reactive gases).</p>

Phases of Matter <ul style="list-style-type: none"> •States of matter on a molecular level <ul style="list-style-type: none"> •Kinetic Molecular Theory •Changes of common matter (melting, freezing, evaporation, condensation, sublimation, thermal expansion, contraction) <ul style="list-style-type: none"> •Temperature <ul style="list-style-type: none"> • Thermometers • Celsius, Fahrenheit, Kelvin • Absolute zero • Latent heat 	Physical Science, Physical States and Changes Explain the physical properties of solids, liquids, gases and their changes (contraction & expansion) using the particulate nature of matter model	P.CM.06.11 Describe and illustrate changes in state, in terms of the arrangement and relative motion of the atoms or molecules.
Phases of Matter <ul style="list-style-type: none"> •Heat Transfer <ul style="list-style-type: none"> •Heat equilibrium •Heat transfer <ul style="list-style-type: none"> • Conduction • Radiation • Convection •Heat conduction in common materials 	Physical Science, Physical States and Changes Describe phases of matter and changes in phases in terms of particle kinetic energy and energy transfer	P.CM.06.11 Describe and illustrate changes in state, in terms of the arrangement and relative motion of the atoms or molecules. P.CM.06.12 Explain how mass is conserved as a substance changes from state to state in a closed system.
Phases of Matter <ul style="list-style-type: none"> •Heat Transfer <ul style="list-style-type: none"> •Heat equilibrium •Heat transfer <ul style="list-style-type: none"> • Conduction • Radiation • Convection •Heat conduction in common materials 	Physical Science, Forms of Energy and Their Interactions Explain heat, heat energy transfer and temperature in terms of particle kinetic energy	P.EN.06.41 Explain how different forms of energy can be transferred from one place to another by radiation, conduction, or convection.
Phases of Matter <ul style="list-style-type: none"> •Heat Transfer <ul style="list-style-type: none"> •Heat equilibrium •Heat transfer <ul style="list-style-type: none"> • Conduction • Radiation • Convection •Heat conduction in common materials 	Physical Science, Forms of Energy and Their Interactions Compare and contrast conduction, convection, and radiation as methods of heat energy transfer	P.EN.06.41 Explain how different forms of energy can be transferred from one place to another by radiation, conduction, or convection.

<p>Mixtures and Solutions</p> <ul style="list-style-type: none"> •Mixtures <ul style="list-style-type: none"> •Types <ul style="list-style-type: none"> • Suspension • Colloidal • Solutions <ul style="list-style-type: none"> •Solubility •Processes of separation <ul style="list-style-type: none"> • Distillation • Chromatography • Evaporation 	<p>Physical Science, Mixtures and Solutions Describe characteristics of a solution at the particle level, including the process of dissolving, saturation, and concentration</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>Atoms, Elements, Molecules, Compounds</p> <ul style="list-style-type: none"> •Atoms <ul style="list-style-type: none"> •Basic structural components and interactions <ul style="list-style-type: none"> • Nucleus •Protons •Neutrons • Electrons •Elements <ul style="list-style-type: none"> •Atom vs. element •Common elements of the Earth <ul style="list-style-type: none"> • Silicon, aluminum, iron, sodium, calcium, potassium, magnesium, hydrogen, oxygen, nitrogen, carbon •Chemical symbols representing common elements •Molecules <ul style="list-style-type: none"> •Atoms vs. molecules •Ionic, covalent, and metallic bonding •Compounds <ul style="list-style-type: none"> •Compounds vs. molecule •Common chemical formulas <ul style="list-style-type: none"> • Glucose- $C_6H_{12}O_6$, Water- H_2O, Salt- $NaCl$, Carbon Dioxide- CO_2 •Salts <p>Chemical Changes</p> <ul style="list-style-type: none"> •Chemical equations 	<p>Physical Science, Atoms and Molecules Explain how chemical reactions form new substances with new properties from the rearrangement and conservation of atoms</p>	<p>P.CM.07.21 Identify evidence of chemical change through color, gas formation, solid formation, and temperature change. P.CM.07.22 Compare and contrast the chemical properties of a new substance with the original after a chemical change. P.CM.07.23 Describe the physical properties and chemical properties of the products and reactants in a chemical change.</p>

<ul style="list-style-type: none"> •Exothermic vs. Endothermic reactions •Oxidation <ul style="list-style-type: none"> •Rusting •Burning •Chemical reactions in living organisms connection <ul style="list-style-type: none"> •Photosynthesis and cellular respiration •Law of conservation of mass 		
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.</p>	<p>The Nature of Science, Scientific Enterprise- Science and Society Describe the diverse nature of science and scientists past and present</p>	<p>S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.</p>

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Seven

UNIT: Motion and Forces (Delta Learning Kit: Newton's Toy Box)

NHA Science Content	NHA Objectives	MI GLCE
<p>Forces</p> <ul style="list-style-type: none"> •Direct contact <ul style="list-style-type: none"> •Normal •Friction •Pushes and pulls •Non-contact <ul style="list-style-type: none"> •Magnetic force •Electrical force <p>Gravitational force</p>	<p>Physical Science, Forces Effect on Motion Explain the effects of contact and non-contact forces on objects using Newton's First Law</p>	<p>P.FM.05.21 Distinguish between contact forces and non-contact forces. P.FM.05.22 Demonstrate contact and non-contact forces to change the motion of an object.</p>
<p>Isaac Newton's 1st and 2nd Laws of Motion</p> <ul style="list-style-type: none"> •1st Law- Objects at rest remain at rest and objects in motion remain in motion in a straight line unless acted on by an unbalanced/net force <ul style="list-style-type: none"> •If the forces acting on an object are balanced, then there will be no change in motion of that object (it won't speed up, slow down, or change direction) •Direction and magnitude of forces acting on an object •Balanced forces (equilibrium), Unbalanced forces, Net force •Inertia- the resistance of an object to change in motion. Mass is a measure of the inertia of an object. •A force is NOT needed to keep an object in motion •2nd Law- An object's change in motion (change in direction, speeding up or slowing down, starting or stopping) is dependent on the size of the net force acting on it and how much mass the object 	<p>Physical Science, Forces Effect on Motion Explain the relationship between the mass of the object, the size of the net force acting on the object, and the resulting change in motion of the object in real world examples of motion</p>	<p>P.FM.05.34 Relate the size of change in motion to the strength of unbalanced forces and the mass of the object. P.FM.05.32 Describe how constant motion is the result of balanced (zero net) forces. P.FM.05.33 Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force. P.FM.05.31 Describe what happens when two forces act on an object in the same or opposing directions.</p>

<ul style="list-style-type: none"> has • $F=ma$ • Real world applications of Newton's Laws <ul style="list-style-type: none"> • Sports, transportation, human body, motion of objects in space, etc. 		
Measuring Motion <ul style="list-style-type: none"> • Describing and graphing motion <ul style="list-style-type: none"> • Position and frame of reference • Direction of motion • Speed 	Physical Science, Measuring Motion Analyze the motion of objects in terms of direction and changes in motion	P.FM.05.42 Describe the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects.
Measuring Motion <ul style="list-style-type: none"> • Speed = Distance/Time ($S=D/T$), average speed= change in distance/change in time • Velocity- average velocity= displacement/time <ul style="list-style-type: none"> • vectors • Acceleration- average acceleration= change in velocity/time 	Physical Science, Measuring Motion Describe, measure, and graph quantities that characterize moving objects such as direction, speed, velocity, and acceleration	P.FM.05.41 Explain the motion of an object relative to its point of reference. P.FM.05.42 Describe the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects. P.FM.05.43 Illustrate how motion can be measured and represented on a graph.
The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.		
Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be	The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events	S.IP.07.16 Identify patterns in data.

used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.		
Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.	The Nature of Science, Scientific Inquiry- The Scientific Method Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically	S.IP.07.11 Generate scientific questions based on observations, investigations, and research.
Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.	The Nature of Science, Scientific Inquiry- The Scientific Method Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time	S.IP.07.12 Design and conduct scientific investigations.

<p>It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.</p>	<p>The Nature of Science, Scientific Inquiry- The Scientific Method Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science</p>	<p>S.RS.07.14 Evaluate scientific explanations based on current evidence and scientific principles. S.RS.07.12 Describe limitations in personal and scientific knowledge. S.RS.07.11 Evaluate the strengths and weaknesses of claims, arguments, and data.</p>
<p>When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.</p>	<p>The Nature of Science, Scientific Knowledge Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables</p>	<p>S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse. S.IA.07.14 Draw conclusions from sets of data from multiple trials of a scientific investigation to draw conclusions.</p>
<p>Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.</p>	<p>The Nature of Science, Scientific Inquiry- Data Collection and Analysis Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)</p>	<p>S.IP.07.15 Construct charts and graphs from data and observations. S.IP.07.16 Identify patterns in data.</p>

	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Interpret and evaluate tables, charts, and graphs produced by others	S.IA.07.11 Analyze information from data tables and graphs to answer scientific questions. S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.
	The Nature of Science, Scientific Inquiry- Data Collection and Analysis Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports	S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse. S.IA.07.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data. S.RS.07.13 Identify the need for evidence in making scientific decisions. S.IA.17.13 Communicate and defend findings of observations and investigations.
People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.	The Nature of Science, Scientific Enterprise- Science and Society Describe the diverse nature of science and scientists past and present	S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Seven

UNIT: Weather and Water (Foss Learning Kit: Weather and Water)

NHA Science Content	NHA Objectives	MI GLCE
<p>Weather Measurement</p> <ul style="list-style-type: none"> •Temperature (use of a thermometer) •Precipitation (use of a rain gauge) •Wind direction and speed (Use of a wind vanes and an anemometer) •Humidity (Use of a hair hygrometer) Pressure (Use of a barometer) 	<p>Earth and Space Science, Weather and Climate Analyze common weather instruments</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
<p>The Atmosphere</p> <ul style="list-style-type: none"> •Characteristics <ul style="list-style-type: none"> •Density of fluids (including air) •Pressure of fluids (including air) •Temperature of fluids (including air) •Layers of the Atmosphere and their properties (density, pressure, temperature, composition) <ul style="list-style-type: none"> • Troposphere • Stratosphere <ul style="list-style-type: none"> • Ozone layer • Mesosphere • Thermosphere 	<p>Earth and Space Science, Atmosphere Describe the composition, characteristics, and structure of the Earth's atmosphere</p>	<p>E.FE.07.11 Describe the atmosphere as a mixture of gases. E.FE.07.12 Compare and contrast the composition of the atmosphere at different elevations.</p>

<p>Interaction of the Earth and Sun</p> <ul style="list-style-type: none"> •Earth in space <ul style="list-style-type: none"> • 23.5 degree tilt of axis causes heat differentiation •Heat differentiation and the influence on weather <ul style="list-style-type: none"> •Seasonal changes across the earth 	<p>Earth and Space Science, Weather and Climate Analyze how radiant energy from the sun heats earth materials and influences weather</p>	<p>E.ES.07.11 Demonstrate, using a model or drawing, the relationship between the warming by the sun of the Earth and the water cycle as it applies to the atmosphere (evaporation, water vapor, warm air rising, cooling, condensation, clouds). E.ES.07.12 Describe the relationship between the warming of the atmosphere of the Earth by the sun and convection within the atmosphere and oceans. E.ES.07.13 Describe how the warming of the Earth by the sun produces winds and ocean currents. P.EN.07.61 Identify that nuclear reactions take place in the sun, producing heat and light. P.EN.07.62 Explain how only a tiny fraction of light energy from the sun is transformed to heat energy on Earth. E.ES.07.72 Describe how different weather occurs due to the constant motion of the atmosphere from the energy of the sun reaching the surface of the Earth.</p>
<p>The Water Cycle</p> <ul style="list-style-type: none"> •From ground to air <ul style="list-style-type: none"> •Evaporation <ul style="list-style-type: none"> • Relative humidity •Sublimation •Evapo-transpiration •Water storage in the atmosphere <ul style="list-style-type: none"> •Condensation <ul style="list-style-type: none"> • Dew point • Condensation nuclei •Clouds and precipitation •Following Precipitation <ul style="list-style-type: none"> • Infiltration, runoff, evaporation • Force of gravity vs. energy of water molecule • Runoff vs. infiltration <ul style="list-style-type: none"> • Permeability • Saturation 	<p>Earth and Space Science, Water on Earth Describe the various paths a water molecule might follow in the water cycle and explain factors that influence each path</p>	<p>E.E.ES.07.81 Explain the water cycle and describe how evaporation, transpiration, condensation, cloud formation, precipitation, infiltration, surface runoff, ground water, and absorption occur within the cycle.</p>

<ul style="list-style-type: none"> • Pore space 		
<p>The Water Cycle</p> <ul style="list-style-type: none"> • Distribution of Water on Earth <ul style="list-style-type: none"> • Solid, liquid, gas states (e.g. glaciers, snow on mountains, polar ice caps, icebergs, lakes, oceans, seas, water vapor) • Freshwater vs. saltwater • Oceans <ul style="list-style-type: none"> • Basic composition and physical characteristics of oceans (e.g. currents, waves, features of the ocean floor, salinity) • Watersheds • Wetlands <ul style="list-style-type: none"> • Function and value to humans • Groundwater <ul style="list-style-type: none"> • Water table, aquifers, manmade wells, artesian wells, springs 	<p>Earth and Space Science, Water on Earth Describe the basic distinguishing characteristics of various locations of water on Earth (E.g. glaciers, ice caps, oceans, wetlands, etc.)</p>	<p>E.ES.07.82 Analyze the flow of water between the components of a watershed, including surface features (lakes, streams, rivers, wetlands) and groundwater.</p>
<p>Weather vs. Climate</p> <ul style="list-style-type: none"> • Air Masses <ul style="list-style-type: none"> – Interaction of fronts 	<p>Earth and Space Science, Weather and Climate Explain how the interaction of air masses influences weather conditions</p>	<p>E.ES.07.74 Describe weather conditions associated with frontal boundaries (cold, warm, stationary, and occluded) and the movement of major air masses and the jet stream across North America using a weather map.</p>
<p>Weather vs. Climate</p> <ul style="list-style-type: none"> • Weather Maps <ul style="list-style-type: none"> • Satellite weather images • Weather maps <ul style="list-style-type: none"> • Symbols (precipitation, pressure, temperature, dew point, cloud cover, winds) • Temperature contours, pressure contours 	<p>Earth and Space Science, Weather and Climate Interpret weather maps to describe local, regional and national weather conditions</p>	<p>S.IA.07.11 Analyze information from data tables and graphs to answer scientific questions.</p>

<p>Weather vs. Climate</p> <ul style="list-style-type: none"> •Factors Affecting Climate in a Region <ul style="list-style-type: none"> •Latitude <ul style="list-style-type: none"> • Global convection currents and resulting climate patterns at different latitudes •Elevation •Proximity to bodies of water •Position relative to mountains •Climate Regions 	<p>Earth and Space Science, Weather and Climate Compare and contrast climate regions around the world</p>	<p>E.ES.07.71 Compare and contrast the difference and relationship between climate and weather. E.ES.07.73 Explain how the temperature of the oceans affects the different climates on Earth because water in the oceans holds a large amount of heat.</p>
<p>The following objectives are process skills. As you teach the content objectives above, include opportunities for students to practice the following science skills.</p>		
<p>Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.</p>	<p>The Nature of Science, Common Themes in Science Measure and graph change over time and analyze the results to determine patterns and trends or predict events</p>	<p>S.IP.07.16 Identify patterns in data.</p>

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Seven

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • The human body <ul style="list-style-type: none"> - Interaction of body systems • Adolescent changes <ul style="list-style-type: none"> - Voice - Acne - Physical changes <ul style="list-style-type: none"> • Height • Weight • Illness/disease prevention <ul style="list-style-type: none"> - Awareness of risk factors <ul style="list-style-type: none"> • Lifestyle • Family history - Sanitation/spread of germs <ul style="list-style-type: none"> • Air, indirect contact, person-to-person contact • HIV/AIDS Prevention <ul style="list-style-type: none"> - Transmission of disease <ul style="list-style-type: none"> • Facts vs. myths - Strategies for protection <ul style="list-style-type: none"> • Awareness of risky situations/behaviors • Not touching blood or used needles - Community resources of information/help <p>Healthy Diet</p> <ul style="list-style-type: none"> • Use of dietary guidelines <ul style="list-style-type: none"> - Food labels • Restaurants/fast food choices <ul style="list-style-type: none"> - Food preparation methods • Benefits of having healthy eating habits <ul style="list-style-type: none"> - Dental health - Reduced health risks • Consequences of an unhealthy diet • Influences on food choices <ul style="list-style-type: none"> - Family/friends - Culture/religion 	<p>Strand 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Summarize the benefits of healthy eating, being physically active, and keeping the body hydrated, and the potential consequences of not doing so.</p> <p>1.2 Describe the federal dietary guidelines for teenagers, and the recommended amount of physical activity needed to achieve health benefits.</p> <p>Standard 2: Access Information</p> <p>1.3 Use nutrition information on food labels to compare products and select foods for specific dietary goals.</p> <p>1.4 Determine the accuracy of health claims on food packages and advertisements in order to choose foods that have the most nutritional value.</p> <p>1.5 Demonstrate the ability to access resources regarding healthy weight management and unhealthy eating patterns; and assess the validity of the resources.</p> <p>Standard 3: Health Behaviors</p> <p>1.6 Analyze characteristics of restaurant menu items and methods of preparation to identify healthier food choices one can make when eating out, including at fast food restaurants.</p> <p>1.7 Evaluate a typical day's food intake according to the federal dietary guidelines for teenagers.</p> <p>1.8 Describe moderate-intensity physical activities that are personally enjoyed and that can be enjoyed for a lifetime.</p> <p>Standard 4: Influences</p> <p>1.9 Analyze the influence of television, computer, and video games on physical activity.</p> <p>Standard 5: Goal Setting</p> <p>1.10 Assess personal barriers to healthy eating and being physically active, and develop practical solutions to remove these barriers.</p> <p>1.11 Make a personal plan for improving one's nutrition and incorporating physical activity into daily routines.</p> <p>Standard 8: Advocacy</p> <p>1.12 Advocate for the availability of appealing, nutrient-dense foods in the school cafeteria and throughout the school environment.</p> <p>Standard 1: Core Concepts (Recommended)</p> <p>1.13 Summarize the characteristics of a healthy body image and factors that</p>

<ul style="list-style-type: none"> - Media/advertising - Money/economics - Lifestyle/priorities - Emotional eating - Convenience /cost - Environment/food availability • Food quality and safety <ul style="list-style-type: none"> - Food borne illnesses - Proper refrigeration - Hand washing - Proper cooking - Storage temperatures - Sanitation/cleanliness in the kitchen • Weight management <ul style="list-style-type: none"> - Developing and maintaining a healthy body image - Influence of weight perception on food choices - Unhealthy eating patterns <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Community health care facilities <ul style="list-style-type: none"> - Availability of health care products/information /services - Situations requiring professional health services <ul style="list-style-type: none"> • Health emergencies • Asthma, diabetes management • Injury prevention strategies <ul style="list-style-type: none"> - Home emergency plans - Maintaining supplies in readiness of an emergency - Identification and removal of safety hazards - Basic first aid skills • Skills to enhance personal safety <ul style="list-style-type: none"> - Car safety/ seatbelts - Internet safety - Recognizing and avoiding threatening situations - Strategies to handle threatening situations <p>Healthy Practices</p> <ul style="list-style-type: none"> • Personal influences on health <ul style="list-style-type: none"> - Food choices/exercise/sleep /activity - Importance of daily physical activity - Anything put into your body • Family influences on health <ul style="list-style-type: none"> - Physical, emotional, social - Ability of family to provide for its members 	<p>determine body weight, including body type.</p> <p>Standard 2: Access Information</p> <p>1.14 Describe how to access nutrition information about foods offered in restaurants in one's community.</p> <p>Standard 3: Health Behaviors</p> <p>1.15 Evaluate the availability of nutrient-dense foods in the school cafeteria and throughout the school environment.</p> <p>1.16 Demonstrate the ability to use safety equipment for physical activity.</p> <p>Standard 7: Social Skills</p> <p>1.17 Demonstrate skills for dealing with pressure to eat in ways that are not healthy.</p> <p>1.18 Demonstrate the ability to persuade peers to eat healthy and be physically active.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts</p> <p>2.1 Analyze how alcohol, tobacco, and other drug use and exposure negatively impacts the user, as well as friends, family members, and community members.</p> <p>Standard 2: Access Information</p> <p>2.2 Locate resources in one's school and community, and on the Internet, for information and assistance regarding alcohol, tobacco, and other drug use; and assess the validity of the resources.</p> <p>Standard 3: Health Behaviors</p> <p>2.3 Describe a variety of needs young people may have, explain healthy ways to meet these needs without using alcohol, tobacco, or other drugs, and make a personal commitment to remain drug free.</p> <p>2.4 Recognize risky situations that may lead to trouble, so that one can protect oneself and others from alcohol, tobacco, and other drug use.</p> <p>Standard 4: Influences</p> <p>2.5 Evaluate environmental and social factors, especially advertising strategies, which may influence young people to use alcohol, tobacco, or other drugs.</p> <p>Standard 6: Decision Making</p> <p>2.6 Apply problem-solving skills to hypothetical situations to protect oneself and others from alcohol, tobacco, and other drug use.</p> <p>Standard 7: Social Skills</p> <p>2.7 Demonstrate effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs.</p> <p>Standard 3: Health Behaviors (Recommended)</p> <p>2.8 Demonstrate how to follow directions for correct use of over-the-counter and prescription medications.</p> <p>2.9 Demonstrate skills to avoid hazards due to another's use of alcohol, tobacco, or other drugs, including avoiding secondhand smoke and riding in a</p>
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- Peer relationships
 - Exclusiveness
 - Discriminating
 - Risk-taking behaviors
 - Name-calling/prejudice
- Drug, alcohol, & other drug use
 - Long-term and short-term effects of use
 - Alcohol and impaired driving
 - Health benefits to avoiding use
 - Difficulty of fighting addictions
 - Negative effects on relationships
 - Effects on athletic performance and weight management
 - Legal perspectives
 - Use vs. misuse of prescription drugs
 - Influences that promote use
 - Peer pressure
 - Strategies to refuse use
 - Adult/peer modeling
 - Advertising/media
 - Availability/cost
 - Tools to avoid use
 - Self-control
 - Role play of refusal situations
 - Responding to negative social influence and peer pressure
 - Caffeine, diet pills, and other drugs
 - Community resources of information/help

Healthy Minds

- Negative effects of media
 - Influence from television, video games, movies, advertising
- Self-Image
 - Importance of healthy perception of weight and body image
- Stress management
 - Talking about problems
 - Understanding that feelings of isolation and depression will pass
 - Examining situation leading to feelings
- Social interactions
 - Recognition of positive self-esteem
 - Interpersonal communication
 - Building positive relationships with peers, parents
 - Communicating care and respect to all people
 - Safe and risky behaviors in relationships
 - Handling peer pressure

car with someone who has been using alcohol or other drugs.

Standard 7: Social Skills

2.10 Demonstrate ways to support people who are abstaining from and/or trying to quit using alcohol, tobacco, or other drugs.

2.11 Compose persuasive advice for peers on how to stay alcohol, tobacco, and drug free.

STRAND 3: Safety

Standard 2: Access Information

3.5 Describe the characteristics of situations for which adult help is needed, including intimidating and dangerous situations, where valid help can be located, and how to access it for self or others.

Standard 3: Health Behaviors

3.6 Evaluate potential responses to violence to determine the probability of a safe outcome.

3.7 Describe strategies to stay safe when using the Internet.

3.8 Demonstrate skills and strategies for avoiding or escaping potentially dangerous situations.

Standard 4: Influences

3.10 Evaluate individual, group, and societal influences that promote peace and respectful behaviors, and those that promote violence and disrespectful behaviors.

Standard 6: Decision Making

3.11 Apply the problem-solving steps to hypothetical situations involving assault and intimidation, including sexual harassment.

Standard 7: Social Skills

3.12 Apply conflict resolution skills to real or hypothetical situations involving peers.

3.13 Demonstrate skills for dealing with intimidation, including sexual harassment.

Standard 3: Health Behaviors (Recommended)

3.15 Demonstrate the ability to properly and consistently use a variety of safety gear, including seat belts.

3.16 Assess situations for safety hazards and consequences, and make recommendations regarding safety procedures or safety gear to alleviate the risks.

3.17 Commit to taking individual action to promote peace.

Standard 8: Advocacy

3.19 Advocate for changes in home, school, or community environments that would increase safety.

STRAND 4: Social and Emotional Health

Standard 1: Core Concepts

4.1 Distinguish between passive, aggressive, and assertive communication.

4.2 Describe the warning signs, risk factors, and protective factors for

<ul style="list-style-type: none"> - Management of feelings and behaviors (anger) • Communication <ul style="list-style-type: none"> - Passive/aggressive/assertive • Decision making and problem solving skills • Conflict resolution <ul style="list-style-type: none"> - Possible causes of conflict - Non-violent strategies to manage conflict - Refusal/negotiation 	<p>depression and suicide.</p> <p>Standard 2: Access Information</p> <p>4.3 Analyze situations as to whether they call for simple acts of caring among friends, or require getting the help of caring adults.</p> <p>4.4 Demonstrate how to ask trusted adults and friends for help with emotional or mental health concerns for oneself or others, including the risk of suicide.</p> <p>4.5 Demonstrate the ability to locate school and community resources to assist with problems related to emotional health concerns, including when someone is in danger of hurting self or others.</p> <p>Standard 3: Health Behaviors</p> <p>4.6 Describe the signs and symptoms of stress.</p> <p>4.7 Demonstrate the ability to use stress management techniques.</p> <p>Standard 4: Influences</p> <p>4.8 Explain internal and external factors that help to determine how one acts toward others.</p> <p>4.9 Demonstrate using the problem solving steps to solve a problem.</p> <p>Standard 7: Social Skills</p> <p>4.10 Demonstrate ways to show caring and respect for others, including those with real or perceived differences (e.g., cultural differences, disabilities, gender, & sexual orientation).</p> <p>4.11 Demonstrate the ability to use assertive communication skills.</p> <p>4.12 Apply conflict resolution skills to real or hypothetical situations involving peers.</p> <p>Standard 1: Core Concepts (Recommended)</p> <p>4.13 Describe essential character traits needed for personal success and well being.</p> <p>Standard 3: Health Behaviors</p> <p>4.14 Apply skills to manage strong feelings.</p> <p>Standard 6: Decision Making</p> <p>4.15 Apply character traits during the process of making a decision.</p> <p>Standard 7: Social Skills</p> <p>4.16 Evaluate behaviors, including one's own, to determine if they are examples of essential character traits.</p> <p>Standard 8: Advocacy</p> <p>4.17 Advocate for a school environment</p> <p>STRAND 5: Personal Health and Wellness</p> <p>Standard 1: Core Concepts</p> <p>5.1 Describe the importance of rest and sleep for personal health.</p> <p>5.2 Explain how common infectious diseases are transmitted by air, indirect contact, and person-to-person contact.</p> <p>Standard 2: Access Information</p> <p>5.3 Locate resources in one's school and community, and on the Internet, related to personal health issues and concerns; and assess the validity of the</p>
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resources.

Standard 3: Health Behaviors

5.4 Apply health practices that can prevent the spread of illness, including food borne illness.

5.5 Demonstrate basic first aid skills (i.e., controlling bleeding, Heimlich maneuver).

5.6 Analyze the characteristics of an illness or injury to determine whether it is necessary to seek medical care.

5.7 Demonstrate the proper steps to protect against harm from the sun.

Standard 4: Influences

5.8 Analyze the social influences that encourage or discourage a person to practice sun safety.

Standard 5: Goal Setting

5.9 Create a plan to incorporate adequate rest and sleep in daily routines.

Standard 2: Access Information (Recommended)

5.10 Locate resources in one's school and community, and on the Internet, for first aid information and training; and assess the validity of the resources.

5.11 Demonstrate the ability to access information about personal health products (e.g., deodorant, shampoo, sun screen, and dental care products), and evaluate the information's validity.

Standard 3: Health Behaviors

5.12 Explain strategies to support youth who have illnesses such as asthma, epilepsy, or diabetes.

Standard 4: Influences

5.13 Analyze the influence of media on selection of personal health care products.

STRAND 6: HIV AND STIs Prevention

Standard 1: Core Concepts

6.1 Explain how HIV is and is not transmitted.

6.2 Distinguish between facts and myths regarding HIV infection and AIDS.

Standard 2: Access Information

6.3 Explain when it is important to get adult, medical, and/or counseling help.

6.4 Describe sources of accurate information and assistance in one's community.

Standard 3: Health Behaviors

6.5 Analyze behaviors and situations that may result in increased risk for HIV and other sexually transmitted infections (STIs).

6.6 Analyze situations where assertive communication and refusal skills can be used to avoid and escape risky situations.

STRAND 7: Sexuality Education

(Note: State law makes whether to offer sexuality education a local district decision. Course content must

be reviewed by the district's Sex Education Advisory Board to determine

whether it is consistent with the district's board policies and approved sexuality education curriculum. If the district chooses to offer sexuality education, certain content must be included in an age-appropriate fashion in the K-12 instructional program. This content is integrated into these content expectations. For the specific language of the law, see Sections 380.1507, 1507a, and 1507b of the Michigan Compiled Laws at www.michiganlegislature.org.)

Standard 1: Core Concepts

7.1 Summarize the benefits of staying within behavioral limits and remaining abstinent.

7.2 Compare characteristics of healthy and unhealthy relationships, and describe ways to express caring for a boyfriend or girlfriend while staying abstinent.

Standard 3: Health Behaviors

7.3 Set personal boundaries and limits related to physical intimacy and sexual behavior.

7.4 Demonstrate skills to avoid and escape risky situations.

Standard 4: Influences

7.5 Examine viewpoints of parents and other trusted adults regarding teen relationships, abstinence, and sexual decisions.

7.6 Evaluate the impact of alcohol and other drug use on decisions regarding sexual behavior.

Standard 5: Goal Setting

7.7 Create a plan to stay within behavioral limits which protect one from HIV and STIs.

Standard 7: Social Skills

7.8 Demonstrate the ability to communicate one's behavioral limits and to show respect for the limits of others related to physical intimacy and sexual behavior..

7.9 Demonstrate the ability to use verbal and non-verbal ways to refuse participation in sexual behavior.

Standard 8: Advocacy

7.10 Demonstrate the ability to be positive peer role models in the school and community.

NHA Science Michigan Alignment
Grade Seven

Michigan Grade Level Content Expectations Taught at Another Grade Level

NHA Grade 6

MI.S.RS.07.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities. (Models and Design Unit)
 MI.S.RS.07.16 Design solutions to problems using technology. (Models and Design Unit)
 MI.E.ES.07.41 Explain how human activities (surface mining, deforestation, overpopulation, construction and urban development, farming, dams, landfills, and restoring natural areas) change the surface of the Earth and affect the survival of organisms. (Ecosystems Unit)
 MI.P.EN.07.43 Explain how light energy is transferred to chemical energy through the process of photosynthesis. (Ecosystems Unit)
 MI.L.OL.07.61 Recognize the need for light to provide energy for the production of carbohydrates, proteins and fats. (Ecosystems Unit)
 MI.L.OL.07.62 Explain that carbon dioxide and water are used to produce carbohydrates, proteins, and fats. (Ecosystems Unit)
 MI.L.OL.07.63 Describe evidence that plants make, use and store food. (Ecosystems Unit)
 MI.P.EN.07.31 Identify examples of waves, including sound waves, seismic waves, and waves on water. (Sound Unit)
 MI.P.EN.07.32 Describe how waves are produced by vibrations in matter. (Sound Unit)
 MI.P.EN.07.32 Demonstrate how waves transfer energy when they interact with matter (for example: tuning fork in water, waves hitting a beach, earthquake knocking over buildings). (Sound Unit)

Michigan Grade Level Content Expectations Taught in Other Subjects

English – Language Arts

None apply.

Social Studies

None apply.

Mathematics

None apply.

GRADE EIGHT

Science Grade Level Content

Michigan Alignment

NATIONAL HERITAGE ACADEMIES CURRICULUM

MICHIGAN 8TH GRADE ALIGNMENT

SCIENCE

NHA EXEMPLARS	MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS
<p>The Nature of Science Scientific Knowledge Scientific Inquiry – The Scientific Method Scientific Inquiry – Data Collection and Analysis Scientific Enterprise – Science and Society Common Themes in Science</p> <p>The Living Environment Classification Plant and Animal Adaptations Genetics and Heredity Fossils and Extinction Animal Body Structures and Functions Germ Theory</p> <p>Physical Science Electricity Simple Machines</p> <p>Earth and Space Science Characteristics of Objects in Space Interaction of the Sun, Earth, and Moon Earth Systems</p>	

NHA Science Exemplar: The Nature of Science

The student will study and apply the strategies and practices of scientists having to do with scientific knowledge and inquiry. They will learn to develop hypotheses and make predictions while they create scientific investigations to test their theories.

Grade Eight

UNIT: Introduction to Science

NHA Science Content To Be Integrated Into Each Unit

SCIENTIFIC KNOWLEDGE

When similar investigations give different results, the scientific challenge is to judge whether the differences are trivial or significant, and it often takes further studies to decide. Even with similar results, scientists may wait until an investigation has been repeated many times before accepting the results as correct.

Although all scientific ideas are tentative and subject to change and improvement in principle, for most major ideas in science, there is much experimental and observational confirmation. Those ideas are not likely to change greatly in the future. Some of these ideas and knowledge are very old and still applicable. Scientists do and have changed their ideas about nature when they encounter new experimental evidence that does not match their existing explanations. When new experimental results are inconsistent with existing, well established ideas, scientists pursue further experimentation to determine whether the results are flawed or the existing ideas require modification.

SCIENTIFIC INQUIRY

Different kinds of questions suggest different kinds of scientific investigations. Some investigations involve observing and describing objects, organisms, or events; some involve collecting specimens; some involve experiments; some involve seeking more information; some involve discovery of new objects and phenomena; and some involve making models. Some matters cannot be examined usefully in a scientific way. Among them are matters that by their nature cannot be tested objectively and those that are essentially matters of morality. Science can sometimes be used to inform ethical decisions by identifying the likely consequences of particular actions but cannot be used to establish that some action is either moral or immoral.

Variables and controls can affect the results of an investigation and ideally one variable should be tested at a time; however it is not always possible to identify and/or control all variables. If more than one variable changes at the same time in an experiment, the outcome of the experiment may not be clearly

Michigan Grade Level Content Expectations

There are no Michigan Grade Level Content Expectations that meet this NHA content.

attributable to any one variable. Collaboration among investigators can often lead to research designs that are able to deal with situations where it is not possible to control all of the variables.

It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. Evaluation includes reviewing the experimental procedures, examining the evidence, identifying faulty reasoning, pointing out statements that go beyond the evidence, and suggesting alternative explanations for the same observations. In areas where active research is being pursued and in which there is not a great deal of experimental or observational evidence and understanding, it is normal for scientists to differ with one another about the interpretation of the evidence or theory being considered. Different scientists might publish conflicting experimental results or might draw different conclusions from the same data. Ideally, scientists acknowledge such conflict and work towards finding evidence that will resolve their disagreement.

Technology used (safely) to gather data enhances accuracy and allows scientists to analyze and quantify results of investigations.

Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and closer to some limiting value, reach some intermediate maximum or minimum, alternately increase and decrease, increase or decrease in steps, or do something different from any of these. Graphs can also help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.

SCIENTIFIC ENTERPRISE

People of all backgrounds and with diverse interests, talents, qualities, and motivations engage in fields of science and engineering; some of these people work in teams and others work alone, but all communicate extensively with others. The work of science requires a variety of human abilities, qualities, and habits of mind (e.g., reasoning, insight, energy, skill, creativity, intellectual honesty, tolerance of ambiguity, skepticism, openness to new ideas). Scientists are employed by colleges and universities, business and industry, hospitals, and many government agencies. Their places of work include offices, classrooms, laboratories, farms, factories, and natural field settings ranging from space to the ocean floor.

Scientific knowledge and the procedures used by scientists influence the way many individuals think about themselves, others, and the environment.

Societal challenges often inspire questions for scientific research. Social and economic forces strongly influence which science research programs are pursued and funded

COMMON THEMES

A system can include processes as well as things. Thinking about things as systems means looking for how every part relates to others. The output from one part of a system (which can include material, energy, or information) can become the input to other parts. Such feedback can serve to control what goes on in the system as a whole. Any system is usually connected to other systems, both internally and externally. Thus a system may be thought of as containing subsystems and as being a sub-system of a larger system. Some portion of the output of a system may be fed back to that system's input. Systems are defined by placing boundaries around collections of interrelated things to make them easier to study. Regardless of where the boundaries are placed, a system still interacts with its surrounding environment. Therefore, when studying a system, it is important to keep track of what enters or leaves the system. A system may stay the same because nothing is influencing it or the influences on it are balanced. Many systems contain feedback mechanisms that serve to keep changes within certain limits.

Symbolic equations can be used to summarize how the quantity of something changes over time or in response to other changes. Cycles, such as the seasons or body temperature, can be described by what their cycle length or frequency is, what their highest and lowest values are, and when these values occur. Different cycles range from many years down to a fraction of a second. Cyclic patterns evident in past events can be used to make predictions about future events. However, these predictions may not always match what actually happens. The way some systems behave is so erratic that patterns of change are not apparent. Small differences in how things start out can sometimes produce large differences in how they end up. Some events are so sensitive to small differences in initial conditions that their outcomes cannot be predicted. Trends based on what has happened in the past can be used to make predictions about what things will be like in the future. However, these predictions may not always match what actually happens.

Some properties of an object depend on its length, some depend on its area, and some depend on its volume (for instance, cooling rates of different-sized containers of water, strength of different-sized constructions from the same material, flight characteristics of different-sized model airplanes). As the complexity of any system increases, gaining an understanding of it depends increasingly on summaries, such as averages and ranges, and on descriptions of typical examples of that system. Natural phenomena often involve sizes,

durations, and speeds that are extremely small or extremely large. These phenomena may be difficult to appreciate because they involve magnitudes far outside human experience.

NHA Unit Objectives

- Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables
- Trace the development of an idea to a scientific theory
- Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically
- Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time
- Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science
- Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results
- Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures
- Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)
- Interpret and evaluate tables, charts, and graphs produced by others
- Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports
- Describe the diverse nature of science and scientists past and present
- Describe ways in which science and society influence one another
- Analyze the parts, subsystems and interactions of a system
- Measure and graph change over time and analyze the results to determine patterns and trends or predict events
- Compare and contrast the properties of objects as they change in scale

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Eight

UNIT: Earth in Space (Delta Learning Kit: Earth, Moon, and Sun)

NOTE- This unit must be taught prior to the MEAP in the fall.

NHA Science Content	NHA Objectives	MI GLCE
<p>The Solar System</p> <ul style="list-style-type: none"> Sun, moon, and planets (e.g. temperatures, pressure conditions, surface features, gravitational pull, position in the Solar System, atmospheric conditions, actual and apparent motion, and ability to support life) Meteors, asteroids, and comets 	<p>Earth and Space Science, Characteristics of Objects in Space Compare and contrast the major characteristics of bodies in the Solar System</p>	<p>MI.E.ST.05.11 Design a model of the solar system that shows the relative order and scale of the planets, dwarf planets, comets, and asteroids to the sun.</p>
<p>Gravity in Space</p> <ul style="list-style-type: none"> Ideas of Galileo, Kepler, Newton, Einstein Gravity as a force affecting bodies in space <ul style="list-style-type: none"> Weight vs. mass (Weight=mass X acceleration due to gravity) Every object exerts gravitational force on every other object The amount of gravitational force depends on the mass of objects and the distance between them Orbits <ul style="list-style-type: none"> Floating vs. falling Forces in two dimensions 	<p>Earth and Space Science, Characteristics of Objects in Space Compare the size and distance of objects within systems in the universe using either astronomical units or light years, depending on the distance</p>	<p>(There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)</p>
	<p>Earth and Space Science, Characteristics of Objects in Space Describe the appearance and apparent motion of groups of stars in the night sky relative to Earth and how various cultures have understood and used them for navigation and calendars</p>	<p>MI.E.ST.05.23 Explain the apparent motion of the stars (constellations) and the sun across the sky.</p>
<p>History of Astronomy</p> <ul style="list-style-type: none"> Aristotle and Ptolemy <ul style="list-style-type: none"> Geocentric model and epicycles Galileo <ul style="list-style-type: none"> Heliocentric model 	<p>Earth and Space Science, Characteristics of Objects in Space Describe basic characteristics of the Milky Way and recognize it as one galaxy among billions in the universe</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>

<p>Earth's Rotation and Revolution</p> <ul style="list-style-type: none"> The plane of the Earth and Sun and Earth's tilt on its axis Latitude and longitude lines and relationship to earth in space <ul style="list-style-type: none"> Tropic of Cancer Tropic of Capricorn <p>Phases of the Moon</p> <ul style="list-style-type: none"> First quarter, second quarter, new moon, 3rd quarter, full moon waxing vs. waning Gibbous vs. crescent <p>Eclipses</p> <ul style="list-style-type: none"> Solar eclipses Lunar eclipses <p>Tides</p> <ul style="list-style-type: none"> Neap and spring tides High and low tides <p>Distances in Space</p> <ul style="list-style-type: none"> Light years vs. astronomical units <ul style="list-style-type: none"> Nearest star to the Sun Distance across Milky Way Distance across universe <p>Stars</p> <ul style="list-style-type: none"> Distances and basic properties (e.g. sizes, life cycles) Actual and apparent motion of stars <ul style="list-style-type: none"> Big Dipper around Polaris <ul style="list-style-type: none"> Astrolabes and orienteering using Polaris <p>Galaxies</p> <ul style="list-style-type: none"> Characteristics of the Milky Way Number of galaxies and stars in the universe 	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Analyze and describe the role of gravity in celestial phenomena</p>	<p>MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity.</p>
	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Compare and contrast the ideas of Ptolemy, Aristotle, Copernicus, and Galileo regarding Earth's position and motion in space</p>	<p>There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.</p>
	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Explain how the rotation and revolution of Earth and the tilt of Earth on its axis cause observed phenomena on Earth such as days/nights and seasons</p>	<p>MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity. MI.E.ES.05.61 Demonstrate and explain seasons using a model. MI.E.ES.05.62 Explain how the revolution of the Earth around the sun defines a year.</p>
	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Correlate the pattern of change in the location and phase of the Moon with the actual motion of the Moon around Earth</p>	<p>MI.E.ST.05.22 Explain the phases of the moon.</p>
	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Describe how the relative positions of the Sun, Earth , and Moon can result in solar and lunar eclipses</p>	<p>MI.E.ST.05.24 Explain lunar and solar eclipses.</p>
	<p>Earth and Space Science, Interaction of the Sun, Earth, and Moon Explain tides as they relate to the position and gravitational force of the Sun and Moon</p>	<p>MI.E.ST.05.25 Explain the tides of the oceans as they relate to the gravitational pull and orbit of the moon.</p>

NHA Science Exemplar: Earth and Space Science

The student will participate in the study of the physical characteristics of our Earth and the evidence of those characteristics all around us. Topics include: rocks and minerals; the properties and movement of water on the earth; the relationship between land, air, and water; and the motion of Earth in space.

Grade Eight

UNIT: Earth Systems

NHA Science Content	Michigan Grade Level Content Expectations
<p>Earth as a System</p> <ul style="list-style-type: none"> • Parts vs. whole <ul style="list-style-type: none"> - Hydrosphere - Atmosphere - Lithosphere - Biosphere - Cryosphere - Anthrosphere • Earth as a mechanistic system <ul style="list-style-type: none"> - Open vs. closed - Dynamic equilibrium <p>Impact of Events on Earth Systems</p> <ul style="list-style-type: none"> • Event to sphere, sphere to event and sphere to sphere interactions. Students research and propose possible interactions. <ul style="list-style-type: none"> - Forest fires (for example). <ul style="list-style-type: none"> • Destroy plants <ul style="list-style-type: none"> - Absence of plants leads to increased erosion because of fewer roots to hold soil <ul style="list-style-type: none"> • Increased erosion increases muddiness of water in streams <ul style="list-style-type: none"> - Increased muddiness could affect plants and animals in the stream - Deforestation - Volcanic eruptions - Earthquakes - Ice shelf disintegration - Hurricanes - Human events (for example) <ul style="list-style-type: none"> • Air pollution <ul style="list-style-type: none"> - Global warming <ul style="list-style-type: none"> • Increases in ocean temperatures <ul style="list-style-type: none"> - Algal blooms 	<p>There are no Michigan Grade Level Content Expectations that meet this NHA content.</p>

<ul style="list-style-type: none"> • Reduces oxygen in water and can cause other organisms to die - Damaged reefs <ul style="list-style-type: none"> • Organisms dependent on the reef habitat die - Polar ice caps melting <ul style="list-style-type: none"> • Ice caps are reflecting light (albedo effect) so less reflection means more absorption which causes more global warming • Fertilizers <ul style="list-style-type: none"> - Eutrophication of water bodies <ul style="list-style-type: none"> • Causes excess plant growth in the water <ul style="list-style-type: none"> - Excess plants block sunlight and cause death to plants • Dead plant decomposition reduces amount of oxygen in water and causes other organisms to die 	
NHA Unit Objectives	
<ul style="list-style-type: none"> • Compare the Earth system to other systems of parts that make up a whole • Compare and contrast different types of systems and identify what makes Earth an open mechanistic system • Analyze various events on Earth and describe the impact they have across multiple spheres of the Earth 	

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Eight

UNIT: Species Over Time

NHA Science Content	Michigan Grade Level Content Expectations
<p>Adaptations of Animals</p> <ul style="list-style-type: none">Anatomical structuresPhysiological processesBehavioral adaptationLife cycles that aid in survival of the speciesInherited vs. acquired traits <p>Effects of Sexual vs. Asexual Reproduction</p> <ul style="list-style-type: none">Advantages and disadvantages of both<ul style="list-style-type: none">Comparing how each impacts the spread of traits that are detrimental or beneficial for survival <p>Natural Selection</p> <ul style="list-style-type: none">The impact of environmental factors on traits that are passed to offspring, and the resulting change in the dominant traits of the populationMutationsHeritable traits and varying reproductive success<ul style="list-style-type: none">There must be heritable variation in a trait, like beak size, color pattern, etc. in a populationThere must be differential survival and reproduction associated with the possession of that traitThe traits passed on can only be from the traits possessed by ancestors (for example, the polar bear would benefit from a white nose, but the trait so far hasn't been one available to be passed along)The example of antibiotic resistanceArtificial selection<ul style="list-style-type: none">Selective breeding- illustrates the concept and diverse results of natural selectionMicroevolution vs. macroevolution- Our focus at this level is on microevolution<ul style="list-style-type: none">Micro- a result of changes in the genetic composition of a population with each new generation	<p>There are no Michigan Grade Level Content Expectations that meet this NHA content.</p>

<ul style="list-style-type: none"> - Macro- the gradual branching of populations into separate species over time <p>Extinction of Species</p> <ul style="list-style-type: none"> • Fossil record • Human related causes • Natural events 	
NHA Unit Objectives	
<ul style="list-style-type: none"> • Analyze the inherited and learned structures, behavior and physiology of organisms that contribute to survival in their particular environment • Explain the impact of both sexual and asexual reproduction on the spread of traits that are detrimental or beneficial for the survival of an organism • Analyze the process of natural selection and evaluate evidence of it as a mechanism that leads to diversity of species over time • Describe how fossils provide evidence of the appearance, diversification, and extinction of organisms from the past 	

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Eight

UNIT: Body Systems

NHA Science Content	Michigan Grade Level Content Expectations
<p>Body Organization</p> <ul style="list-style-type: none">Cells→Tissues→Organs→Organ Systems <p>Review of Body Systems</p> <ul style="list-style-type: none">Skeletal and muscular systems<ul style="list-style-type: none">Function is locomotionExoskeleton vs. endoskeletonRelationship of structure to mechanical advantage of simple machinesDigestive system<ul style="list-style-type: none">Function is to breakdown food for energyUpper gastrointestinal tract<ul style="list-style-type: none">Mouth, pharynx esophagus, stomachLower gastrointestinal tract<ul style="list-style-type: none">Intestines, anusCirculatory system<ul style="list-style-type: none">Function is to move materials between cellsHeart, blood, veins, arteriesRespiratory system<ul style="list-style-type: none">Function is to provide oxygen so energy can be released, and remove carbon dioxideNostrils, nasal cavity, trachea, lungsExcretory system<ul style="list-style-type: none">Function is to dispose of wasteKidneys, bladder, urethraNervous system<ul style="list-style-type: none">Function is to coordinate the skeletal and muscular systemsThe brain, reflexes, sensesEffects of drugs and alcoholEndocrine system<ul style="list-style-type: none">Function is to regulate body processes and maintain equilibrium in systemsHormones	<p>There are no Michigan Grade Level Content Expectations that meet this NHA content.</p>

<p>Comparison of Body Systems</p> <ul style="list-style-type: none"> • Adaptations in body systems relate to the needs of the species <p>Interaction of Body Systems</p> <ul style="list-style-type: none"> • Negative feedback • Homeostasis 	
NHA Unit Objectives	
<ul style="list-style-type: none"> • Compare the body systems of various animals and explain how differences relate to the needs of the animals in their habitats • Describe the interaction between each of the human body systems, including homeostasis and the mechanisms that maintain the balance of body systems 	

NHA Science Exemplar: Physical Science

The student will investigate the laws of the physical world that form our understanding of phenomena such as the motion of objects, the characteristics of matter, and the various forms of energy applicable to our lives.

Grade Eight

UNIT: Electricity and Magnetism (Delta Learning Kit: Electrical Connections)

NHA Science Content	Michigan Grade Level Content Expectations
<p>Circuits</p> <ul style="list-style-type: none">Electrical Terms and Concepts<ul style="list-style-type: none">Electricity, electrical energy, current, powerConductors and insulatorsMeasuring electricity<ul style="list-style-type: none">Volts, resistance, and amperesOhm's law: Voltage (V) = amperes (I) X resistance (R)Types of Circuits<ul style="list-style-type: none">Simple circuitsShort circuits<ul style="list-style-type: none">Application of Ohm's lawFusesCircuit breakersSeries circuitParallel circuit <p>Electromagnetism</p> <ul style="list-style-type: none">Changing magnetic fields generate electrical current<ul style="list-style-type: none">Michael Faraday- 1791-1867<ul style="list-style-type: none">First discovered that electricity could be generated by moving a magnet inside a coil of wireBuilt the first electric motor, generator and transformerTurbines and generators<ul style="list-style-type: none">Hoover dam is an example of the use of natural resources to change magnetic fields and generate electrical energyElectrical currents generate magnetic fields<ul style="list-style-type: none">ElectromagnetsElectric motors	<p>There are no Michigan Grade Level Content Expectations that meet this NHA content.</p>
NHA Unit Objectives	
<ul style="list-style-type: none">Construct complex circuits and describe the interaction of the circuit components to produce heat, light, sound, and magnetic effectsAnalyze changing current flow in given circuitsDescribe the relationship between electric current and magnetism	

- Analyze and describe the process for generating electrical energy from a variety of energy sources (e.g. sun, wind and coal)

NHA Science Exemplar: The Living Environment

The student will explore the common themes that intertwine and connect all aspects of living things, such as the similarities of plants and animals, structure and functions of body parts, adaptations to new environments, and coexistence of animals in a variety of ecosystems.

Grade Eight

UNIT: Health

NHA Science Content	Michigan Grade Level Content Expectations
<p>Healthy Body</p> <ul style="list-style-type: none"> • The human body <ul style="list-style-type: none"> - Interaction of body systems • Adolescent changes <ul style="list-style-type: none"> - Voice - Acne - Physical changes <ul style="list-style-type: none"> • Height • Weight • Illness/disease prevention <ul style="list-style-type: none"> - Awareness of risk factors <ul style="list-style-type: none"> • Lifestyle • Family history - Sanitation/spread of germs <ul style="list-style-type: none"> • Air, indirect contact, person-to-person contact • HIV/AIDS Prevention <ul style="list-style-type: none"> - Transmission of disease <ul style="list-style-type: none"> • Facts vs. myths - Strategies for protection <ul style="list-style-type: none"> • Awareness of risky situations/behaviors • Not touching blood or used needles - Community resources of information/help <p>Healthy Diet</p> <ul style="list-style-type: none"> • Benefits of having healthy eating habits and keeping hydrated <ul style="list-style-type: none"> - Dental health - Reduced health risks • Use of dietary guidelines <ul style="list-style-type: none"> - Food labels • Restaurants/fast food choices <ul style="list-style-type: none"> - Food preparation methods - Location of restaurant nutritional information • Influences on food choices 	<p>Strand 1: Nutrition and Physical Activity</p> <p>Standard 1: Core Concepts</p> <p>1.1 Summarize the benefits of healthy eating, being physically active, and keeping the body hydrated, and the potential consequences of not doing so.</p> <p>1.2 Describe the federal dietary guidelines for teenagers, and the recommended amount of physical activity needed to achieve health benefits.</p> <p>Standard 2: Access Information</p> <p>1.3 Use nutrition information on food labels to compare products and select foods for specific dietary goals.</p> <p>1.4 Determine the accuracy of health claims on food packages and advertisements in order to choose foods that have the most nutritional value.</p> <p>1.5 Demonstrate the ability to access resources regarding healthy weight management and unhealthy eating patterns; and assess the validity of the resources.</p> <p>Standard 3: Health Behaviors</p> <p>1.6 Analyze characteristics of restaurant menu items and methods of preparation to identify healthier food choices one can make when eating out, including at fast food restaurants.</p> <p>1.7 Evaluate a typical day's food intake according to the federal dietary guidelines for teenagers.</p> <p>1.8 Describe moderate-intensity physical activities that are personally enjoyed and that can be enjoyed for a lifetime.</p> <p>Standard 4: Influences</p> <p>1.9 Analyze the influence of television, computer, and video games on physical activity.</p> <p>Standard 5: Goal Setting</p> <p>1.10 Assess personal barriers to healthy eating and being physically active, and develop practical solutions to remove these barriers.</p> <p>1.11 Make a personal plan for improving one's nutrition and incorporating physical activity into daily routines.</p> <p>Standard 8: Advocacy</p> <p>1.12 Advocate for the availability of appealing, nutrient-dense foods in the school cafeteria and throughout the school environment.</p>

<ul style="list-style-type: none"> - Family/friends - Culture/religion - Media/advertising <ul style="list-style-type: none"> • On packaging - Money/economics - Lifestyle/priorities - Emotional eating - Convenience /cost - Environment/food availability • Consequences of an unhealthy diet • Food quality and safety <ul style="list-style-type: none"> - Food borne illnesses - Proper refrigeration - Hand washing - Proper cooking - Storage temperatures - Sanitation/cleanliness in the kitchen • Weight management <ul style="list-style-type: none"> - Developing and maintaining a healthy body image - Influence of weight perception on food choices - Unhealthy eating patterns - Awareness of personal hindrances in regards to healthy eating - Community resources to obtain information on healthy weight management <p>Healthy Decisions</p> <ul style="list-style-type: none"> • Community health care facilities <ul style="list-style-type: none"> - Availability of health care products/information /services - Situations requiring professional health services <ul style="list-style-type: none"> • Health emergencies • Asthma, diabetes management • Injury prevention strategies <ul style="list-style-type: none"> - Home emergency plans - Maintaining supplies in readiness of an emergency - Identification and removal of safety hazards - Basic first aid skills • Skills to enhance personal safety <ul style="list-style-type: none"> - Car safety/ seatbelts - Internet safety - Recognizing and avoiding threatening situations - Strategies to handle threatening situations <p>Healthy Practices</p>	<p>Standard 1: Core Concepts (Recommended) 1.13 Summarize the characteristics of a healthy body image and factors that determine body weight, including body type.</p> <p>Standard 2: Access Information 1.14 Describe how to access nutrition information about foods offered in restaurants in one's community.</p> <p>Standard 3: Health Behaviors 1.15 Evaluate the availability of nutrient-dense foods in the school cafeteria and throughout the school environment. 1.16 Demonstrate the ability to use safety equipment for physical activity.</p> <p>Standard 7: Social Skills 1.17 Demonstrate skills for dealing with pressure to eat in ways that are not healthy. 1.18 Demonstrate the ability to persuade peers to eat healthy and be physically active.</p> <p>STRAND 2: Alcohol, Tobacco , and Other Drugs</p> <p>Standard 1: Core Concepts 2.1 Analyze how alcohol, tobacco, and other drug use and exposure negatively impacts the user, as well as friends, family members, and community members.</p> <p>Standard 2: Access Information 2.2 Locate resources in one's school and community, and on the Internet, for information and assistance regarding alcohol, tobacco, and other drug use; and assess the validity of the resources.</p> <p>Standard 3: Health Behaviors 2.3 Describe a variety of needs young people may have, explain healthy ways to meet these needs without using alcohol, tobacco, or other drugs, and make a personal commitment to remain drug free. 2.4 Recognize risky situations that may lead to trouble, so that one can protect oneself and others from alcohol, tobacco, and other drug use.</p> <p>Standard 4: Influences 2.5 Evaluate environmental and social factors, especially advertising strategies, which may influence young people to use alcohol, tobacco, or other drugs.</p> <p>Standard 6: Decision Making 2.6 Apply problem-solving skills to hypothetical situations to protect oneself and others from alcohol, tobacco, and other drug use.</p> <p>Standard 7: Social Skills 2.7 Demonstrate effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs.</p> <p>Standard 3: Health Behaviors (Recommended) 2.8 Demonstrate how to follow directions for correct use of over-the-counter and prescription medications.</p>
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- Personal influences on health
 - Food choices/exercise/sleep /activity
 - Importance of daily physical activity
 - Anything put into your body
- Family influences on health
 - Physical, emotional, social
 - Ability of family to provide for its members
- Peer relationships
 - Exclusiveness
 - Discriminating
 - Risk-taking behaviors
 - Name-calling/prejudice
- Drug, alcohol, & other drug use
 - Long-term and short-term effects of use
 - Alcohol and impaired driving
 - Health benefits to avoiding use
 - Difficulty of fighting addictions
 - Negative effects on relationships
 - Effects on athletic performance and weight management
 - Legal perspectives
 - Use vs. misuse of prescription drugs
 - Influences that promote use
 - Peer pressure
 - Strategies to refuse use
 - Adult/peer modeling
 - Advertising/media
 - Availability/cost
 - Tools to avoid use
 - Self-control
 - Role play of refusal situations
 - Responding to negative social influence and peer pressure
 - Caffeine, diet pills, and other drugs
 - Community resources of information/help

Healthy Minds

- Negative effects of media
 - Influence from television, video games, movies, advertising
 - Connection to decreased levels of physical activity
- Self-Image
 - Importance of healthy perception of weight and body image
- Stress management
 - Talking about problems
 - Understanding that feelings of isolation and depression will pass

2.9 Demonstrate skills to avoid hazards due to another's use of alcohol, tobacco, or other drugs, including avoiding secondhand smoke and riding in a car with someone who has been using alcohol or other drugs.

Standard 7: Social Skills

2.10 Demonstrate ways to support people who are abstaining from and/or trying to quit using alcohol, tobacco, or other drugs.

2.11 Compose persuasive advice for peers on how to stay alcohol, tobacco, and drug free.

STRAND 3: Safety

Standard 2: Access Information

3.5 Describe the characteristics of situations for which adult help is needed, including intimidating and dangerous situations, where valid help can be located, and how to access it for self or others.

Standard 3: Health Behaviors

3.6 Evaluate potential responses to violence to determine the probability of a safe outcome.

3.7 Describe strategies to stay safe when using the Internet.

3.8 Demonstrate skills and strategies for avoiding or escaping potentially dangerous situations.

Standard 4: Influences

3.10 Evaluate individual, group, and societal influences that promote peace and respectful behaviors, and those that promote violence and disrespectful behaviors.

Standard 6: Decision Making

3.11 Apply the problem-solving steps to hypothetical situations involving assault and intimidation, including sexual harassment.

Standard 7: Social Skills

3.12 Apply conflict resolution skills to real or hypothetical situations involving peers.

3.13 Demonstrate skills for dealing with intimidation, including sexual harassment.

Standard 3: Health Behaviors (Recommended)

3.15 Demonstrate the ability to properly and consistently use a variety of safety gear, including seat belts.

3.16 Assess situations for safety hazards and consequences, and make recommendations regarding safety procedures or safety gear to alleviate the risks.

3.17 Commit to taking individual action to promote peace.

Standard 8: Advocacy

3.19 Advocate for changes in home, school, or community environments that would increase safety.

STRAND 4: Social and Emotional Health

Standard 1: Core Concepts

<ul style="list-style-type: none"> - Examining situation leading to feelings • Social interactions <ul style="list-style-type: none"> - Positive vs. harmful relationships - Recognition of positive self-esteem - Interpersonal communication <ul style="list-style-type: none"> • Building positive relationships with peers, parents • Communicating care and respect to all people - Safe and risky behaviors in relationships - Handling peer pressure - Management of feelings and behaviors (anger) <ul style="list-style-type: none"> • Responding to violence • Communication <ul style="list-style-type: none"> - Passive/aggressive/assertive • Decision making and problem solving skills • Conflict resolution <ul style="list-style-type: none"> - Possible causes of conflict - Non-violent strategies to manage conflict - Refusal/negotiation 	<p>4.1 Distinguish between passive, aggressive, and assertive communication.</p> <p>4.2 Describe the warning signs, risk factors, and protective factors for depression and suicide.</p> <p>Standard 2: Access Information</p> <p>4.3 Analyze situations as to whether they call for simple acts of caring among friends, or require getting the help of caring adults.</p> <p>4.4 Demonstrate how to ask trusted adults and friends for help with emotional or mental health concerns for oneself or others, including the risk of suicide.</p> <p>4.5 Demonstrate the ability to locate school and community resources to assist with problems related to emotional health concerns, including when someone is in danger of hurting self or others.</p> <p>Standard 3: Health Behaviors</p> <p>4.6 Describe the signs and symptoms of stress.</p> <p>4.7 Demonstrate the ability to use stress management techniques.</p> <p>Standard 4: Influences</p> <p>4.8 Explain internal and external factors that help to determine how one acts toward others.</p> <p>4.9 Demonstrate using the problem solving steps to solve a problem.</p> <p>Standard 7: Social Skills</p> <p>4.10 Demonstrate ways to show caring and respect for others, including those with real or perceived differences (e.g., cultural differences, disabilities, gender, & sexual orientation).</p> <p>4.11 Demonstrate the ability to use assertive communication skills.</p> <p>4.12 Apply conflict resolution skills to real or hypothetical situations involving peers.</p> <p>Standard 1: Core Concepts (Recommended)</p> <p>4.13 Describe essential character traits needed for personal success and well being.</p> <p>Standard 3: Health Behaviors</p> <p>4.14 Apply skills to manage strong feelings.</p> <p>Standard 6: Decision Making</p> <p>4.15 Apply character traits during the process of making a decision.</p> <p>Standard 7: Social Skills</p> <p>4.16 Evaluate behaviors, including one's own, to determine if they are examples of essential character traits.</p> <p>Standard 8: Advocacy</p> <p>4.17 Advocate for a school environment in which everyone treats each other with caring and respect.</p> <p>Strand 5: Personal Health and Wellness</p> <p>Standard 1: Core Concepts</p> <p>5.1 Describe the importance of rest and sleep for personal health.</p> <p>5.2 Explain how common infectious diseases are transmitted by air, indirect contact, and person-to-person contact.</p>
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	<p>Standard 2: Access Information</p> <p>5.3 Locate resources in one's school and community, and on the Internet, related to personal health issues and concerns; and assess the validity of the resources.</p> <p>Standard 3: Health Behaviors</p> <p>5.4 Apply health practices that can prevent the spread of illness, including food borne illness.</p> <p>5.5 Demonstrate basic first aid skills (i.e., controlling bleeding, Heimlich maneuver).</p> <p>5.6 Analyze the characteristics of an illness or injury to determine whether it is necessary to seek medical care.</p> <p>5.7 Demonstrate the proper steps to protect against harm from the sun.</p> <p>Standard 4: Influences</p> <p>5.8 Analyze the social influences that encourage or discourage a person to practice sun safety.</p> <p>Standard 5: Goal Setting</p> <p>5.9 Create a plan to incorporate adequate rest and sleep in daily routines.</p> <p>Standard 2: Access Information (Recommended)</p> <p>5.10 Locate resources in one's school and community, and on the Internet, for first aid information and training; and assess the validity of the resources.</p> <p>5.11 Demonstrate the ability to access information about personal health products (e.g., deodorant, shampoo, sun screen, and dental care products), and evaluate the information's validity.</p> <p>Standard 3: Health Behaviors</p> <p>5.12 Explain strategies to support youth who have illnesses such as asthma, epilepsy, or diabetes.</p> <p>Standard 4: Influences</p> <p>5.13 Analyze the influence of media on selection of personal health care products.</p> <p>STRAND 6: HIV AND STIs Prevention</p> <p>Standard 1: Core Concepts</p> <p>6.1 Explain how HIV is and is not transmitted.</p> <p>6.2 Distinguish between facts and myths regarding HIV infection and AIDS.</p> <p>Standard 2: Access Information</p> <p>6.3 Explain when it is important to get adult, medical, and/or counseling help.</p> <p>6.4 Describe sources of accurate information and assistance in one's community.</p> <p>Standard 3: Health Behaviors</p> <p>6.5 Analyze behaviors and situations that may result in increased risk for HIV and other sexually transmitted infections (STIs).</p> <p>6.6 Analyze situations where assertive communication and refusal skills can be used to avoid and escape risky situations.</p>
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The Nature of Science
Measurement Topic: Scientific Inquiry - The Scientific Method
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Generating basic questions (who, what, when, where, why, and "I wonder...") from observations of the natural world (Units Providing Good Scoring Opportunities: How Do We Learn, Seasons) Making observations related to the 5 senses about living things, nonliving objects, and events (Units Providing Good Scoring Opportunities: How Do We Learn, Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Question Observations Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the 5 senses Recognizing or recalling examples of basic questions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (UNIT: How Do We Learn) • Safely using tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (UNIT: How Do We Learn) • Recording and communicating findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs (Units Providing Good Scoring Opportunities: How Do We Learn, Introduction to animals, Seasons)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Measurement ○ Tools • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Making measurements of length, weight, temperature, capacity and volume in a practice situation ○ Demonstrating the safe use of tools and instruments ○ Recognizing or recalling accurate statements about the reasons for recording data
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Classification
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Categorizing organisms based on a variety of simple criteria (<i>e.g., body features, appendages, methods of movement, body covering</i>) (UNIT: Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Animal features Performing basic processes, such as: <ul style="list-style-type: none"> Identifying examples of animals that exhibit provided characteristics
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Needs of Organisms
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the basic needs of a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region (UNIT: Introduction to Animals) Explaining how food is used by animals (UNIT: Introduction to Animals) Comparing and contrasting the needs of animals with the needs of humans which include safety precautions, good hygiene and healthy habits(UNIT: Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Needs Growth Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the basic needs of animals (e.g. air, water, food, shelter) recognizing or recalling examples of the basic needs of humans (e.g. food, water, shelter, security, good hygiene, exercise, good nutrition, avoiding harmful substances)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Life Cycles of Plants and Animals
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the basic differences in life cycles of common animals, including humans, as they grow and develop over time (UNIT: Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Life cycle Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the life cycles of animals
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Ecosystems
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the behavior of animals is influenced by the conditions of their environment (UNIT: Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Animal behavior Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the influence of the environment on the behavior of animals
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Animal Body Structures and Functions
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying structures specific to a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region (UNIT: Introduction to Animals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Animal structures Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing examples of structures specific to a wide variety of animals
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Magnetism
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the effect of magnets on certain objects whether touching or not (UNIT: Magnetism) Describing some real-world applications of magnets (UNIT: Magnetism) Recalling objects that can be damaged by exposure to magnets (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Magnetism)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Magnet Performing basic processes, such as: <ul style="list-style-type: none"> Identifying objects attracted to magnets Recognizing or recalling examples of real-world applications of magnets Recognizing objects that can be damaged by exposure to magnets
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Weather and Climate
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Observing and describing the cyclical pattern of seasons (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Seasons) Correlating the different seasons with different life processes in plants and animals (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Seasons)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Cycle Performing basic processes, such as: <ul style="list-style-type: none"> Identifying the four seasons
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the consistency of the results of an experiment conducted multiple times (Units Providing Good Scoring Opportunities: Introduction to Science, Weather) Communicating a scientific idea using evidence (Units Providing Good Scoring Opportunities: Introduction to Science, Weather)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Experiment Consistent Evidence Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the importance of scientists using evidence Recognizing or recalling that repeated scientific investigations have consistent results
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry - The Scientific Method
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Planning simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world (Units Providing Good Scoring Opportunities: Introduction to Science, Weather) Making observations related to the 5 senses about living things, nonliving objects, and events (Units Providing Good Scoring Opportunities: Introduction to Science, Weather)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Question Observations Performing basic processes, such as: <ul style="list-style-type: none"> Making simple observations during teacher conducted investigation Answering basic questions after observing a teacher conducted investigation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (Units Providing Good Scoring Opportunities: Introduction to Science, Properties, Weather, The Surface of Earth) • Safely using tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (Units Providing Good Scoring Opportunities: Introduction to Science, Properties) • Recording and communicating findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs (Units Providing Good Scoring Opportunities: Introduction to Science, Weather)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Measurement ○ Tools ○ Graph • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Making measurements of length, weight, temperature, capacity and volume in a practice situation ○ Demonstrating the safe use of tools and instruments ○ Recognizing or recalling accurate statements about the reasons for recording data
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the parts of things and how one part connects to and affects another in grade level curriculum (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits) Identifying and recording instances of things that change and the different ways they change (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Weather, Ecosystems) Describing the different sizes, weights, ages and speeds of things observed (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Earth in Space) Identifying similarities and differences between a model of an object and the real thing (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Model System Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing parts of a system Recognizing or recalling accurate statements about change Recognizing or recalling accurate sizes, weights, ages and speeds Recognizing or recalling accurate statements about the importance of using models in science
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Engineering
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the relationship between the properties of a material and its typical uses and determining the best material for a specific use (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Properties) Comparing and contrasting manmade and natural materials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Properties)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Natural materials Manmade materials Performing basic processes, such as: <ul style="list-style-type: none"> Identifying characteristics of natural materials and human-made materials Recognizing or recalling examples of the use of various properties of natural materials
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant and Animal Adaptations
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the physical and behavioral characteristics of a variety of North American animals that help them survive in their particular environments (UNIT: Animal Adaptations) Identifying the similarities and differences in features and characteristics of animals of the same species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Survival Adaptation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the physical and behavioral characteristics of North American animals Recognizing or recalling accurate statements about the features and characteristics of animals of the same species
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Fossils and Extinction
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing fossils as evidence that there are kinds of animals that lived long ago that are no longer found on Earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Fossil Extinct Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of animals that lived long ago that are no longer found on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Genetics and Heredity
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing similarities and differences between offspring and parents of a variety of animals (UNIT: Animal Adaptations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Offspring Traits Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the similarities and differences between offspring and parents
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Food Chains and Webs
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Classifying animals as plant eaters, animal eaters, or both plant and animal eaters and identifying their primary food source (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Plant eaters Food source Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of plant eaters, animal eaters or both Recognizing or recalling accurate statements about the primary food source of animals
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Ecosystems
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing evidence that all environments change as a result of the organisms living there (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Environmental change Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the changes the organisms cause to their ecosystem
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Properties of Materials
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining that objects have properties that can be analyzed and described using the senses (UNIT: Properties) Describing, comparing and classifying objects (<i>e.g., size, color, shape, texture, weight, magnetism, ability to float</i>) (UNIT: Properties)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> The 5 senses Properties Texture Magnetism Performing basic processes, such as: <ul style="list-style-type: none"> Describing an object's properties as the qualities or traits of that object
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: The Changing Earth
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Recalling major features of the Earth's surface (e.g., mountains, oceans, plains) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Surface of Earth)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Mountain Plateau Valley Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing examples of earth's surface features
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Earth Materials and Responsible Use
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the basic properties of rocks (<i>e.g., color, composition, texture, size</i>) (UNIT: The Surface of Earth) Classifying rock particles as boulders, cobble, pebbles, gravel, sand, silt, or clay (UNIT: The Surface of Earth) Comparing and contrasting soil samples by components (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Surface of Earth) Explaining uses for different natural resources based upon their properties (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Surface of Earth)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Boulder Silt Clay Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the basic properties of rocks Recognizing or recalling accurate statements about the components of soil Recognizing or recalling examples of and uses for natural resources
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Atmosphere
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining that air is a substance that surrounds us, takes up space, moves as wind, and interacts with us and objects on earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Weather)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Wind Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the properties of air
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Weather and Climate
 Grade One

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting cirrus, stratus, and cumulus clouds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Weather) Describing examples of severe weather and appropriate safety precautions (UNIT: Weather) Describing the effect of the Sun's rays on land, air and water (UNIT: Weather)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Cirrus Tornado Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of cloud types Identifying examples of severe weather Recognizing or recalling basic safety precautions for severe weather Recognizing or recalling accurate statements about the effect of the sun on soil, air and water
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Daily Weather Measurement
 Grade One

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Describing patterns of change in the weather over time (UNIT: Weather) • Describing various tools that are used in weather measurement (UNIT: Weather)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Barometer ○ Rain gauge ○ Thermometer • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling accurate statements about the tools used to measure weather ○ Recognizing or recalling accurate statements about the relationship between the measured temperature and how it feels
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Interaction of the Sun, Earth, and Moon
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting day and night by observing and recording differences in temperature, light, and objects visible in the sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Describing the changing look and location of the moon in the day and night sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Full moon New moon Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of elements of night and day Recognizing examples of the moon at various times in the month
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Characteristics of Objects in Space
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Listing observable characteristics of stars (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Brightness Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling characteristics of the stars
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the consistency of the results of an experiment conducted multiple times (Units Providing Good Scoring Opportunities: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces) Communicating a scientific idea using evidence (Units Providing Good Scoring Opportunities: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Experiment Consistent Evidence Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the importance of scientists using evidence Recognizing or recalling that repeated scientific investigations have consistent results
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Planning simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world (Units Providing Good Scoring Opportunities: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces) Making observations related to the 5 senses about living things, nonliving objects, and events (Units Providing Good Scoring Opportunities: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Question Observations Performing basic processes, such as: <ul style="list-style-type: none"> Conducting a teacher provided investigation based on the classes prediction, collecting data using the 5 senses
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments in investigations (Units Providing Good Scoring Opportunities: Introduction to Science; Matter, Mixtures, and Changes) • Safely using tools and instruments (<i>e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers</i>) to construct, measure, and/or look at objects for investigations (UNIT: Introduction to Science) • Recording and communicating findings from observations of an investigation, using a variety of methods such as drawings, journaling, pictographs, and bar graphs (Units Providing Good Scoring Opportunities: Introduction to Science, The Water Cycle, Plants, Energy, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Measurement ○ Tools ○ Graph • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Making measurements of length, weight, temperature, capacity and volume in a practice situation ○ Demonstrating the safe use of tools and instruments ○ Recognizing or recalling accurate statements about the reasons for recording data
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the parts of things and how one part connects to and affects another in grade level curriculum (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying and recording instances of things that change and the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describing the different sizes, weights, ages and speeds of things observed (Units Providing Good Scoring Opportunities: Introduction to Science, Plants, Motion and Forces) Identifying similarities and differences between a model of an object and the real thing (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Model System Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing parts of a system Recognizing or recalling accurate statements about change Recognizing or recalling accurate sizes, weights, ages and speeds Identifying similarities and differences between a model of an object and the real thing
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Needs of Organisms
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing evidence that plants are alive and need air, water, light, and nutrients to grow (UNIT: Plants)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Nutrients Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the needs of plants
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Life Cycles of Plants and Animals
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the changes observed in plants as they progress through their life cycle (UNIT: Plants)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Germination Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the changes observed in plants
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant Structures and Functions
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the structure and function of the stem, bulbs, and roots in the growth of new plants (UNIT: Plants) Comparing and contrasting flowering plants and grasses of different species in structure, life processes, and reaction to environmental influences (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Plants)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Stem Bulb Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the structures and function of the stems, bulbs and roots Recognizing or recalling accurate statements about the comparison of flowering plants and grasses in structure, life processes, and reaction to environmental influences
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forms of Energy and Their Interactions
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing various methods for generating and transferring heat energy (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Heat energy Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about methods for generating and transferring heat energy
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Energy Resources
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how energy is used in the household, in transportation, in toys, etc. (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Energy) Identifying sources of energy, such as gasoline from oil, electricity, and food (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Energy) Demonstrating practical ways to conserve energy (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Energy Source Conservation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing accurate statements about how energy is used Recognizing sources of energy Recognizing practical ways to conserve energy
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Measuring Motion
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the position of an object relative to another object or background (UNIT: Motion and Forces) Comparing and contrasting the motion of different objects (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Position Performing basic processes, such as: <ul style="list-style-type: none"> Identifying objects based on given directions Recognizing or recalling accurate statements about the motion of objects
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forces Effect on Motion
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing balance as a function of position and weight/counterweight (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Motion and Forces) Describing the effects that pushing or pulling have on the motion of objects (UNIT: Motion and Forces) Describing the observable effects of gravity on objects (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Weight Counter weight Gravity Balance Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the effect of position and weight/counter weight on balance Recognizing or recalling accurate statements about the effects of pushing or pulling on the motion of objects Recognizing or recalling accurate statements about the effects of gravity on objects
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Simple Machines
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing simple machines (<i>e.g., lever, pulley, wedge, inclined plane, wheel and axle, screw</i>) and their purpose (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (Unit: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Lever Pulley Wedge Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of simple machines and their designed purchase
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Properties of Materials
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting the characteristics (<i>e.g., flexibility, transparency</i>) of various solid objects (UNIT: Matter, Mixtures, and Changes)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the characteristics of various solid objects
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Physical States and Changes
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing basic characteristics and properties of liquids (UNIT: Matter, Mixtures, and Changes) Explaining how different materials react to change (<i>e.g. in temperature, pressure, forces</i>) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Matter, Mixtures, and Changes)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Liquid Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the basic characteristics and properties of liquids Recognizing or recalling accurate statements about how different materials react to changes
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Mixtures and Solutions
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing characteristics of solutions (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Matter, Mixtures, and Changes) Describing how mixtures can be created and separated using various tools (UNIT: Matter, Mixtures, and Changes)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Mixtures Solutions Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of mixtures and solutions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Water on Earth
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the locations of solid and liquid water on Earth (UNIT: The Water Cycle) Analyzing precipitation such as snow, ice, rain, hail, and sleet as forms of water resulting from different conditions (UNIT: The Water Cycle) Comparing and contrasting the effect that surface type has on whether water seeps into the surface, runs off, or puddles (UNIT: The Water Cycle) Describing the effect of evaporation (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Water Cycle) Investigating and explaining the changes in state from solid to liquid made by water and the conditions necessary for these changes (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: The Water Cycle) MI.E.FE.02.12 Identifying household uses of water (drinking, cleaning, food preparation) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: The Water Cycle)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Snow Rain Evaporation Household Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling the locations of fresh or frozen water on earth Recognizing or recalling accurate statements about the effect of runoff on various surfaces Recognizing or recalling accurate statements about the changes in state of water
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing the results of similar experiments and determining reasons for any inconsistencies (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces) Constructing reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces) Differentiating between observation and inference in scientific explanations (UNIT: Introduction to Science)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Observation Inference Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the reasons investigations might turn out differently Recognizing or recalling examples of appropriate evidence used to back up scientific explanations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Planning and conducting simple investigations (e.g., <i>formulating a testable question, planning a fair test, making systematic observations, and developing logical conclusions</i>) (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Investigation Fair test Logical conclusions Performing basic processes, such as: <ul style="list-style-type: none"> Identifying the parts of and conducting a teacher provided investigation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces) • Safely using appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicating the results of investigations and describing the investigations in ways that enable others to repeat them (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces) • Organizing, displaying, and interpreting data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (Units Providing Good Scoring Opportunities: Introduction to Science, Sound, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Volume, ○ Capacity ○ Mass ○ Temperature • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling accurate statements about or examples of measurements of length, height, weight, mass, temperature, distance and area ○ Recognizing or recalling accurate statements about safety procedures when conducting an investigation ○ Recognizing or recalling accurate statements about the importance of keeping accurate records when performing investigations ○ Recognizing or recalling examples of bar graphs, line plots and stem-and-leaf plots
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (Units Providing Good Scoring Opportunities: Introduction to Science, Classification, Earth in Space, Light, Rocks and Minerals, The Changing Surface of Earth)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about scientists in a grade level appropriate area
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying and measuring things that change and describing the different ways they change (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Rocks and Minerals, The Changing Surface, Motion and Forces) Identifying objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explaining the role of models in studying objects, events, and processes (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Rocks and Minerals, The Changing Surface, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scale Model System Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts of a system Recognizing or recalling examples of things that change Recognizing or recalling examples of extremes Identifying objects, events and processes that can be studied best by using models
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Technology
 Grade Three

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing some of the technologies that have advanced our knowledge of objects in space (UNIT: Earth in Space)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Effects of technology Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of technology that has advanced our knowledge of space
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Classification
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Classifying organisms based on physical and environmental characteristics (<i>e.g., ecosystem, body structures</i>) (UNIT: Classification) Classifying vertebrates and invertebrates on the basis of observable physical characteristics (UNIT: Classification)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Vertebrates Invertebrates Performing basic processes, such as: <ul style="list-style-type: none"> Identifying examples of ways that organisms can be grouped Recognizing or recalling examples of vertebrates and invertebrates
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Sound
Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the relationship between vibrations and the production of sound (UNIT: Sound) Describing the variables that affect pitch (UNIT: Sound) Explaining how sound energy travels through solids, liquids, and gas (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Sound) Comparing and contrasting sounds produced by various objects in terms of pitch and amplitude (UNIT: Sound)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Pitch Amplitude Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the relationship between vibrations and the production of sound Recognizing or recalling accurate statements about the variables that affect pitch Recognizing or recalling accurate statements about sound energy moving through solids, liquids and gasses Recognizing or recalling accurate statements about the sound, amplitude and pitch
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Light
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the refraction, reflection, transmission, and/or absorption of light as it interacts with objects that are transparent, translucent, and opaque (UNIT: Light) Describing the visible spectrum of light (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Light)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Refraction Reflection Transmission Absorption Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of the refraction, reflection, transmission, and/or absorption of light Recognizing or recalling the components of the visible spectrum of light
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Measuring Motion
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the position and change in position (motion) of an object in comparison to a reference point (UNIT: Motion and Forces) Calculating the speed of objects based on the distance traveled divided by the time it took to travel the distance (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Reference point Speed Performing basic processes, such as: <ul style="list-style-type: none"> Describing the direction and recognizing the correct speed of an object in motion
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Effects on Motion
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing changing motion of objects and identifying forces acting on the object to cause change in motion (Unit: Motion and Forces) Explaining how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Force Mass Performing basic processes, such as: <ul style="list-style-type: none"> Identifying forces (often multiple) acting on various objects in motion and at rest Recognizing or recalling accurate statements about the relationship between the change in motion and the mass of an object and the strength of the force acting upon it
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Earth Materials and Responsible Use
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Comparing and contrasting types of earth materials (UNIT: Rocks and Minerals) • Describing properties used to identify minerals and determine the mineral makeup of rocks (UNIT: Rocks and Minerals) • Comparing and contrasting the observable features and formation processes of igneous, sedimentary, and metamorphic rocks (UNIT: Rocks and Minerals) • Describing the identifying properties of common rock samples (UNIT: Rocks and Minerals)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Metamorphic ○ Sedimentary ○ Gabbro • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling examples of igneous , sedimentary and metamorphic rocks ○ Recognizing or recalling the properties used to identify minerals and mineral makeup of rocks
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: The Changing Earth
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting major features of the earth's surface (e.g., <i>ocean, sea, lake, pond, mountain, hill, mesa, plateau</i>) (UNIT: The Changing Surface of Earth) Describing the variety of forces involved in weathering, erosion and deposition (UNIT: The Changing Surface of Earth) Describing how physical/mechanical weathering (e.g., wind, water, ice, and gravity) causes change to the Earth's surface over time (UNIT: The Changing Surface of Earth)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Mesa Mechanical weathering Erosion Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about physical/mechanical weathering Recognizing or recalling accurate statements about erosion and deposition
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Interaction of the Sun, Earth, and Moon
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the correlation between the rotation and revolution of the Earth and our days, nights and years (UNIT: Earth in Space) Describing the pattern of changes in the appearance of the moon throughout the cycle (UNIT: Earth in Space) Describing the rotation and revolution of the Moon around Earth (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Rotation Revolution Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the revolution and rotation of the earth Recognizing or recalling accurate statements about the pattern of changes in the appearance of the Moon Recognizing or recalling accurate statements about the rotation and revolution of the Moon
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Characteristics of Objects in Space
 Grade Three

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the major characteristics of the Sun, Moon, and planets (UNIT: Earth in Space) Describing the motion and relative distance of the planets around the Sun (UNIT: Earth in Space) Describing characteristics of stars (UNIT: Earth in Space)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Relative distance Constellation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of the major characteristics of the sun, moon and planets Recognizing or recalling accurate statements about the motion and relative distance of the planets around the Sun Recognizing or recalling accurate statements about the characteristics of stars
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing the results of similar experiments and determining reasons for any inconsistencies (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) Constructing reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) Differentiating between observation and inference in scientific explanations (UNIT: Introduction to Science)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Observation Inference Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the reasons investigations might turn out differently Recognizing or recalling examples of appropriate evidence used to back up scientific explanations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Planning and conducting simple investigations (<i>e.g., formulating a testable question, planning a fair test, making systematic observations, and developing logical conclusions</i>) (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Investigation Fair test Logical conclusions Performing basic processes, such as: <ul style="list-style-type: none"> Identifying the parts of and conducting a teacher provided investigation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (Units Providing Good Scoring Opportunities: Introduction to Science, Properties of Materials, Animal Adaptations, Plants, Electricity and Magnetism, Energy) • Safely using appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicating the results of investigations and describing the investigations in ways that enable others to repeat them (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy) • Organizing, displaying, and interpreting data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (Units Providing Good Scoring Opportunities: Introduction to Science, Animal Adaptations, Plants, Electricity and Magnetism, Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Volume, ○ Capacity ○ Mass ○ Temperature • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling accurate statements about or examples of measurements of length, height, weight, mass, temperature, distance and area ○ Recognizing or recalling accurate statements about safety procedures when conducting an investigation ○ Recognizing or recalling accurate statements about the importance of keeping accurate records when performing investigations ○ Recognizing or recalling examples of bar graphs, line plots and stem-and-leaf plots
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (Units Providing Good Scoring Opportunities: Introduction to Science, Electricity and Magnetism, Species Over time, Ecosystems, Conservation of Natural Resources)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about scientists in a grade level appropriate area
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	<p>Mastered grade level expectations by:</p> <ul style="list-style-type: none"> Describing how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying and measuring things that change and describing the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explaining the role of models in studying objects, events, and processes (Units Providing Good Scoring Opportunities: Introduction to Science, Properties of Materials, Electricity and Magnetism) <p>Engineering and Technology, Technology</p> <ul style="list-style-type: none"> S.RS.04.16 Identify technology used in everyday life (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) S.RS.04.17 Identify current problems that may be solved through the use of technology (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	<p>Basic understanding achieved such as:</p> <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scale Model System Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts of a system Recognizing or recalling examples of things that change Recognizing or recalling examples of extremes Identifying objects, events and processes that can be studied best by using models
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Engineering and Technology
Measurement Topic: Technology
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> S.RS.04.16 Identifying technology used in everyday life (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) S.RS.04.17 Identifying current problems that may be solved through the use of technology (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Technology Performing basic processes, such as: <ul style="list-style-type: none"> Working with a computer
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant Structures and Functions
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the function of each of the plant parts (<i>e.g., root, stem, leaves, or flower</i>) (UNIT: Plants) MI.L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers). (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Stamen Pistil Performing basic processes, such as: <ul style="list-style-type: none"> Identifying parts of common plants as the root, stem, leaves, or flower
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Life Cycles of Plants and Animals
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining ways that the stages of an animal's life cycle (including humans) contribute to the survival of the animal (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Animal Adaptations) Comparing the life cycles of common annuals, biennials, and perennials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Plants)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Perennial Biennial Performing basic processes, such as: <ul style="list-style-type: none"> Identifying the stages of an animal's life cycle Identifying the stages of a plant's (annuals, biennials and perennials) life cycle
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant and Animal Adaptations
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the adaptive features (<i>e.g., camouflage, behaviors, weapons</i>) of animals native to common habitats around the world (UNIT: Animal Adaptations) Describing the adaptive features of plants native to habitats around the world (UNIT: Plants)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Camouflage Habitats Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the adaptive features of animals Recognizing or recalling accurate statements about the adaptive features of plants
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Animal Body Structures and Functions
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the external structures in a variety of animals from around the world that perform particular functions critical to the survival of the animals (<i>e.g., sensing structures, body coverings and coloration</i>) (UNIT: Animal Adaptations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> External vs. internal structures Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about animal external structures and their functions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Needs of Organisms
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the necessity of food for the survival, growth, and repair of animals (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Repair Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the necessity of food
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant and Animal Adaptations
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying individual differences in organisms from the same population that could give them an advantage or disadvantage in the competition for resources and reproduction (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Competition Reproduction Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the adaptive features of animals
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Fossils and Extinction
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing organisms and environmental conditions of the past using fossil evidence (UNIT: Species Over Time) Comparing fossils with each other and with living organisms to determine similarities and differences (UNIT: Species Over Time) Describing processes (human related, natural events) that can lead to the extinction of a species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Environmental Conditions Extinction Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about information from fossil evidence about organisms and environmental conditions of the past Recognizing or recalling accurate statements about or examples of the similarities and differences between fossils and living things Recognizing or recalling accurate statements about the processes that lead to the extinction of species
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Food Chains and Webs
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the role of plants in food chains and webs (UNIT: Ecosystems) Classifying various organisms as producers, herbivores, carnivores, omnivores, or decomposers (UNIT: Ecosystems) Comparing and contrasting simple food chains and food webs (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Producers Herbivores Omnivores Food web Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about simple food chains and webs
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Ecosystems
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing components of an ecosystem that have an effect on the behavior and types of organisms in the ecosystem (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Classifying the interaction of organisms (<i>e.g., predator/prey, beneficial to both organisms, beneficial to one and harmful to another, or beneficial to one and neither harmful nor helpful to another</i>) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Describing changes to an ecosystem from natural causes (<i>e.g., disease, fire, flood, erosion, drought, and succession</i>) (UNIT: Ecosystems) Describing changes to an ecosystem from human causes (UNIT: Ecosystems) Describing changes (beneficial, neutral or detrimental) caused by organisms in the ecosystem (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Predator Prey Ecosystem, Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of the interaction of organisms Recognizing or recalling accurate statements about the components of an ecosystem Recognizing or recalling accurate statements about the changes to an ecosystem caused by natural causes, humans and organisms living in the ecosystem
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Genetics and Heredity
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Differentiating between those traits shared between parent and offspring that are inherited and those that are learned (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Inherited traits Learned traits
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Properties of Materials
 Grade Four

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how the material make-up of an object determines some of the properties of the object (UNIT: Properties of Materials)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Properties Performing basic processes, such as: <ul style="list-style-type: none"> Identifying the material make-up of objects
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Physical States and Changes
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting the three states of matter by observable characteristics (UNIT: States of Matter) Explaining the relationship between the temperature of an object and its state (UNIT: States of Matter) Describing the unique properties of water (expansion and contraction) as it is heated and cooled (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: States of Matter)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> States of matter Temperature Expansion/Contraction Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the three states of matter Recognizing or recalling accurate statements about the properties of water as it is heated and cooled
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forms of Energy and Their Interactions
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing forms of energy (sound, chemical, radiant, electrical, atomic, mechanical, heat (transfer and conduction) and providing a real-life example of each (UNIT: Energy) Describing the transformation of energy from one form to another (UNIT: Energy) Describing how heat spreads from one object or place to another (<i>e.g., conduction, convection, radiation</i>) (UNIT: Energy) Investigating different materials to determine which are better conductors and which are better insulators of heat (UNIT: Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Forms of energy Conductors Insulators Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of forms of energy and transformations between forms Identifying objects and processes that give off heat Recognizing or recalling examples of conductors and insulators
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Electricity
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Categorizing substances and/or objects as conductors or nonconductors of electricity based on tests (UNIT: Electricity and Magnetism) • Constructing simple circuits and describing the interaction of the circuit components (UNIT: Electricity and Magnetism) • Comparing and contrasting series and parallel circuits (UNIT: Electricity and Magnetism) • Creating a simple electromagnet and investigating variables affecting its strength (UNIT: Electricity and Magnetism)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Conductor ○ Nonconductor ○ Series circuit ○ Parallel circuit • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling examples of conductors and non-conductors ○ Recognizing or recalling accurate statements about circuits and the interaction of components ○ Recognizing or recalling accurate statements about series and parallel circuits ○ Diagramming a simple electromagnet
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Magnetism
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the properties of magnets (UNIT: Electricity and Magnetism)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Metal Attract Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the properties of magnets
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Earth Materials and Responsible Use
Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance

Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing the components and properties (e.g., compressibility, water retention, color) of various soil types (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Ecosystems) Demonstrating and describing the practices of reducing, reusing and recycling and other conservation measures (UNIT: Conservation of Natural Resources) Classifying manufactured products according to the Earth materials from which they are made (UNIT: Conservation of Natural Resources) S.RS.03&04.18 Describe the effect humans and other organisms have on the balance of the natural world (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.41 Identify natural resources (metals, fuels, fresh water, farmland, and forests) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources) MI.E.ES.03.42 Classify renewable (fresh water, farmland, forests) and non-renewable (fuels, metals) resources (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Conservation of Natural Resources)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Reduce Recycle Environment Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the properties of soil types Identifying examples of Earth materials that can be recycled Recognizing or recalling examples of reduce, reuse and recycle or other conservation measures Recognizing or recalling accurate statements about manufactured products and the material from which they are made
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing the results of similar experiments and determining reasons for any inconsistencies (UNIT: Introduction to Science) Constructing reasonable scientific explanations supported by facts found in books or evidence from observations and/or investigations (UNIT: Introduction to Science) Differentiating between observation and inference in scientific explanations (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Introduction to Science)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Observation Inference Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the reasons investigations might turn out differently Recognizing or recalling examples of appropriate evidence used to back up scientific explanations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Proposing and testing independent and dependent variables in a controlled experiment (UNIT: Introduction to Science)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Independent and dependent variables Controlled experiment Performing basic processes, such as: <ul style="list-style-type: none"> Differentiating between examples of independent and dependent variables
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) (UNIT: Introduction to Science) • Safely using appropriate tools and simple equipment, for investigations, to gather scientific data and extend the senses (UNIT: Introduction to Science) • Communicating the results of investigations and describing the investigations in ways that enable others to repeat them (UNIT: Introduction to Science) • Organizing, displaying, and interpreting data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots (UNIT: Introduction to Science)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Volume, ○ Capacity ○ Mass ○ Temperature • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling accurate statements about or examples of measurements of length, height, weight, mass, temperature, distance and area ○ Recognizing or recalling accurate statements about safety procedures when conducting an investigation ○ Recognizing or recalling accurate statements about the importance of keeping accurate records when performing investigations ○ Recognizing or recalling examples of bar graphs, line plots and stem-and-leaf plots
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying scientists of various groups (<i>i.e. gender, country of origin, socioeconomic status, age</i>) and their contributions (Units Providing Good Scoring Opportunities: Introduction to Science, Technological Design, Body Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about scientists in a grade level curriculum appropriate area
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying and measuring things that change and describing the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identifying objects that are at the extremes in size, weights, ages and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explaining the role of models in studying objects, events, and processes (Units Providing Good Scoring Opportunities: Introduction to Science, Body Systems, Weather and Water)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scale Model System Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts of a system Recognizing or recalling examples of things that change Recognizing or recalling examples of extremes Identifying objects, events and processes that can be studied best by using models
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Technology
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing positive and negative effects of technology on the environment and society (UNIT: Technological Design)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Effects of technology Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the effects of technology on society
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Engineering
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the properties of materials that make them useful in design and construction (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Technological Design) Describing examples of mechanical systems that are designed to serve similar purposes as natural systems (UNIT: Technological Design) Designing and constructing something useful out of a variety of materials using a variety of tools and the design process (UNIT: Technological Design) Evaluating the usefulness of inventions and suggesting ways that the product could be changed or improved (UNIT: Technological Design)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Materials Construction Inventions Performing basic processes, such as: <ul style="list-style-type: none"> Identifying materials and tools used in design and construction Identifying the steps of the design process Identifying examples of mechanical systems that serve that same purpose as natural systems Identifying an invention that can use improvements (<i>e.g., cars</i>)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Animal Body Structures and Functions
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the functions of human body systems (<i>e.g., digestive, circulatory, respiratory</i>) and major organs of the body (<i>e.g., heart, lungs, skin</i>) (UNIT: Body Systems) MI.L.OL.05.42 Explain how animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive) work together to perform selected activities (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) (UNIT: Body Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Endocrine system Kidneys Systems Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the major organs of the body Recognizing or recalling accurate statements about the functions of body systems
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Chemical Changes
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Classifying reactions as chemical or not based on the presence of color change, odor, light or heat emission, and/or gas (UNIT: Mixtures and Solutions) (Teach this objective if time. Though there is no 5th grade GLCE that aligns, it will better prepare students for chemistry studies in 7th.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Chemical reaction Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the characteristics of chemical changes
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Mixtures and Solutions
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Determining the appropriate tools and processes (magnet, filter, evaporation,) needed to separate various mixtures (UNIT: Mixtures and Solutions) Describing factors that influence saturation in a solution (UNIT: Mixtures and Solutions) Describing the appropriate tools and senses needed to determine the concentration levels of various solutions (UNIT: Mixtures and Solutions) <p>(Teach these objectives if time. Though there are no 5th grade GLCE that align, they will better prepare students for chemistry studies in 7th.)</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Solution Concentration Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of tools used to determine the concentration level of solutions Recognizing or recalling the factors that affect saturation in solutions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forces Effect on Motion
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • P.FM.05.21 Distinguishing between contact forces and non-contact forces. (UNIT: Motion and Forces) • P.FM.05.22 Demonstrating contact and non-contact forces to change the motion of an object. (UNIT: Motion and Forces) • P.FM.05.31 Describing what happens when two forces act on an object in the same or opposing directions. (UNIT: Motion and Forces) • P.FM.05.32 Describing how constant motion is the result of balanced (zero net) forces. (UNIT: Motion and Forces) • P.FM.05.33 Describing how changes in the motion of objects are caused by a non-zero net (unbalanced) force. (UNIT: Motion and Forces) • P.FM.05.34 Relating the size of change in motion to the strength of unbalanced forces and the mass of the object. (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Contact force ○ Balanced force • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling the names of forces ○ Identifying forces acting on objects ○ Memorizing newton's laws
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Measuring Motion
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • P.FM.05.41 Explaining the motion of an object relative to its point of reference. (UNIT: Motion and Forces) • P.FM.05.42 Describing the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects. (UNIT: Motion and Forces) • P.FM.05.43 Illustrating how motion can be measured and represented on a graph. (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Point of reference • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Identifying types of motion ○ Identifying the motion of an object in terms of distance, time and direction ○ Identifying correct answers for questions related to a graph
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth in Space Science
Measurement Topic: Interaction of the Sun, Earth, and Moon
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity.(UNIT: Earth in Space) • MI.E.ES.05.61 Demonstrate and explain seasons using a model.(UNIT: Earth in Space) • MI.E.ES.05.62 Explain how the revolution of the Earth around the sun defines a year. (UNIT: Earth in Space) • MI.E.ST.05.22 Explain the phases of the moon. (UNIT: Earth in Space) • MI.E.ST.05.24 Explain lunar and solar eclipses. (UNIT: Earth in Space) • MI.E.ST.05.25 Explain the tides of the oceans as they relate to the gravitational pull and orbit of the moon. (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Axis ○ Orbits ○ Revolution ○ Rotation ○ Eclipse • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Identifying the correct motion of objects in space ○ Describing the cycle of seasons ○ Determining the location of sunrise and sunsets
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth in Space Science
Measurement Topic: Characteristics of Objects in Space
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • MI.E.ST.05.11 Design a model of the solar system that shows the relative order and scale of the planets, dwarf planets, comets, and asteroids to the sun. (UNIT: Earth in Space) • MI.E.ST.05.23 Explain the apparent motion of the stars (constellations) and the sun across the sky. (UNIT: Earth in Space) •

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Solar System ○ Comets ○ Asteroids • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Identifying objects in space from descriptions, drawings or models
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Water on Earth
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the distribution, location, and state of water on Earth (UNIT: Weather and Water) Describing the processes of infiltration, runoff, evaporation, condensation, and precipitation as they relate to movement of water in the water cycle (UNIT: Weather and Water)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Infiltration Runoff Condensation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the distribution, location and state of water on Earth Recognizing or recalling accurate statements about the water cycle
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Weather and Climate
 Grade Five

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Measuring, recording, and explaining daily weather phenomena using the appropriate tools (UNIT: Weather and Water) Compiling and using weather data to determine climate trends (UNIT: Weather and Water) Correlating cloud types with general weather conditions (UNIT: Weather and Water) Describing a variety of storm types, the weather conditions associated with each, and explaining when they occur (UNIT: Weather and Water) Describing the effects geography can have on weather and climate (UNIT: Weather and Water)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Weather phenomena Climate Performing basic processes, such as: <ul style="list-style-type: none"> Using teacher provided data to determine climate trends Recognizing or recalling accurate statements about daily weather phenomena Recognizing or recalling examples of basic cloud types and the general weather conditions that they signal Recognizing or recalling accurate statements about a variety of storm types Recognizing or recalling accurate statements about the effect of geography on weather and climate
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing similar investigations that yield different results to determine the cause of the difference and developing a plan to eliminate the variables (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound) Tracing the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scientific theory Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the variables that exist in investigations Recognizing or recalling accurate statements about theories and hypotheses
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Scientific Method
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Proposing questions and hypotheses that can be studied through scientific investigations and distinguishing them from questions and hypotheses that cannot be examined scientifically (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound) Explaining why only one variable (<i>e.g., independent, dependent, control</i>) can be manipulated at a time (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound) Describing why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Hypothesis Independent/dependent variable Control Performing basic processes, such as: <ul style="list-style-type: none"> Identifying examples of questions and hypotheses that can be studied through scientific investigations Identifying the variables (<i>e.g., independent, dependent, control</i>) in a scientific investigation Recognizing or recalling accurate statements about the role of questioning and defending in the scientific process
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Using appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) Describing basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (UNIT: Introduction to Science) Organizing, displaying, and interpreting scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound) Interpreting and evaluating tables, charts, and graphs produced by others (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound) Citing evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (Units Providing Good Scoring Opportunities: Introduction to Science, Models and Design, Ecosystems, Sound)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Stem-and-leaf Box-and-whisker Scatter Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of tools and technologies used in investigations to gather, organize and report scientific results Recognizing or recalling accurate statements about safety procedures Recognizing or recalling accurate statements about scientific data and interpretation of tables, graphs and plots and the interpretation Citing evidence using a teacher provided template
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing ways in which science and society influence one another (Units Providing Good Scoring Opportunities: Introduction to Science, Energy, Geology, Ecosystems) Describing the diverse nature of science and scientists past and present (Units Providing Good Scoring Opportunities: Introduction to Science, Geology, Ecosystems, Light)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the ways in which science and society influence one another Recognizing or recalling accurate statements about scientists in a grade level curriculum appropriate area
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measuring and graphing change over time and analyzing the results to determine patterns and trends or predict events (Units Providing Good Scoring Opportunities: Introduction to Science, Geology, Ecosystems) Comparing and contrasting the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Constructing physical and conceptual models that mimic the characteristics of an unknown system and comparing the model to the system (UNIT: Models and Design) Evaluating the usefulness of the model as a comparison tool (UNIT: Models and Design)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Subsystems Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts, subsystems and interactions of a system describing patterns of change based on given graphs Recognizing or recalling accurate statements about the properties of objects as they change in scale Describing similarities and differences between a given model and the real thing
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Technology
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Evaluating various technologies in terms of drawbacks and benefits to society (Unit: Models and Design) Explaining how societies influence what types of technology are developed and used in a variety of fields (<i>e.g. agriculture, manufacturing, etc.</i>) (Unit: Models and Design) Describing the similarities and differences between scientific inquiry and technological design (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (Unit: Models and Design)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Technological design Drawbacks and benefits Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of the benefits and drawbacks of various technologies Recognizing or recalling accurate statements about the role of societal needs in determining technological advancement Recognizing or recalling accurate statements about the scientific inquiry process and the technological design process
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Engineering
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Developing a product that fulfills a set of requirements using a product development approach (i.e., design, construction of prototype, tests, evaluation of design, and redesign) (UNIT: Models and Design)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Design Prototype Testing the design Evaluation of design Redesign Performing basic processes, such as: <ul style="list-style-type: none"> Using the product development process to plan the development of a product
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Food Chains and Webs
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the food webs formed by the interactions of producers, carnivores, herbivores and decomposers in an ecosystem (UNIT: Ecosystems) Describing the process of photosynthesis (UNIT: Ecosystems) Describing the flow of energy through an ecosystem (UNIT: Ecosystems) Describing the cycle of nitrogen, carbon, and phosphorous in an ecosystem (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Photosynthesis Nitrogen cycle Carbon cycle Phosphorus cycle Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about food webs Recognizing or recalling accurate statements about photosynthesis Recognizing or recalling accurate statements about the flow of energy in an ecosystem Recognizing or recalling accurate statements about the nitrogen, carbon and phosphorus cycles in an ecosystem
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Ecosystems
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing and describing the relationships among biotic and abiotic factors and their effects on populations of terrestrial and aquatic ecosystems (UNIT: Ecosystems) Analyzing natural changes and human-caused changes in an ecosystem to evaluate, with evidential support, whether they are detrimental or beneficial to the survival of populations in that ecosystem (UNIT: Ecosystems) Analyzing the ecological succession of a variety of environments (UNIT: Ecosystems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Population Symbiotic relationship Predator/prey relationship Biotic/abiotic Ecological succession Performing basic processes, such as: <ul style="list-style-type: none"> Providing examples of an organism, species, population, habitat, community, and ecosystem Recognizing or recalling accurate statements about the effects of biotic and abiotic factors on populations Differentiating between the types of relationships of organisms in an ecosystem (symbiotic, predator/prey) Recognizing or recalling accurate statements about the ecological succession of a variety of environments Determining if provided examples are a detriment or benefit to the survival of populations in an ecosystem
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance

0.5	Some basic understanding, only with assistance
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The Living Environment
Measurement Topic: Animal Body Structures and Functions
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the form and function of the human eye (UNIT: Light)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Rods Cones Lens Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the form and function of the human eye
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Light
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Differentiating between color addition and color subtraction using colored lighting and filters (UNIT: Light) • Comparing the reflection of light from various surfaces (<i>e.g., loss of light, angle of reflection, reflected color</i>) (UNIT: Light) • Investigating and describing the refraction of light passing through various materials (<i>e.g., prisms, lenses, water</i>) (UNIT: Light) • Comparing and contrasting waves that make up the electromagnetic spectrum as versions of radiation that differ in wavelengths, frequencies, and energy levels (UNIT: Light) • Describing an everyday application of each of the waves of the electromagnetic spectrum (UNIT: Light) <p>(NOTE- There are no GLCE that align with this unit. Teach only as an enrichment unit if time permits.)</p>

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> ○ Color addition/color subtraction ○ Reflection ○ Refraction • Performing basic processes, such as: <ul style="list-style-type: none"> ○ Recognizing or recalling examples of color addition and color subtraction ○ Recognizing or recalling accurate statements about or examples of the reflection and refraction of light ○ Recognizing or recalling accurate statements about the waves that make up the electromagnetic spectrum ○ Recognizing or recalling examples of everyday applications of waves
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Sound
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the effect of the medium on sound (UNIT: Sound) Comparing and contrasting the properties of longitudinal and transverse waves and specifying examples of each (UNIT: Sound) Relating the amplitude of a wave (<i>i.e. sound, seismic, water</i>) to the amount of energy used to create the vibration of the object producing the wave (UNIT: Sound) Describing the changing pitch of sound in terms of the speed, frequency, and wavelength of the sound waves (speed=wavelength X frequency) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Longitudinal waves Transverse waves Wavelength Frequency Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the effect of the medium on sound Recognizing or recalling accurate statements about or examples of longitudinal and transverse waves Recognizing or recalling accurate statements about the relationship between the amplitude of a wave and the amount of energy used to create the vibration Recognizing or recalling accurate statements about the change in pitch of a sound
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forms of Energy and Their Interactions
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the various forms of potential (chemical, elastic, gravitational) and kinetic (energy of motion) energy (UNIT: Energy) Tracing the conversion of energy from one form to another in a system (UNIT: Energy) Explaining the law of conservation of energy (UNIT: Energy)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Potential and kinetic energy Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the forms of potential and kinetic energy Recognizing or recalling individual components of the law of conservation of energy Recognizing or recalling accurate statements about the conversion of energy from one form to another in a system
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Energy Resources
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Evaluating energy sources in terms of advantages and disadvantages (<i>e.g. cost, environmental consequences, sustainability</i>) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Renewable Non-renewable Performing basic processes, such as: <ul style="list-style-type: none"> Describing the advantages and disadvantages of given energy sources
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: The Changing Earth
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing and describing the Earth's surface features using maps (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Geology) Describing agents of physical and chemical weathering and explaining their connection to the formation of soil and sediment (UNIT: Geology) Analyzing how physical/mechanical weathering (<i>e.g., waves, wind, water, and glacier movement</i>) shape and reshape Earth's surface over time (UNIT: Geology) Describing the three primary types of plate boundaries and the landforms associated with each (UNIT: Geology) Comparing the physical properties of the interior layers of Earth (UNIT: Geology) Describing major geological events (mountain building, earthquakes, volcanic eruptions) as processes resulting from heat flow and movement of material within Earth (UNIT: Geology) Describing ways scientists learn about Earth's geologic history (<i>e.g., seismographs, ground penetrating radar, core drillers, observations</i>) (UNIT: Geology)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Chemical weathering Convergent boundary/divergent boundary Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of the Earth's surface features Recognizing or recalling examples of physical and chemical weathering Recognizing or recalling accurate statements about the formation of soil Recognizing or recalling accurate statements about the role of physical and mechanical weathering in shaping and reshaping Earth's surface over time Recognizing or recalling examples of the 3 primary types of plate boundaries and the landforms associated with each Recognizing or recalling accurate statements about the physical properties of the interior layers of the earth Recognizing or recalling examples of tools used by geologists Recognizing or recalling accurate statements about the processes involved in major geologic events

1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Earth Materials and Responsible Use
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Classifying sedimentary, igneous and metamorphic rocks (UNIT: Geology) Analyzing observable and measurable soil properties to predict soil quality (UNIT: Geology)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Igneous Horizon Profile Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the classification of rocks Recognizing or recalling accurate statements about the quality of soils
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing similar investigations that yield different results to determine the cause of the difference and developing a plan to eliminate the variables (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces) Tracing the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scientific theory Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the variables that exist in investigations Recognizing or recalling accurate statements about theories and hypotheses
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Proposing questions and hypotheses that can be studied through scientific investigations and distinguishing them from questions and hypotheses that cannot be examined scientifically (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces) Explaining why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces) Describing why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Hypothesis Independent/dependent variable Control Performing basic processes, such as: <ul style="list-style-type: none"> Identifying examples of questions and hypotheses that can be studied through scientific investigations Identifying the variables (<i>e.g., independent, dependent, control</i>) in a scientific investigation Recognizing or recalling accurate statements about the role of questioning and defending in the scientific process
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Using appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) Describing basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Organizing, displaying, and interpreting scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces) Interpreting and evaluating tables, charts, and graphs produced by others (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces) Citing evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Stem-and-leaf Box-and-whisker Scatter Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of tools and technologies used in investigations to gather, organize and report scientific results Recognizing or recalling accurate statements about safety procedures Recognizing or recalling accurate statements about scientific data and interpretation of tables, graphs and plots and the interpretation Citing evidence using a teacher provided template
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing ways in which science and society influence one another (Units Providing Good Scoring Opportunities: Introduction to Science, Heredity) Describing the diverse nature of science and scientists past and present (Units Providing Good Scoring Opportunities: Introduction to Science, Cells, Heredity, Chemistry, Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the opposition of science and political issues Recognizing or recalling accurate statements about scientists in a grade level curriculum appropriate area
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measuring and graphing change over time and analyzing the results to determine patterns and trends or predict events (Units Providing Good Scoring Opportunities: Introduction to Science, Motion and Forces, Weather and Water) Comparing and contrasting the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Subsystems Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts, subsystems and interactions of a system Describing patterns of change based on given graphs Recognizing or recalling accurate statements about the properties of objects as they change in scale
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Genetics and Heredity
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the relationship between genes, proteins, chromosomes, genomes, and DNA and explaining their role in the process of heredity (UNIT: Heredity) Comparing how genetic material is transferred to offspring in sexual and asexual reproduction (UNIT: Heredity) Using models such as Punnett squares or pedigree charts to determine the probability of dominant, recessive and incomplete traits being expressed (UNIT: Heredity)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Genes Chromosomes Dominant/recessive/incomplete dominance Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the transfer of genetic material (in sexual and asexual reproduction) Recognizing or recalling accurate statements about the results of a Punnet square or pedigree chart analysis
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Cell Theory
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Sequencing the major points in the development of the cell theory, including important historical figures and technological advancements associated with the theory (UNIT: Cells) Explaining the three components of the cell theory (UNIT: Cells)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Cell theory Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the development of cell theory Recognizing or recalling accurate statements about the three components of cell theory
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Cell Structure and Function
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the basic functions of cell organelles in plant and animal cells (UNIT: Cells) Describing how materials move into and out of cells in the processes of osmosis, diffusion, and active transport (UNIT: Cells) Explaining how cellular respiration provides cells with energy (UNIT: Cells)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Cell organelles Osmosis Diffusion Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the basic functions of cell organelles Recognizing or recalling accurate statements about how materials move in and out of a cell Recognizing or recalling accurate statements about cellular respiration
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Atoms and Molecules
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how chemical reactions form new substances with new properties from the rearrangement and conservation of atoms (UNIT: Chemistry)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Atoms Elements Molecules Compounds Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about chemical reactions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Properties of Materials
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing physical and chemical properties of a variety of substances (UNIT: Chemistry) Describing the function of the periodic table in describing and grouping common earth elements by their basic properties (<i>e.g., symbol, reactivity, metal, non-metal or metalloid, natural state, what products contain them</i>) (UNIT: Chemistry)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Periodic table Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling properties of materials based on the periodic table Recognizing or recalling chemical or physical properties of a variety of substances
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Physical States and Changes
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the physical properties of solids, liquids, gases and their changes (contraction & expansion) using the particulate nature of matter model (UNIT: Chemistry) Describing phases of matter and changes in phases in terms of particle kinetic energy and energy transfer (UNIT: Chemistry)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Particles Kinetic energy Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the particulate nature of matter model Recognizing or recalling accurate statements about energy transfer during changes in phases of matter
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Mixtures and Solutions
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing characteristics of a solution at the particle level, including the process of dissolving, saturation, and concentration (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Chemistry)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Dissolve Saturation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the characteristics of a solution at particle level
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forms of Energy and Their Interactions
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining heat, heat energy transfer and temperature in terms of particle kinetic energy (UNIT: Chemistry) Comparing and contrasting conduction, convection, and radiation as methods of heat energy transfer (UNIT: Chemistry)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Conduction Convection Radiation Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about heat and particle kinetic energy Recognizing or recalling accurate statements about conduction, convection, and radiation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Measuring Motion
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the motion of objects in terms of direction and changes in motion (UNIT: Motion and Forces) Describing, measuring, and graphing quantities that characterize moving objects such as direction, speed, velocity, and acceleration (UNIT: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Velocity Acceleration Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate measures or graphs of the direction, speed, velocity and acceleration of moving objects Recognizing or recalling accurate statements about the position and motion of an object in comparison to a reference point
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Forces Effect on Motion
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the effects of contact and non-contact forces on objects using Newton's First Law (Unit: Motion and Forces) Explaining the relationship between the mass of the object, the size of the net force acting on the object, and the resulting change in motion of the object in real world examples of motion (Unit: Motion and Forces)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Newton's First Law Net force Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about Newton's first law as applied to contact and non-contact forces Recognizing or recalling accurate statements about the relationship between mass, force and size of an object
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Water on Earth
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the basic distinguishing characteristics of various locations of water on Earth (<i>e.g. glaciers, ice caps, oceans, wetlands, etc.</i>) (UNIT: Weather and Water) Describing the various paths a water molecule might follow in the water cycle and explaining factors that influence each path (UNIT: Weather and Water)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Glacier Wetland Watershed Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the characteristics of various locations of water on earth Recognizing or recalling accurate statements about the paths taken by a water molecule in the water cycle
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Atmosphere
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the composition, characteristics, and structure of the Earth's atmosphere (UNIT: Weather and Water)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Exosphere Thermosphere Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the Earth's atmosphere
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Weather and Climate
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing common weather instruments (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Weather and Water) Interpreting weather maps to describe local, regional and national weather conditions (UNIT: Weather and Water) Explaining how the interaction of air masses influences weather conditions (UNIT: Weather and Water) Analyzing how radiant energy from the sun heats earth materials and influences weather (UNIT: Weather and Water) Comparing and contrasting climate regions around the world (UNIT: Weather and Water)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Doppler Radar Air mass Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about weather maps Recognizing or recalling accurate statements about the interaction of air masses and their influence of weather conditions Recognizing or recalling accurate statements about the effect of the sun's energy on weather patterns Recognizing or recalling accurate statements about the effect of geography on weather and climate
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



The Nature of Science
Measurement Topic: Scientific Knowledge
Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing similar investigations that yield different results to determine the cause of the difference and developing a plan to eliminate the variables (Units Providing Good Scoring Opportunities: Introduction to Science, Earth Systems, Electricity and Magnetism) Tracing the development of an idea to a scientific theory (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Scientific theory Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the variables that exist in investigations Recognizing or recalling accurate statements about theories and hypotheses
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – The Scientific Method
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Proposing questions and hypotheses that can be studied through scientific investigations and distinguishing them from questions and hypotheses that cannot be examined scientifically (Units Providing Good Scoring Opportunities: Introduction to Science, Electricity and Magnetism, Earth Systems) Explaining why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (Units Providing Good Scoring Opportunities: Introduction to Science, Electricity and Magnetism, Earth Systems) Describing why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (Units Providing Good Scoring Opportunities: Introduction to Science, Electricity and Magnetism, Earth Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Hypothesis Independent/dependent variable Control Performing basic processes, such as: <ul style="list-style-type: none"> Identifying examples of questions and hypotheses that can be studied through scientific investigations Identifying the variables (<i>e.g., independent, dependent, control</i>) in a scientific investigation Recognizing or recalling accurate statements about the role of questioning and defending in the scientific process
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Inquiry – Data Collection and Analysis
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Using appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science) Describing basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (UNIT: Introduction to Science) Organizing, displaying, and interpreting scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (Units Providing Good Scoring Opportunities: Introduction to Science, Earth Systems, Electricity and Magnetism) Interpreting and evaluating tables, charts, and graphs produced by others (Units Providing Good Scoring Opportunities: Introduction to Science, Earth Systems, Electricity and Magnetism) Citing evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (Units Providing Good Scoring Opportunities: Introduction to Science, Earth Systems, Electricity and Magnetism)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Stem-and-leaf Box-and-whisker Scatter Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of tools and technologies used in investigations to gather, organize and report scientific results Recognizing or recalling accurate statements about safety procedures Recognizing or recalling accurate statements about scientific data and interpretation of tables, graphs and plots and the interpretation Citing evidence using a teacher provided template
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Scientific Enterprise – Science and Society
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing ways in which science and society influence one another (Units Providing Good Scoring Opportunities: Introduction to Science, Earth Systems, Body Systems) Describing the diverse nature of science and scientists past and present (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Earth Systems, Classification, Species Over Time, Body Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Diversity Scientific enterprise Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the arguments on either side of a conflict between societal and scientific values Recognizing or recalling accurate statements about and examples of scientists and their discoveries
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Nature of Science
Measurement Topic: Common Themes in Science
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the parts, subsystems and interactions of a system (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Body Systems) Measuring and graphing change over time and analyzing the results to determine patterns and trends or predict events (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Body Systems, Species Over Time) Comparing and contrasting the properties of objects as they change in scale (Units Providing Good Scoring Opportunities: Introduction to Science, Earth in Space, Earth Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Subsystems Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the parts, subsystems and interactions of a system Describing patterns of change based on given graphs Recognizing or recalling accurate statements about the properties of objects as they change in scale
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Animal Body Structures and Functions
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the interaction between each of the human body systems, including homeostasis and the mechanisms that maintain the balance of body systems (UNIT: Body Systems) Comparing the body systems of various animals and explaining how differences relate to the needs of the animals in their habitats (UNIT: Body Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Homeostasis Organs Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the structure, function and interaction of human body systems Recognizing or recalling accurate statements about homeostasis Recognizing or recalling accurate statements about the body systems of various animals Recognizing or recalling accurate statements about how body systems relate to the needs of animals in their habitat
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Plant and Animal Adaptations
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the inherited and learned structures, behavior and physiology of organisms that contribute to survival in their particular environment (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Inherited vs. learned Physiology Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the inherited and learned structures, behavior and physiology of organisms that contribute to survival
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Fossils and Extinction
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how fossils provide evidence of the existence, diversification, and extinction of organisms from the past (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Species diversification Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about fossils as evidence of the existence, diversification and extinction of organisms
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

The Living Environment
Measurement Topic: Genetics and Heredity
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the process of natural selection and evaluating evidence of it as a mechanism that leads to diversity of species over time (UNIT: Species Over Time) Explaining the impact of both sexual and asexual reproduction on the spread of traits that are detrimental or beneficial for the survival of an organism (UNIT: Species Over Time)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Natural selection Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the process of natural selection and the evidence for it Recognizing or recalling accurate statements about the impact of sexual and asexual reproduction on the spread of traits
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Physical Science
Measurement Topic: Electricity
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Constructing complex circuits and describing the interaction of the circuit components to produce heat, light, sound, and magnetic effects (UNIT: Electricity and Magnetism) Analyzing changing current flow in given circuits (UNIT: Electricity and Magnetism) Analyzing and describing the process for generating electrical energy from a variety of energy sources (<i>e.g. sun, wind and coal</i>) (UNIT: Electricity and Magnetism) Describing the relationship between electric current and magnetism (UNIT: Electricity and Magnetism)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Circuit Voltage Current Resistance Charged particles Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about complex circuits and the interaction of circuit components Recognizing or recalling accurate statements about the relationship between voltage, current and resistance Recognizing or recalling accurate statements about the process for generating electrical energy from a variety of sources Recognizing or recalling accurate statements about the relationship between electric current and magnetism
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Characteristics of Objects in Space
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting the major characteristics of bodies in the Solar System (UNIT: Earth in Space) Describing basic characteristics of the Milky Way and recognizing it as one galaxy among billions in the universe (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Comparing the size and distance of objects within systems in the universe using either astronomical units or light years, depending on the distance (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Describing the appearance and apparent motion of groups of stars in the night sky relative to Earth and how various cultures have understood and used them for navigation and calendars (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Galaxy Astronomical unit Light year Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about or examples of the major characteristics of bodies in the Solar System Recognizing or recalling accurate statements about the characteristics of the Milky Way Recognizing or recalling accurate statements about the size and distance between objects in the universe
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Interaction of the Sun, Earth, and Moon
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how the rotation and revolution of Earth and the tilt of Earth on its axis cause observed phenomena on Earth such as days/nights and seasons (UNIT: Earth in Space) Comparing and contrasting the ideas of Ptolemy, Aristotle, Copernicus, and Galileo regarding Earth's position and motion in space (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) (UNIT: Earth in Space) Explaining tides (high, low, neap, spring) as they relate to the position and gravitational force of the Sun and Moon (UNIT: Earth in Space) Correlating the pattern of change in the location and phase of the Moon with the actual motion of the Moon around Earth (UNIT: Earth in Space) Describing how the relative positions of the Sun, Earth, and Moon can result in solar and lunar eclipses (UNIT: Earth in Space) Analyzing and describing the role of gravity in celestial phenomena (UNIT: Earth in Space)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Axis Neap tide Moon phases Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling examples of constellations Recognizing or recalling accurate statements about the relationship between the rotation, revolution and tilt of the earth on days, nights and seasons Recognizing or recalling accurate statements about tides Recognizing or recalling accurate statements about the relationship between the phases of the moon and the motion of the moon around the earth Recognizing or recalling accurate statements solar and lunar eclipses
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Earth and Space Science
Measurement Topic: Earth Systems
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing the Earth system (hydrosphere, atmosphere, lithosphere, biosphere, cryosphere, anthrosphere) to other systems of parts that make up a whole (UNIT: Earth Systems) Comparing and contrasting different types of systems (open, closed) and identifying what makes Earth an open mechanistic system (UNIT: Earth Systems) Analyzing various events on Earth (<i>e.g., a volcano erupting</i>) and describing the impact they have across multiple spheres of the Earth (UNIT: Earth Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing or recalling specific terminology such as: <ul style="list-style-type: none"> Hydrosphere Atmosphere Open system Performing basic processes, such as: <ul style="list-style-type: none"> Recognizing or recalling accurate statements about the earth system Recognizing or recalling accurate statements about different types of systems and what makes Earth an open mechanistic system Recognizing or recalling examples of the impact an event can have on other parts of the earth system
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



NHA Academic Vocabulary List

Michigan Kindergarten

Science

Introduction to Animals

Animal Features
Behavior
Death
Needs
Shelter
Growth

Magnetism

Attract
Magnets
Repel

How Do We Learn

Magnifier
Measurement Tools
Question
Ruler
Senses
Thermometer

Seasons

Year
Seasonal Change



NHA Academic Vocabulary List

Michigan Grade One

Science

Introduction to Science

Chart
Observation
Scientist

Animal Adaptations

Extinction
Fossil
Parent/Offspring Similarity
Prehistoric Animals
Traits

Ecosystems

Change
Environment
Food

Properties

Color
Human-made/Natural
Shape
Size
Texture
Weight

The Surface of Earth

Boulder
Earth Materials
Pebble
Rock Characteristics
Sand
Soil

Weather

Air
Cloud (cirrus, cumulus, stratus)
Temperature
Weather Conditions
Wind

Earth in Space

Day/Night
Month
Moon
Star/Star Brightness
Sun's Position



NHA Academic Vocabulary List

Michigan Grade Two

Science

Introduction to Science

Evidence
Investigation
Reasoning

Plants

Diversity
Germination
Nutrients

Matter, Mixtures, and Changes

Freezing
Liquid
Melting
Mixture
Solid
States of Matter

Energy

Energy
Heat

Motion and Forces

Gravity
Balance
Motion (circular, straight-line, zig-zag, vibration)
Position
Pulling
Pushing
Simple Machine

The Water Cycle

Evaporation
Precipitation
Runoff



NHA Academic Vocabulary List

Michigan Grade Three

Science

Introduction to Science

Repeatability
Inference
Scientific Knowledge

Classification

Vertebrate/Invertebrate

Motion and Forces

Change of Direction
Change of Motion
Change of Speed
Force

Sound

Amplitude
Medium
Pitch
Vibration

Light

Light Reflection
Light Refraction
Opaque
Translucent
Transparent

The Changing Surface of Earth

Deposition
Erosion
Natural Forces
Runoff
Weathering

Rocks and Minerals

Igneous
Metamorphic
Minerals
Rock Composition
Sedimentary

Earth in Space

Apparent Movement
Constellation
Orbit
Solar System
Universe



NHA Academic Vocabulary List

Michigan Grade Four

Science

Introduction to Science

Logical Conclusions
Science Tools
Testable Question

Species Over Time

Acquired Traits
Competition
Inherited Characteristic
Similarities Among Species
Variations Among Species

Ecosystems

Food Chain
Food Web
Population/Overpopulation
Predator/Prey

Animal Adaptations

Adaptations
Animal Habitats
Animal Life Cycles
Camouflage
Survival Behaviors
Survival Features

Plants

Annuals
Biennials
Plant Parts
Perennials
Plant Adaptations

Energy

Atomic Energy
Chemical Energy
Electrical Energy
Energy Transfer
Heat Energy
Mechanical Energy
Radiant Energy
Sound Energy

States of Matter

Conservation of Matter
Phase Changes of Matter
States of Water

Electricity and Magnetism

Earth's Magnetic Field
Electrical Charge
Electrical Circuit
Electrical Current
Electricity

Conservation of Natural Resources

Natural Resources
Recycle

Properties of Materials

Composition of Matter
Conductivity
Density
Flexibility



NHA Academic Vocabulary List

Michigan Grade Five

Science

Introduction to Science

Controlled Experiment
Hypothesis
Variables

Technological Design

Engineering
Inventions
Natural Systems
Prototype
Technology

Body Systems

Circulatory System
Digestive System
Endocrine System
Excretory System
Muscular System
Nervous System
Respiratory System
Skeletal System

Mixtures and Solutions

Concentration
Heterogeneous Mixture
Homogeneous Mixture
Saturation
Solution

Weather and Water

Climate
Condensation
Distribution of Water (freshwater vs. saltwater)



NHA Academic Vocabulary List

Michigan Grade Six

Science

Introduction to Science

Dependent Variable
Independent Variable
Scientific Theory
The Scientific Method

Models and Design

Black Boxes
Design Process

Ecosystems

Carrying Capacity
Energy Pyramid
Niches
Photosynthesis
Population Density
Symbiotic Relationships

Energy

Conservation of Energy
Energy Source
Energy Transformation
Fossil Fuels
Non Renewable Resources
Potential Energy
Renewable Resources

Sound

Dissipation of Energy
Frequency
Longitudinal Waves
Transverse Waves
Wavelength

Light

Color Addition / Subtraction
Electromagnetic Spectrum
Light Scattering
Light Transmission
Visible Light

Geology

Crustal Plate Movement
Depositional/Erosional Landforms
Layers of the Earth
Plate Tectonics
Rock Cycle
Topographical Maps



NHA Academic Vocabulary List

Michigan Grade Seven

Science

Introduction to Science

Graph
Scientific Enterprise

Cells

Cell Theory
Cellular Respiration
Specialized Cells

Heredity

Asexual/Sexual Reproduction
Dominant/Recessive Traits
Phenotype/Genotype
Punnett Square

Motion and Forces

1st Law of Motion
2nd Law of Motion
Acceleration
Balanced Force
Velocity

Chemistry

Element
Chemical Reaction
Kinetic Energy
Molecule
Reactant
Substance

Weather and Water

Atmospheric Composition
Atmospheric Pressure
Weather Map Symbols
Weather Measurement



NHA Academic Vocabulary List

Michigan Grade Eight

Science

Introduction to Science

Nature of Science
Data Analysis
Scientific Knowledge

Species Over Time

Artificial/Natural Selection
Mutations
Physiological Change

Body Systems

Equilibrium
Hormones
Tissue
Organ

Electricity and Magnetism

Amperes
Electrical Energy
Electromagnetism
Voltage

Earth Systems

Closed System
Deforestation
Eutrophication
Ice Shelf Disintegration

Earth in Space

Galaxies
Geocentric Model
Gravitational Force
Heliocentric Model
Light Year
Solar/Lunar Eclipses



QUARTER 1	
Michigan	
Science: Kindergarten	
Unit: How Do We Learn	
Year Long Curriculum Plan by Quarter	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events and identify this as something that scientists do to gain knowledge about the world Generate basic questions (who, what, when, where, why, and "I wonder...") from observations of the natural world
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments

QUARTER 2	
<i>Michigan</i>	
<i>Science: Kindergarten</i>	
Unit: Introduction to Animals	
Year Long Curriculum Plan by Quarter	The Living Environment: Animal Body Structures and Functions <ul style="list-style-type: none"> Identify structures specific to a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region
	The Living Environment: Classification <ul style="list-style-type: none"> Categorize organisms based on a variety of simple criteria (e.g., body features, appendages, methods of movement, body covering)
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events and identify this as something that scientists do to gain knowledge about the world
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations

QUARTER 3	
<i>Michigan</i>	
<i>Science: Kindergarten</i>	
Unit: Introduction to Animals	
Year Long Curriculum Plan by Quarter	The Living Environment: Needs of Organisms <ul style="list-style-type: none"> Describe the basic needs of a wide variety of animals, such as fish, snails, worms, birds, and other common animals native to the region Explain how food is used by animals Compare and contrast the needs of animals with the needs of humans which include safety precautions, good hygiene and healthy habits
	The Living Environment: Ecosystems <ul style="list-style-type: none"> Describe how the behavior of animals is influenced by the conditions of their environment
	The Living Environment: Life Cycles of Plants and Animals <ul style="list-style-type: none"> Describe the basic differences in life cycles of common animals, including humans, as they grow and develop over time

QUARTER 4		
Michigan		
Science: Kindergarten		
Year Long Curriculum Plan by Quarter	Unit: Magnetism	Unit: Seasons
	Physical Science: Magnetism <ul style="list-style-type: none"> Explain the effect of magnets on certain objects whether touching or not Describe some real-world applications of magnets Recall objects that can be damaged by exposure to magnets (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	Earth and Space Science: Weather and Climate <ul style="list-style-type: none"> Observe and describe the cyclical pattern of seasons (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Correlate the different seasons with different life processes in plants and animals (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Generate basic questions (who, what, when, where, why, and "I wonder...") from observations of the natural world The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs and identify this as something that scientists do to help them learn more about their observations



QUARTER 1			
Michigan			
Science: Grade One			
Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional-objectives are integrated into other units)	Unit: Animal Adaptations	Unit: Ecosystems
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence 	The Living Environment: Plant and Animal Adaptations <ul style="list-style-type: none"> Describe the physical characteristics of a variety of North American animals that help them survive in their particular environments Identify the similarities and differences in features and characteristics of animals of the same species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	The Living Environment: Food Chains and Webs <ul style="list-style-type: none"> Classify animals as plant eaters, animal eaters, or both plant and animal eaters and identify their primary food source
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world 	The Living Environment: Genetics and Heredity <ul style="list-style-type: none"> Describe similarities and differences between offspring and parents of a variety of animals 	The Living Environment: Ecosystems <ul style="list-style-type: none"> Describe evidence that all environments change, and often as a result of the organisms living there (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments 	The Living Environment: Fossils and Extinction <ul style="list-style-type: none"> Describe fossils as evidence that there are kinds of animals that lived long ago that are no longer found on Earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Identify and record instances of things that change and the different ways they change
	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Identify the parts of things and how one part connects to and affects another (There is no GLCE that aligns with this NHA objective. 	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Identify similarities and differences between a model of an object and the real thing Describe the different sizes, weights, ages, and speeds of things observed 	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Identify and record instances of things that change and the different ways they change

	<p>Teach only as an enrichment objective as time permits.)</p> <ul style="list-style-type: none"> Identify and record instances of things that change and the different ways they change Identify similarities and differences between a model of an object and the real thing Describe the different sizes, weights, ages, and speeds of things observed 		
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QUARTER 2			
Michigan			
Science: Grade One			
Unit: Properties			
Year Long Curriculum Plan by Quarter	Physical Science: Properties of Materials <ul style="list-style-type: none"> Explain that objects have properties that can be analyzed and described using the senses Describe, compare and classify objects by size, color, shape, texture, weight, magnetism, and ability to float 		
	Engineering and Technology: Engineering <ul style="list-style-type: none"> Describe the relationship between the properties of a material and its typical uses and determine the best material for a specific use (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Compare and contrast manmade and natural materials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 		
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments 		

QUARTER 3	
<i>Michigan</i>	
<i>Science: Grade One</i>	
Unit: The Surface of Earth	
Year Long Curriculum Plan by Quarter	Earth and Space Science: The Changing Earth <ul style="list-style-type: none"> Recall major features of the Earth's surface (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	Earth and Space Science: Earth Materials and Responsible Use <ul style="list-style-type: none"> Describe the basic properties of rocks (e.g., color, composition, texture, size) Classify rock particles as boulders, cobble, pebbles, gravel, sand, silt, or clay Explain uses for different natural resources based upon their properties (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Compare and contrast soil samples by components (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments

QUARTER 4		
Michigan		
Science: Grade One		
Year Long Curriculum Plan by Quarter	Unit: Weather	Unit: Earth in Space
	<p>Earth and Space Science: Atmosphere</p> <ul style="list-style-type: none"> Explain that air is a substance that surrounds us, takes up space, moves as wind, and interacts with us and objects on earth (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>Earth and Space Science: Daily Weather Measurement</p> <ul style="list-style-type: none"> Describe patterns of change in weather over time Describe various tools that are used in weather measurement <p>Earth and Space Science: Weather and Climate</p> <ul style="list-style-type: none"> Describe the effect of the Sun's rays on land, air, and water Compare and contrast cirrus, stratus, and cumulus clouds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe examples of severe weather and appropriate safety precautions <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify and record instances of things that change and the different ways they change 	<p>Earth and Space Science: Interaction of the Sun, Earth, and Moon</p> <ul style="list-style-type: none"> Compare and contrast day and night by observing and recording differences in temperature, light, and objects visible in the sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>Earth and Space Science: Characteristics of Objects in Space</p> <ul style="list-style-type: none"> Describe the changing look and location of the moon in the day and night sky (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) List observable characteristics of stars (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Describe the different sizes, weights, ages, and speeds of things observed



QUARTER 1		
Michigan		
Science: Grade Two		
Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional- objectives are integrated into other units)	Unit: Plants
	<p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs Safely use tools and instruments (e.g., thermometers, magnifiers, rulers, balances, scissors, hammers, pliers, screwdrivers) to construct, measure, and/or look at objects Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify the parts of things and how one part connects to and affects another (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and record instances of things that change and the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify similarities and differences between a model of an object and the real thing Describe the different sizes, weights, ages, and speeds of things observed 	<p>The Living Environment: Needs of Organisms</p> <ul style="list-style-type: none"> Describe evidence that plants are alive and need air, water, light, and nutrients to grow <p>The Living Environment: Life Cycles of Plants and Animals</p> <ul style="list-style-type: none"> Describe the changes observed in plants as they progress through their life cycle <p>The Living Environment: Plant Structures and Function</p> <ul style="list-style-type: none"> Compare and contrast flowering plants and grasses of different species in structure, life processes, and reaction to environmental influences (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe the structure and function of the stem, bulbs, and roots in the growth of new plants <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Describe the different sizes, weights, ages, and speeds of things observed

QUARTER 2	
Michigan	
Science: Grade Two	
Unit: Motion and Forces	
Year Long Curriculum Plan by Quarter	<p>Physical Science: Forces Effect on Motion</p> <ul style="list-style-type: none"> Describe balance as a function of position and weight/counterweight (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe the effects that pushing or pulling have on the motion of objects Describe the observable effects of gravity on objects <p>Physical Science: Measuring Motion</p> <ul style="list-style-type: none"> Describe the position of an object relative to another object or background Compare and contrast the motion of different objects <p>Physical Science: Simple Machines</p> <ul style="list-style-type: none"> Describe simple machines and their purpose (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify similarities and differences between a model of an object and the real thing Describe the different sizes, weights, ages, and speeds of things observed

QUARTER 3	
<i>Michigan</i>	
<i>Science: Grade Two</i>	
Unit: Energy	
Year Long Curriculum Plan by Quarter	Physical Science: Energy Resources <ul style="list-style-type: none"> Describe how energy is used in the household, in transportation, in toys, etc. (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify sources of energy, such as gasoline from oil, electricity, and food (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Demonstrate practical ways to conserve energy (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	Physical Science: Forms of Energy and Their Interactions <ul style="list-style-type: none"> Investigate and describe various methods for generating and transferring heat energy (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Describe the consistency of the results of an experiment conducted multiple times Communicate a scientific idea using evidence
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs

QUARTER 4		
Michigan		
Science: Grade Two		
Year Long Curriculum Plan by Quarter	Unit: Matter, Mixtures, and Changes	Unit: The Water Cycle
	<p>Physical Science: Properties of Materials</p> <ul style="list-style-type: none"> Compare and contrast the characteristics of various solid objects <p>Physical Science: Physical States and Changes</p> <ul style="list-style-type: none"> Describe basic characteristics and properties of liquids Explain how different materials react to change (e.g. in temperature, pressure, forces) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>Physical Science: Mixtures and Solutions</p> <ul style="list-style-type: none"> Describe how mixtures can be created and separated using various tools Describe characteristics of solutions (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Make measurements of length, weight, temperature, capacity and volume using standard and nonstandard units and appropriate instruments 	<p>Earth and Space Science: Water on Earth</p> <ul style="list-style-type: none"> Analyze precipitation such as snow, ice, rain, hail, and sleet as forms of water resulting from different conditions Compare and contrast the effect that surface type has on whether water seeps into the surface, runs off, or puddles Describe the effect of evaporation (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe the locations of solid and liquid water on Earth Investigate and explain the changes in state from solid to liquid made by water and the conditions necessary for these changes (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) MI.E.FE.02.12 Identify household uses of water (drinking, cleaning, food preparation) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Make observations related to the 5 senses about living things, nonliving objects, and events Plan simple investigations as a strategy for evaluating predictions based on questions developed from observations of the natural world <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Record and communicate findings from observations using a variety of methods such as drawings, journaling, pictographs, and bar graphs <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Communicate a scientific idea using evidence Describe the consistency of the results of an experiment conducted multiple times



QUARTER 1			
Michigan			
Science: Grade Three			
Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional-objectives are integrated into other units)	Unit: Classification	Unit: Motion and Forces
	<p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Differentiate between observation and inference in scientific explanations Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Safely use appropriate tools and simple equipment to gather scientific data and extend the senses Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Communicate the results of investigations and describe the investigations in ways that enable others to repeat them Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) 	<p>The Living Environment: Classification</p> <ul style="list-style-type: none"> Classify organisms based on physical and environmental characteristics Classify vertebrates and invertebrates on the basis of observable physical characteristics <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions 	<p>Physical Science: Measuring Motion</p> <ul style="list-style-type: none"> Describe the position and change in position (motion) of an object in comparison to a reference point Calculate the speed of objects based on the distance traveled divided by the time it took to travel the distance <p>Physical Science: Forces Effect on Motion</p> <ul style="list-style-type: none"> Analyze changing motion of objects and identify forces acting on the object to cause change in motion Explain how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify and measure things that change and describe the different ways they change Explain the role of models in studying objects, events, and processes <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Communicate the results of investigations and describe the investigations in ways that enable

	<p>and their contributions</p> <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describe the different ways they change Explain the role of models in studying objects, events, and processes Identify objects that are at the extremes in sizes, weights, ages, and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 		<p>others to repeat them</p> <ul style="list-style-type: none"> Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations
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QUARTER 2	
<i>Michigan</i>	
<i>Science: Grade Three</i>	
Unit: Earth in Space	
Year Long Curriculum Plan by Quarter	Earth and Space Science: Characteristics of Objects in Space <ul style="list-style-type: none"> Describe the major characteristics of the Sun, Moon, and planets Describe the motion and relative distance of the planets around the Sun Describe characteristics of stars
	Earth and Space Science: Interaction of the Sun, Earth, and Moon <ul style="list-style-type: none"> Describe the correlation between the rotation and revolution of the Earth and our days, nights, and years Describe the pattern of changes in the appearance of the moon throughout the cycle Describe the rotation and revolution of the Moon around Earth
	Engineering and Technology: Technology <ul style="list-style-type: none"> Describe some of the technologies that have advanced our knowledge of objects in space
	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Identify and measure things that change and describe the different ways they change Explain the role of models in studying objects, events, and processes
	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

QUARTER 3		
Michigan		
Science: Grade Three		
Year Long Curriculum Plan by Quarter	Unit: Sound	Unit: Light
	<p>Physical Science: Sound</p> <ul style="list-style-type: none"> Describe the relationship between vibrations and the production of sound Explain how sound energy travels through solids, liquids, and gas (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Compare and contrast sounds produced by various objects in terms of pitch and amplitude Describe the variables that affect pitch <p>The Living Environment: Animal Body Structures and Functions</p> <ul style="list-style-type: none"> Describe the parts of the ear and their functions (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Communicate the results of investigations and describe the investigations in ways that enable others to repeat them Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies <p>Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations</p>	<p>Physical Science: Light</p> <ul style="list-style-type: none"> Describe the refraction, reflection, transmission, and/or absorption of light as it interacts with objects that are transparent, translucent, and opaque Describe the visible spectrum of light (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

QUARTER 4		
Michigan		
Science: Grade Three		
Year Long Curriculum Plan by Quarter	Unit: Rocks and Minerals	Unit: The Changing Surface of Earth
	<p>Earth and Space Science: Earth Materials and Responsible Use</p> <ul style="list-style-type: none"> Compare and contrast types of earth materials Describe properties used to identify minerals and determine the mineral makeup of rocks Compare and contrast the observable features and formation processes of igneous, sedimentary, and metamorphic rocks Describe the identifying properties of common rock samples <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify and measure things that change and describe the different ways they change Explain the role of models in studying objects, events, and processes <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions 	<p>Earth and Space Science: The Changing Earth</p> <ul style="list-style-type: none"> Compare and contrast major features of the earth's surface Describe the variety of forces involved in weathering, erosion and deposition Describe how physical/mechanical weathering (e.g., wind, water, ice, and gravity) causes change to the Earth's surface over time <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Identify and measure things that change and describe the different ways they change Explain the role of models in studying objects, events, and processes <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions



QUARTER 1

Michigan

Science: Grade Four

Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional- objectives are integrated into other units)		Unit: Ecosystems
	The Nature of Science: Scientific Knowledge		Earth and Space Science: Earth Materials and Responsible Use
	<ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Differentiate between observation and inference in scientific explanations Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations 		<ul style="list-style-type: none"> Compare the components and properties of various soil types (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
	The Nature of Science: Scientific Inquiry- The Scientific Method		The Living Environment: Food Chains and Webs
	<ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) 		<ul style="list-style-type: none"> Analyze the role of plants in food chains and webs Classify various organisms as producers, herbivores, carnivores, omnivores, or decomposers Compare and contrast simple food chains and food webs
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis		The Living Environment: Needs of Organisms
	<ul style="list-style-type: none"> Safely use appropriate tools and simple equipment to gather scientific data and extend the senses Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Communicate the results of investigations and describe the investigations in ways that enable others to repeat them Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots 		<ul style="list-style-type: none"> Explain the necessity of food for the survival, growth, and repair of animals
	The Nature of Science: Scientific Enterprise- Science and Society		The Living Environment: Ecosystems
	<ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions 		<ul style="list-style-type: none"> Describe components of an ecosystem that have an effect on the behavior and types of organisms in the ecosystem (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Classify the interaction of organisms in an ecosystem (e.g., predator/prey, beneficial to both organisms, beneficial to one and harmful to another, or beneficial to one and neither harmful nor helpful to another) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Describe changes to an ecosystem from natural causes (e.g., disease, fire, flood, erosion, drought, and succession) Describe changes to an ecosystem from human causes Describe changes (beneficial, neutral or detrimental) caused by organisms in the ecosystem
	The Nature of Science: Common Themes in Science		The Nature of Science: Scientific Enterprise- Science and Society
	<ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describe the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain the role of models in studying objects, events, and processes Identify objects that are at the extremes in sizes, weights, ages, and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 		<ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

	Engineering and Technology, Technology <ul style="list-style-type: none"> S.RS.04.16 Identify technology used in everyday life (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) S.RS.04.17 Identify current problems that may be solved through the use of technology (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) 	
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QUARTER 2			
Michigan			
Science: Grade Four			
Year Long Curriculum Plan by Quarter	Unit: Plants	Unit: Animal Adaptations	Unit: Species Over Time
	The Living Environment: Plant Structures and Function <ul style="list-style-type: none"> Explain the function of each of the plant parts MI.L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers). (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) The Living Environment: Plant and Animal Adaptations <ul style="list-style-type: none"> Describe the adaptive features of plants native to habitats around the world The Living Environment: Life Cycles of Plants and Animals <ul style="list-style-type: none"> Compare the life cycles of common annuals, biennials, and perennials (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) 	The Living Environment: Animal Body Structures and Functions <ul style="list-style-type: none"> Identify the external structures of a variety of animals from around the world that perform particular functions critical to the survival of the animals The Living Environment: Life Cycles of Plants and Animals <ul style="list-style-type: none"> Explain ways that the stages of an animal's life cycle (including humans) contribute to the survival of the animal (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) The Living Environment: Plant and Animal Adaptations <ul style="list-style-type: none"> Identify the adaptive features (e.g. camouflage, behaviors, weapons) of animals native to common habitats around the world The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) The Nature of Science: Scientific Inquiry- Data Collection and Analysis	The Living Environment: Genetics and Heredity <ul style="list-style-type: none"> Differentiate between those traits shared between parents and offspring that are inherited and those that are learned The Living Environment: Plant and Animal Adaptations <ul style="list-style-type: none"> Identify individual differences in organisms from the same population that could give them an advantage or disadvantage in the competition for resources and reproduction The Living Environment: Fossils and Extinction <ul style="list-style-type: none"> Analyze organisms and environmental conditions of the past using fossil evidence Compare fossils with each other and with living organisms to determine similarities and differences Describe processes that can

	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots Communicate the results of investigations and describe the investigations in ways that enable others to repeat them 	<ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots Communicate the results of investigations and describe the investigations in ways that enable others to repeat them 	<p>lead to the extinction of a species (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)</p>
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations 	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations 	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

QUARTER 3			
Michigan			
Science: Grade Four			
Year Long Curriculum Plan by Quarter	Unit: Conservation of Natural Resources	Unit: Properties of Materials	Unit: States of Matter
	Earth and Space Science: Earth Materials and Responsible Use <ul style="list-style-type: none"> Classify manufactured products according to the Earth materials from which they are made Demonstrate and describe the practices of reducing, reusing and recycling and other conservation measures S.RS.03&04.18 Describe the effect humans and other organisms have on the balance of the natural world (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.E.ES.03.41 Identify natural resources (metals, fuels, fresh water, farmland, and forests) (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) 	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Physical Science: Properties of Materials <ul style="list-style-type: none"> Explain how the material make-up of an object determines some of the properties of the object The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Explain the role of models in studying objects, events, and processes Identify objects that are at the extremes in sizes, weights, ages, and speeds 	Physical Science: Physical States and Changes <ul style="list-style-type: none"> Compare and contrast the three states of matter by observable characteristics Explain the relationship between the temperature of an object and its state Describe the unique properties of water (expansion and contraction) as it is heated and cooled (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

	<ul style="list-style-type: none"> MI.E.ES.03.42 Classify renewable (fresh water, farmland, forests) and non-renewable (fuels, metals) resources (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions 		
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QUARTER 4		
Michigan		
Science: Grade Four		
Year Long Curriculum Plan by Quarter	Unit: Electricity and Magnetism	Unit: Energy
	<p>Physical Science: Electricity</p> <ul style="list-style-type: none"> Construct simple circuits and describe the interaction of the circuit components Compare and contrast series and parallel circuits Categorize substances and/or objects as conductors or nonconductors of electricity based on tests Create a simple electromagnet and investigate variables affecting its strength <p>Physical Science: Magnetism</p> <ul style="list-style-type: none"> Describe the properties of magnets <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots Communicate the results of investigations and describe the investigations in ways that enable others to repeat them <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Explain the role of models in studying objects, events, and processes 	<p>Physical Science: Forms of Energy and Their Interactions</p> <ul style="list-style-type: none"> Describe forms of energy and provide a real-life example of each Describe how heat spreads from one object or place to another (e.g., conduction, convection, radiation) Investigate different materials to determine which are better conductors and which are better insulators of heat Describe the transformation of energy from one form to another <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Plan and conduct simple investigations (e.g., formulate a testable question, plan a fair test, make systematic observations, and develop logical conclusions) <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots Communicate the results of investigations and describe the investigations in ways that enable others to repeat them <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations



QUARTER 1		
Michigan		
Science: Grade Five		
Year Long Curriculum Plan by Quarter	Unit: Introduction to Science	Unit: Technological Design
	<p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Compare the results of similar experiments and determine reasons for any inconsistencies Differentiate between observation and inference in scientific explanations (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Construct reasonable explanations supported by facts found in books or evidence from observations and/or investigations <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Propose and test independent and dependent variables in a controlled experiment <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Safely use appropriate tools and simple equipment to gather scientific data and extend the senses Make accurate measurements with appropriate units (centimeters, meters, Celsius, Fahrenheit, grams, seconds, minutes) Communicate the results of investigations and describe the investigations in ways that enable others to repeat them Organize, display and interpret data from observations and investigations in simple bar graphs, line plots, line graphs, and/or stem-and-leaf plots <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Describe how the parts of a system work together (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Identify and measure things that change and describe the different ways they change (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain the role of models in studying objects, events, and processes Identify objects that are at the extremes in sizes, weights, ages, and speeds (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	<p>Engineering and Technology: Engineering</p> <ul style="list-style-type: none"> Describe examples of mechanical systems that are designed to serve purposes similar to natural systems Design and construct something useful out of a variety of materials using a variety of tools Evaluate the usefulness of inventions and suggest ways that the product could be changed or improved Describe properties of materials that make them useful in design and construction (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>Engineering and Technology: Technology</p> <ul style="list-style-type: none"> Describe positive and negative effects of technology on the environment and society <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions

QUARTER 2		
Michigan		
Science: Grade Five		
Year Long Curriculum Plan by Quarter	Unit: Earth in Space	Unit: Motion and Forces
	<p>Earth and Space Science, Characteristics of Objects in Space (There are no NHA Objectives that aligns with these GLCE. Include these objectives in your unit.)</p> <ul style="list-style-type: none"> MI.E.ST.05.11 Design a model of the solar system that shows the relative order and scale of the planets, dwarf planets, comets, and asteroids to the sun. MI.E.ST.05.23 Explain the apparent motion of the stars (constellations) and the sun across the sky. <p>Earth and Space Science, Interaction of the Sun, Earth, and Moon (There are no NHA Objectives that aligns with these GLCE. Include these objectives in your unit.)</p> <ul style="list-style-type: none"> MI.E.ST.05.21 Describe the motion of planets and moons in terms of rotation on axis and orbits due to gravity. MI.E.ES.05.61 Demonstrate and explain seasons using a model. MI.E.ES.05.62 Explain how the revolution of the Earth around the sun defines a year. MI.E.ST.05.22 Explain the phases of the moon. MI.E.ST.05.24 Explain lunar and solar eclipses. MI.E.ST.05.25 Explain the tides of the oceans as they relate to the gravitational pull and orbit of the moon. 	<p>Physical Science, Forces Effect on Motion (There are no NHA Objectives that align with the following GLCE. Include these objectives in your unit.)</p> <ul style="list-style-type: none"> P.FM.05.21 Distinguish between contact forces and non-contact forces. P.FM.05.22 Demonstrate contact and non-contact forces to change the motion of an object. P.FM.05.31 Describe what happens when two forces act on an object in the same or opposing directions. P.FM.05.32 Describe how constant motion is the result of balanced (zero net) forces. P.FM.05.33 Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force <p>Physical Science, Measuring Motion</p> <ul style="list-style-type: none"> P.FM.05.34 Relate the size of change in motion to the strength of unbalanced forces and the mass of the object. P.FM.05.41 Explain the motion of an object relative to its point of reference. P.FM.05.42 Describe the motion of an object in terms of distance, time and direction, as the object moves, and in relationship to other objects. P.FM.05.43 Illustrate how motion can be measured and represented on a graph.

QUARTER 3		
Michigan		
Science: Grade Five		
Year Long Curriculum Plan by Quarter	Unit: Body Systems	Unit: Species Over Time
	<p>The Living Environment: Animal Body Structures and Functions</p> <ul style="list-style-type: none"> Describe the functions of human body systems and major organs of the body (e.g., heart, lungs, skin) MI.L.OL.05.42 Explain how animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive) work together to perform selected activities (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Explain the role of models in studying objects, events, and processes <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Identify scientists of various groups (i.e. gender, country of origin, socioeconomic status, age) and their contributions 	<p>The Living Environment, Plant and Animal Adaptations</p> <ul style="list-style-type: none"> Describe the functions of human body systems and major organs of the body (e.g., heart, lungs, skin) MI.L.OL.05.42 Explain how animal systems (digestive, circulatory, respiratory, skeletal, muscular, nervous, excretory, and reproductive) work together to perform selected activities (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.11 Explain how behavioral characteristics (adaptation, instinct, learning, habit) of animals help them to survive in their environment (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.HE.05.11 Explain that the traits of an individual are influenced by both the environment and the genetics of the individual (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.HE.05.12 Distinguish between inherited and acquired traits (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.21 Relate degree of similarity in anatomical features to the classification of contemporary organisms (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.13 Describe how fossils provide evidence about how living things and environmental conditions have changed (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.) MI.L.EV.05.14 Analyze the relationship of environmental change and catastrophic events (for example: volcanic eruption, floods, asteroid impacts, tsunami) to species extinction (There is no NHA Objective that aligns with this GLCE. Include this objective in your unit.)

QUARTER 4		
Michigan		
Science: Grade Five		
Year Long Curriculum Plan by Quarter	Unit: Mixtures and Solutions (Teach this unit only if time permits. There aren't 5 th grade GLCE that align to these objectives, though teaching them would help prepare students for 7 th grade chemistry.)	Unit: Weather and Water (Teach this unit only if time permits. There aren't 5 th grade GLCE that align to these objectives, though teaching them would help prepare students for 7 th grade weather.)
	<p>Physical Science: Mixtures and Solutions</p> <ul style="list-style-type: none"> Determine the appropriate tools and processes needed to separate various mixtures Describe factors that influence saturation in a solution Describe the appropriate tools and senses needed to compare and contrast the concentration levels of various solutions <p>Physical Science: Chemical Changes</p> <ul style="list-style-type: none"> Classify reactions as chemical or not based on the presence of color change, odor, light or heat emission, and/or gas 	<p>Earth and Space Science: Weather and Climate</p> <ul style="list-style-type: none"> Measure, record, and explain daily weather phenomena using the appropriate tools Correlate cloud types with general weather conditions Describe a variety of storm types, the weather conditions associated with each, and explain when they occur Compile and use weather data to determine climate trends Describe the effects geography can have on weather and climate <p>Earth and Space Science: Water on Earth</p> <ul style="list-style-type: none"> Analyze the distribution, location, and state of water on Earth Describe the processes of infiltration, runoff, evaporation, condensation, and precipitation as they relate to movement of water in the water cycle <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Explain the role of models in studying objects, events, and processes



QUARTER 1

Michigan

Science: Grade Six

Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional- objectives are integrated into other units)	Unit: Ecosystems
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables Trace the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	The Living Environment: Food Chains and Webs <ul style="list-style-type: none"> Analyze the food webs formed by the interactions of producers, carnivores, herbivores and decomposers in an ecosystem Describe the process of photosynthesis Describe the flow of energy through an ecosystem Describe the cycle of nitrogen, carbon, and phosphorous in an ecosystem
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science 	The Living Environment: Ecosystems <ul style="list-style-type: none"> Analyze and describe the relationships among biotic and abiotic factors and their effects on populations of terrestrial and aquatic ecosystems Analyze natural changes and human-caused changes in an ecosystem to evaluate, with evidential support, whether they are detrimental or beneficial to the survival of populations in that ecosystem Analyze the ecological succession of a variety of environment
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures 	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events
	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another 	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science
	The Nature of Science: Common Themes in Science	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables
		The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter)

	<ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measure and graph change over time and analyze the results to determine patterns and trends or predict events Compare and contrast the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	<ul style="list-style-type: none"> Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another
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QUARTER 2		
Michigan		
Science: Grade Six		
Year Long Curriculum Plan by Quarter	Unit: Models and Design	Unit: Energy
	<p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Construct physical and conceptual models that mimic the characteristics of an unknown system and compare the model to the system Evaluate the usefulness of the model as a comparison tool <p>Engineering and Technology: Engineering</p> <ul style="list-style-type: none"> Develop a product that fulfills a set of requirements using a product development approach (i.e. design, construction of prototype, tests, evaluation of design, redesign) <p>Engineering and Technology: Technology</p> <ul style="list-style-type: none"> Evaluate various technologies in terms of drawbacks and benefits to society Explain how societies influence what types of technology are developed and used in a variety of fields Describe the similarities and differences between scientific inquiry and technological design (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others 	<p>Physical Science: Forms of Energy and Their Interactions</p> <ul style="list-style-type: none"> Describe the various forms of potential and kinetic energy Trace the conversion of energy from one form to another in a system Explain the law of conservation of energy <p>Physical Science: Energy Resources</p> <ul style="list-style-type: none"> Evaluate energy sources in terms of advantages and disadvantages (e.g. cost, environmental consequences, sustainability) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe ways in which science and society influence one another

	Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports	
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QUARTER 3		
Michigan		
Science: Grade Six		
Year Long Curriculum Plan by Quarter	Unit: Sound	Unit: Light (There are no GLCE that align with this unit. Teach only as an enrichment unit if time permits.)
	<p>Physical Science: Sound</p> <ul style="list-style-type: none"> Compare and contrast the properties of longitudinal and transverse waves and specify examples of each Describe the effect of the medium on sound Relate the amplitude of a wave (i.e. sound, seismic, water) to the amount of energy used to create the vibration of the object producing the wave Describe the changing pitch of sound in terms of the speed, frequency, and wavelength of the sound waves (speed=wavelength X frequency) (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports 	<p>Physical Science: Light</p> <ul style="list-style-type: none"> Compare and contrast waves that make up the electromagnetic spectrum as versions of radiation that differ in wavelengths, frequencies, and energy levels Describe an everyday application of each of the waves of the electromagnetic spectrum Differentiate between color addition and color subtraction using colored lighting and filters Compare the reflection of light from various surfaces (e.g., loss of light, angle of reflection, reflected color) Investigate and describe the refraction of light passing through various materials (e.g., prisms, lenses, water) <p>The Living Environment: Animal Body Structures and Functions:</p> <ul style="list-style-type: none"> Analyze the form and function of the human eye <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present

QUARTER 4	
<i>Michigan</i>	
<i>Science: Grade Six</i>	
Unit: Geology	
Year Long Curriculum Plan by Quarter	Earth and Space Science: The Changing Earth <ul style="list-style-type: none"> Analyze and describe Earth's surface features using maps (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Compare the physical properties of the interior layers of Earth Describe agents of physical and chemical weathering and explain their connection to the formation of soil and sediment Analyze how physical/mechanical weathering (e.g. waves, wind, water, and glacier movements) shape and reshape Earth's surface over time Describe major geological events (mountain building, earthquakes, volcanic eruptions) as processes resulting from heat flow and movement of material within Earth Describe the three primary types of plate boundaries and the landforms associated with each Describe ways scientists learn about Earth's geologic history (e.g., seismographs, ground penetrating radar, core drillers, observations)
	Earth and Space Science: Earth Materials and Responsible Use <ul style="list-style-type: none"> Analyze observable and measurable soil properties to predict soil quality Classify sedimentary, igneous and metamorphic rocks
	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another
	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events



QUARTER 1

Michigan

Science: Grade Seven

Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional- objectives are integrated into other units)	Unit: Motion and Forces
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables Trace the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	Physical Science: Forces Effect on Motion <ul style="list-style-type: none"> Explain the effects of contact and non-contact forces on objects using Newton's First Law Explain the relationship between the mass of the object, the size of the net force acting on the object, and the resulting change in motion of the object in real world examples of motion
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science 	Physical Science: Measuring Motion <ul style="list-style-type: none"> Analyze the motion of objects in terms of direction and changes in motion Describe, measure, and graph quantities that characterize moving objects such as direction, speed, velocity, and acceleration
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events Compare and contrast the properties of objects as they change in scale
	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another 	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science
		The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables
		The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims

	<p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Measure and graph change over time and analyze the results to determine patterns and trends or predict events Compare and contrast the properties of objects as they change in scale (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) 	<p>in oral and written reports</p> <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present
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QUARTER 2	
<i>Michigan</i>	
<i>Science: Grade Seven</i>	
Unit: Chemistry	
Year Long Curriculum Plan by Quarter	<p>Physical Science: Properties of Materials</p> <ul style="list-style-type: none"> Describe physical and chemical properties of a variety of substances Describe the function of the periodic table in describing and grouping common earth elements by their basic properties (e.g., symbol, reactivity, metal, non-metal or metalloid, natural state, what products contain them) <p>Physical Science: Physical States and Changes</p> <ul style="list-style-type: none"> Explain the physical properties of solids, liquids, gases and their changes (contraction & expansion) using the particulate nature of matter model Describe phases of matter and changes in phases in terms of particle kinetic energy and energy transfer <p>Physical Science: Forms of Energy and Their Interactions</p> <ul style="list-style-type: none"> Explain heat, heat energy transfer and temperature in terms of particle kinetic energy Compare and contrast conduction, convection, and radiation as methods of heat energy transfer <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Trace the development of an idea to a scientific theory (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present <p>Physical Science: Mixtures and Solutions</p> <ul style="list-style-type: none"> Describe characteristics of a solution at the particle level, including the process of dissolving, saturation, and concentration (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) <p>Physical Science: Atoms and Molecules</p> <ul style="list-style-type: none"> Explain how chemical reactions form new substances with new properties from the rearrangement and conservation of atoms

QUARTER 3	
<i>Michigan</i>	
<i>Science: Grade Seven</i>	
Unit: Weather and Water	
Year Long Curriculum Plan by Quarter	<p>Earth and Space Science: Weather and Climate</p> <ul style="list-style-type: none"> Analyze common weather instruments (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.) Explain how the interaction of air masses influences weather conditions Interpret weather maps to describe local, regional and national weather conditions Compare and contrast climate regions around the world Analyze how radiant energy from the sun heats earth materials and influences weather <p>Earth and Space Science: Atmosphere</p> <ul style="list-style-type: none"> Describe the composition, characteristics, and structure of the Earth's atmosphere <p>Earth and Space Science: Water on Earth</p> <ul style="list-style-type: none"> Describe the various paths a water molecule might follow in the water cycle and explain factors that influence each path Describe the basic distinguishing characteristics of various locations of water on Earth (E.g. glaciers, ice caps, oceans, wetlands, etc.) <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events

QUARTER 4		
Michigan		
Science: Grade Seven		
Year Long Curriculum Plan by Quarter	Unit: Heredity	Unit: Cells
	<p>The Living Environment: Genetics and Heredity</p> <ul style="list-style-type: none"> Describe the relationship between genes, proteins, chromosomes, genomes, and DNA and explain their role in the process of heredity Compare how genetic material is transferred to offspring in sexual and asexual reproduction Use models such as Punnett squares or pedigree charts help determine the probability of traits being expressed <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another 	<p>The Living Environment: Cell Theory</p> <ul style="list-style-type: none"> Sequence the major points in the development of the cell theory, including important historical figures and technological advancements associated with the theory Explain the three components of the cell theory <p>The Living Environment: Cell Structure and Function</p> <ul style="list-style-type: none"> Describe the basic functions of cell organelles in plant and animal cells Describe how materials move into and out of cells in the processes of osmosis, diffusion, and active transport Explain how cellular respiration provides cells with the energy needed for them to carry on the functions that sustain life in organisms <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present



QUARTER 1

Michigan

Science: Grade Eight

Unit: Earth in Space

Earth and Space Science: Characteristics of Objects in Space

- Compare and contrast the major characteristics of bodies in the Solar System
- Compare the size and distance of objects within systems in the universe using either astronomical units or light years, depending on the distance (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
- Describe the appearance and apparent motion of groups of stars in the night sky relative to Earth and how various cultures have understood and used them for navigation and calendars
- Describe basic characteristics of the Milky Way and recognize it as one galaxy among billions in the universe (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)

Earth and Space Science: Interaction of the Sun, Earth, and Moon

- Analyze and describe the role of gravity in celestial phenomena
- Compare and contrast the ideas of Ptolemy, Aristotle, Copernicus, and Galileo regarding Earth's position and motion in space (There is no GLCE that aligns with this NHA objective. Teach only as an enrichment objective as time permits.)
- Explain how the rotation and revolution of Earth and the tilt of Earth on its axis cause observed phenomena on Earth such as days/nights and seasons
- Correlate the pattern of change in the location and phase of the Moon with the actual motion of the Moon around Earth
- Describe how the relative positions of the Sun, Earth, and Moon can result in solar and lunar eclipses
- Explain tides as they relate to the position and gravitational force of the Sun and Moon

Year Long Curriculum Plan by Quarter

The Nature of Science: Scientific Knowledge

- Trace the development of an idea to a scientific theory

The Nature of Science: Scientific Enterprise- Science and Society

- Describe the diverse nature of science and scientists past and present

The Nature of Science: Common Themes in Science

- Analyze the parts, subsystems and interactions of a system
- Measure and graph change over time and analyze the results to determine patterns and trends or predict events

Compare and contrast the properties of objects as they change in scale

QUARTER 2		
Michigan		
Science: Grade Eight		
Year Long Curriculum Plan by Quarter	Unit: Introduction to Science (Optional- objectives are integrated into other units)	Unit: Body Systems
	<p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables Trace the development of an idea to a scientific theory <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Use appropriate tools, technologies and metric measurements to gather, analyze, and interpret data and report results Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports Describe basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system Measure and graph change over time and analyze the results to determine patterns and trends or predict events Compare and contrast the properties of objects as they change in scale 	<p>The Living Environment: Animal Body Structures and Functions</p> <ul style="list-style-type: none"> Compare the body systems of various animals and explain how differences relate to the needs of the animals in their habitats Describe the interaction between each of the human body systems, including homeostasis and the mechanisms that maintain the balance of body systems <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Analyze the parts, subsystems and interactions of a system Measure and graph change over time and analyze the results to determine patterns and trends or predict events <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another

QUARTER 3		
Michigan		
Science: Grade Eight		
Year Long Curriculum Plan by Quarter	Unit: Electricity and Magnetism	Unit: Species Over Time
	<p>Physical Science: Electricity</p> <ul style="list-style-type: none"> Construct complex circuits and describe the interaction of the circuit components to produce heat, light, sound, and magnetic effects Analyze changing current flow in given circuits Describe the relationship between electric current and magnetism Analyze and describe the process for generating electrical energy from a variety of energy sources (e.g. sun, wind and coal) <p>The Nature of Science: Scientific Inquiry- The Scientific Method</p> <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables <p>The Nature of Science: Scientific Inquiry- Data Collection and Analysis</p> <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports 	<p>The Living Environment: Plant and Animal Adaptations</p> <ul style="list-style-type: none"> Analyze the inherited and learned structures, behavior and physiology of organisms that contribute to survival in their particular environment <p>The Living Environment: Genetics and Heredity</p> <ul style="list-style-type: none"> Explain the impact of both sexual and asexual reproduction on the spread of traits that are detrimental or beneficial for the survival of an organism Analyze the process of natural selection and evaluate evidence of it as a mechanism that leads to diversity of species over time <p>The Living Environment: Fossils and Extinction</p> <ul style="list-style-type: none"> Describe how fossils provide evidence of the appearance, diversification, and extinction of organisms from the past <p>The Nature of Science: Scientific Knowledge</p> <ul style="list-style-type: none"> Trace the development of an idea to a scientific theory <p>The Nature of Science: Scientific Enterprise- Science and Society</p> <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present <p>The Nature of Science: Common Themes in Science</p> <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events

QUARTER 4	
<i>Michigan</i>	
<i>Science: Grade Eight</i>	
Unit: Earth Systems	
Year Long Curriculum Plan by Quarter	Earth and Space Science: Earth Systems <ul style="list-style-type: none"> Compare the Earth system to other systems of parts that make up a whole Compare and contrast different types of systems and identify what makes Earth an open mechanistic system Analyze various events on Earth and describe the impact they have across multiple spheres of the Earth
	The Nature of Science: Scientific Knowledge <ul style="list-style-type: none"> Analyze similar investigations that yield different results to determine the cause of the difference and develop a plan to eliminate the variables
	The Nature of Science: Scientific Inquiry- The Scientific Method <ul style="list-style-type: none"> Propose questions and hypotheses that can be studied through scientific investigations and distinguish them from questions and hypothesis that cannot be examined scientifically Explain why only one variable (e.g., independent, dependent, control) can be manipulated at a time Describe why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science
	The Nature of Science: Scientific Inquiry- Data Collection and Analysis <ul style="list-style-type: none"> Organize, display, and interpret scientific data in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) Interpret and evaluate tables, charts, and graphs produced by others Cite evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports
	The Nature of Science: Scientific Enterprise- Science and Society <ul style="list-style-type: none"> Describe the diverse nature of science and scientists past and present Describe ways in which science and society influence one another
	The Nature of Science: Common Themes in Science <ul style="list-style-type: none"> Measure and graph change over time and analyze the results to determine patterns and trends or predict events Compare and contrast the properties of objects as they change in scale

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Maps & Globes</i>	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	<ul style="list-style-type: none"> Analyze the appropriate use and purposes of different types of maps (UNIT: Global Geography)
Grade Five	<ul style="list-style-type: none"> Determine location and distance (UNIT: US Geography) Interpret different types of maps and geographical representations (UNIT: US Geography)
Grade Four	<ul style="list-style-type: none"> Determine location and distance using map features and scale (UNIT: Geography Skills & Themes) Interpret different types of maps (UNIT: Geography Skills & Themes)
Grade Three	<ul style="list-style-type: none"> Interpret a map using its features (title, scale, grid) (UNIT: Map Features) Determine location and distance (cardinal directions, scale, grid) (UNIT: Map Features) Compare and contrast types of maps (political & physical) (UNIT: Map Features)
Grade Two	Not applicable
Grade One	<ul style="list-style-type: none"> Interpret a map using its features (cardinal directions, key) (UNIT: Earth's Continents)
Kindergarten	<ul style="list-style-type: none"> Explain how maps and globes are used (UNIT: Introduction to Maps) Describe how major landforms, bodies of water, and other features of the Earth are represented on maps and globes (UNIT: Introduction to Maps)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Physical Features</i>	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> Describe the physical features of different regions on Earth (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies, Australia Studies)
Grade Six	<ul style="list-style-type: none"> Describe the physical features of different regions on Earth (UNITS: Latin America Studies, Europe Studies)
Grade Five	<ul style="list-style-type: none"> Describe specific landforms and rivers of the United States (UNIT: US Geography)
Grade Four	<ul style="list-style-type: none"> Compare physical features of their state to regions in the United States (UNITS: US Regions, State Studies)
Grade Three	<ul style="list-style-type: none"> Describe the physical features of various places on Earth (UNIT: Ancient Rome)
Grade Two	<ul style="list-style-type: none"> Locate major landforms, bodies of water, and other features of North America (UNIT: North American Geography) Describe the physical features of various places on Earth (UNITS: India & China, Ancient Greece)
Grade One	<ul style="list-style-type: none"> Identify and locate specific major landforms and bodies of water (UNIT: Earth's Continents) Describe the physical features of various places on Earth, including the local community (UNITS: My School & Community, Early People & Civilizations)
Kindergarten	<ul style="list-style-type: none"> Identify and locate specific major landforms, bodies of water, and other features of the Earth (UNIT: Introduction to Maps)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Political Features</i>	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies, Australia Studies)
Grade Six	<ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) (UNITS: Latin America Studies, Europe Studies)
Grade Five	Not applicable
Grade Four	<ul style="list-style-type: none"> Group the United States into regions in a variety of ways (political, physical, economical) (UNIT: US Regions) Locate geographical areas within regions of the United States (states, capital cities, & major cities) (UNIT: US Regions) Locate and identify geographical areas of their own state (boundaries, capital city, other major cities) (UNIT: State)
Grade Three	<ul style="list-style-type: none"> Locate the geographic area of the world where ancient civilizations existed (UNITS: Ancient Rome, The Vikings)
Grade Two	<ul style="list-style-type: none"> Explain the difference between a continent and a country (UNIT: North American Geography) Compare and contrast urban, suburban, and rural communities (UNIT: Communities Around the World) Locate the geographic area of the world where ancient civilizations existed (UNITS: India & China, Ancient Greece)
Grade One	<ul style="list-style-type: none"> Locate their wider geographical area (UNITS: Earth's Continents, My School & Community) Locate the geographic area of the world where specific ancient civilizations existed (UNIT: Early People & Civilizations)
Kindergarten	<ul style="list-style-type: none"> Name and locate their geographical area using a map (school, city, state, and country) (UNIT: Me & My World) Identify and describe the immediate surroundings (neighborhood, address, phone number) (UNIT: Me & My World)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: 5 th Themes of Geography	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	<ul style="list-style-type: none"> Describe features of different world regions using the 5 Themes of Geography (UNIT: Global Geography) Predict the impact of natural disasters on both the physical environment and human response to the disasters (UNIT: Global Geography) Predict the consequences of movement on the physical environment (UNIT: Global Geography)
Grade Five	Not applicable
Grade Four	<ul style="list-style-type: none"> Define and list an example of each of the 5 Themes of Geography (UNIT: Geography Skills & Themes) Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)
Grade Three	<ul style="list-style-type: none"> Define and describe “Human-Environment Interaction”, one of the 5 Themes of Geography (UNIT: Map Features)
Grade Two	<ul style="list-style-type: none"> Evaluate the advantages and disadvantages of different modes of transportation (UNIT: Communities Around the World)
Grade One	Not applicable
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Economic Concepts</i>	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	<ul style="list-style-type: none"> • Make generalizations about countries and their economies using basic economic concepts (GDP, inflation) (UNIT: Global Economics) • Explain how economies are influenced by competition and the impact of that on modern society (UNIT: Global Economics) • Describe how different categories of earned income are influenced by a variety of factors (UNIT: Global Economics)
Grade Five	<ul style="list-style-type: none"> • Describe consequences of competition on an economy (among producers & sellers, consumers & buyers) (UNIT: US Economics) • Describe the relationships of economic concepts in a competitive market (UNIT: US Economics)
Grade Four	<ul style="list-style-type: none"> • Analyze the strengths and weaknesses of the concept of specialization (UNIT: Economic Systems)
Grade Three	<ul style="list-style-type: none"> • Describe basic economic concepts (UNIT: Entrepreneurs) • Analyze choices based on positive and negative incentives (UNIT: Entrepreneurs) • Propose a way needs can be met considering choices available (opportunity cost) (UNIT: Entrepreneurs)
Grade Two	<ul style="list-style-type: none"> • Explain the concept of “market” (UNIT: Market Resources) • Describe how people make choices regarding resources (UNIT: Market Resources)
Grade One	<ul style="list-style-type: none"> • Distinguish between basic economic concepts (goods & services, benefits & costs) (UNIT: Economic Choices) • Explain how choices influence economic decisions (UNIT: Economic Choices)
Kindergarten	<ul style="list-style-type: none"> • Define basic economic concepts (UNIT: Introduction to Market Economics) • Give examples of basic economic concepts found in their own community (UNIT: Me & My World)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Resources</i>	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	Not applicable
Grade Five	<ul style="list-style-type: none"> Explain ways to improve human productivity and resources and the impact that would have on an economy (UNIT: US Economics) Evaluate personal choices made with money (e.g., budgets, spending vs. saving, and credit) (UNIT: US Economics)
Grade Four	<ul style="list-style-type: none"> Categorize real-life examples of productive resources (natural, human, capital) (UNIT: Economic Systems) Explain the concept of “income” (generating income and using income) (UNIT: Economic Systems)
Grade Three	<ul style="list-style-type: none"> Compare and contrast different categories of resources (natural, human, and capital) (UNIT: Entrepreneurs) Explain the concept of “entrepreneurship” (UNIT: Entrepreneurs) Explain the purpose of using money as opposed to bartering (UNIT: Entrepreneurs)
Grade Two	<ul style="list-style-type: none"> Give examples of categories of resources (natural, human, and capital) (UNIT: Market Resources)
Grade One	<ul style="list-style-type: none"> Explain the concept of “price” (UNIT: Economic Choices)
Kindergarten	<ul style="list-style-type: none"> Explain how money is used in our economy (UNIT: Introduction to Market Economics) Give an example of an economic exchange from personal experience (UNIT: Introduction to Market Economics)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Economies of the World</i>	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> • Explain the impact of trade on a country's economy and relations with other countries (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies) • Compare the economies of different world regions to each other and to the United States using basic economic concepts (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies)
Grade Six	<ul style="list-style-type: none"> • Distinguish the strengths and weaknesses of each economic system (UNIT: Global Economics) • Explain the concept of "globalization" (UNIT: Global Economics) • Explain the impact of trade on a country's economy and relations with other countries (UNITS: Latin America Studies, Europe Studies) • Compare the economies of different world regions to each other and to the United States using basic economic concepts (UNITS: Latin America Studies, Europe Studies)
Grade Five	<ul style="list-style-type: none"> • Describe different economic systems and where they are practiced around the world (UNIT: US Economics) • Describe the economy of the United States (UNIT: US Economics)
Grade Four	<ul style="list-style-type: none"> • Define the purpose of an economic system (UNIT: Economic Systems) • Explain how the government is an example of an economic system (UNIT: Economic Systems) • Describe the economy of their state (UNIT: State Studies)
Grade Three	Not applicable
Grade Two	Not applicable
Grade One	Not applicable
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Significant Events, Individuals, & Contributions</i> (World History)	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> • Explain the impact of individual explorers and conquistadors on the places they colonized (UNIT: Canada Studies, Australia Studies) • Describe important individuals and their accomplishments in various independence movements around the world (UNIT: Asia Studies) • Explain contributions of ancient civilizations and their influence on modern society (UNITS: Middle East Studies, Africa Studies) • Evaluate the legacy of artistic and civil rights movements and important individuals within these movements on modern society (UNIT: Asia Studies) • Explain the impact of major world religions on history and current events (UNITS: Middle East Studies, Asia Studies, • Analyze the impact of trade on the development of African civilizations and the reasons for European colonization of Africa (UNIT: Africa Studies)
Grade Six	<ul style="list-style-type: none"> • Explain the impact of individual explorers and conquistadors on the places they colonized (UNIT: Latin America Studies) • Describe important individuals and their accomplishments in various independence movements around the world (UNIT: Latin America Studies) • Explain contributions of ancient civilizations and their influence on modern society (UNIT: Europe Studies) • Evaluate the legacy of artistic and civil rights movements and important individuals within these movements on modern society (UNIT: Europe Studies) • Explain the impact of major world religions on history and current events (UNIT: Europe Studies)
Grade Five	<ul style="list-style-type: none"> • Describe the explorers' influence on the conquered land (e.g. trade) (UNIT: Early Exploration) • Determine the reasons that motivated the explorers toward discovery (UNIT: Early Exploration) • Explain the impact of new technology on the voyages of the explorers (UNIT: Early Exploration)
Grade Four	Not applicable
Grade Three	<ul style="list-style-type: none"> • Describe significant individuals in ancient history and the impact their accomplishments had on ancient and modern society (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages) • Summarize the causes and effects of major events in ancient world history (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages) • Explain the impact of individual warriors on 15th century Europe (Joan of Arc, William the Conqueror) (UNIT: Europe in the Middle Ages)

Grade Two	<ul style="list-style-type: none"> • Explain the purpose for building the Great Wall of China (UNIT: India & China) • Explain the impact of ancient inventions and contributions on ancient modern society (UNIT: India & China, Ancient Greece) • Explain the significance of the accomplishments of Alexander the Great (UNIT: Ancient Greece)
Grade One	<ul style="list-style-type: none"> • Identify conquistadors and locate the civilizations they conquered (UNIT: The New World) • Describe the reasons for conquering new land (UNIT: The New World) • Describe the explorers influence on the conquered land (UNIT: The New World) • Describe important people and places and their impact on Ancient Mesopotamian civilization (UNIT: Early People & Civilizations) • Explain how written language and laws are important in developing a civilization (UNIT: Early People & Civilizations)
Kindergarten	<ul style="list-style-type: none"> • Describe important people, things, and events in the story of Columbus's voyage to the Americas (UNIT: Christopher Columbus) • Explain how and why Columbus named the land and people of the Americas (UNIT: Christopher Columbus) • Give examples of Moral Focus concepts demonstrated by Columbus (UNIT: Christopher Columbus)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Historical Conflict (World History)</i>	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	<ul style="list-style-type: none"> Analyze the causes and consequences of ancient Greek and Roman conflicts (UNIT: Europe Studies) Explain the impact of religious conflict on the people of a specific region (UNIT: Europe Studies)
Grade Five	Not applicable
Grade Four	Not applicable
Grade Three	<ul style="list-style-type: none"> Describe the major causes and outcome of the Hundred Years War (UNIT: Europe in the Middle Ages)
Grade Two	<ul style="list-style-type: none"> Describe major battles in the Persian Wars (UNIT: Ancient Greece)
Grade One	Not applicable
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Current Events in the Context of History</i> (<i>World History</i>)	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> • Apply the 5 Themes of Geography to current events happening throughout the world (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies, Australia Studies) • Predict the possible impact of current events throughout the world on the United States (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies, Australia Studies)
Grade Six	<ul style="list-style-type: none"> • Describe conflict and cooperation that occurs in current events (where they arise) (UNIT: Global Geography) • Apply the 5 Themes of Geography to current events happening throughout the world (UNITS: Latin America Studies, Europe Studies) • Predict the possible impact of current events throughout the world on the United States (UNITS: Latin America Studies, Europe Studies)
Grade Five	Not applicable
Grade Four	Not applicable
Grade Three	Not applicable
Grade Two	Not applicable
Grade One	Not applicable
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Significant Events, Individuals, & Contributions (US History)</i>	
Grade Eight	<ul style="list-style-type: none"> Analyze how early exploration and governmental policies affected Native Americans in the United States (UNITS: Early America, Westward Expansion) Evaluate the impact of important individuals' contributions to United States history (UNITS: The American Revolution Era, The Civil War) Evaluate how different attitudes, governmental policies, and individual opinions influenced the American Revolution (UNIT: The American Revolution) Explain the impact of early governmental policies on modern society (UNITS: The American Revolution, Life in the New Nation, Westward Expansion, The Civil War) Compare and contrast the political process (elections, political parties) from the 1700 and 1800s to today (UNIT: Life in the New Nation) Explain the government's reasons for land acquisition in the 1800s (UNITS: Westward Expansion) Evaluate how different attitudes, governmental policies, and individual opinions influenced the Civil War and African-American society in the United States (UNIT: The Civil War) Compare and contrast industrial development in the late-1800s/early-1900s to modern technological advancement (UNIT: Late 19th Century-Early 20th Century)
Grade Seven	Not applicable
Grade Six	Not applicable
Grade Five	<ul style="list-style-type: none"> Analyze contributions of colonial regions on modern society (UNIT: Colonization) Explain important events in the Revolutionary Era that led to the independence of the United States from Britain (UNIT: The Revolutionary War) Analyze the impact of important individuals on the history of the United States (UNITS: The Revolutionary War, Westward Expansion, The Civil War) Explain the concept "Manifest Destiny" (UNIT: Westward Expansion) Explain the causes and eventual effects of events leading to the Civil War (UNIT: The Civil War)
Grade Four	<ul style="list-style-type: none"> Describe the important individuals and events within each region of the United States (UNIT: US Regions) Explain how the geographical location of these regions impact historical events in that region (UNIT: US Regions) Sequence important historical events of their individual state (UNIT: State Studies) Explain the impact of national historical events on their individual state (exploration, conflicts, and other important events that are applicable) (UNIT: State Studies)

Grade Three	<ul style="list-style-type: none"> • Explain the impact of the explorers' discoveries on modern society (UNIT: Early Exploration of North America) • Compare and contrast the colonies as a region and individually (UNIT: The 13 Colonies)
Grade Two	<ul style="list-style-type: none"> • Describe important individuals in American wars and the impact their contributions had on modern society (UNIT: War of 1812, The Civil War) • Compare and contrast transportation in the 1800s with transportation today (UNIT: Westward Expansion)
Grade One	<ul style="list-style-type: none"> • Describe how the Roanoke and Virginia colonies were established (UNIT: The New World) • Identify important individuals and their contributions to the development of the United States (UNITS: The New World, The American West) • Explain how early explorers of the American west showed the Moral Focus concepts of courage and perseverance (UNIT: The American West)
Kindergarten	<ul style="list-style-type: none"> • Describe how the story of the Pilgrims led to the modern celebration of Thanksgiving Day (UNIT: The Pilgrims) • Explain the terms "independence" and "democracy" and their significance to the July 4th holiday (UNIT: July4-Independence Day) • Identify the names of the four presidents on Mt. Rushmore and an important contribution of each (UNIT: The Presidents) • Describe how past presidents showed examples of Moral Focus concepts (UNIT: The Presidents)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Historical Conflict (US History)</i>	
Grade Eight	<ul style="list-style-type: none"> • Explain causes and effects of the American Revolution and the impact of these events on United States history (UNIT: The American Revolution) • Evaluate how strengths and weaknesses of participants in conflict in United States history influence the outcome of the conflict (UNITS: The American Revolution, The Civil War) • Explain the impact of the outcome of conflict in United States history on modern society (UNITS: The American Revolution, Life in the New Nation, Westward Expansion, The Civil War, Late 19th Century-Early 20th Century) • Describe how land acquisition lead to conflict in United States history (UNIT: Westward Expansion, Late 19th Century-Early 20th Century)
Grade Seven	Not applicable
Grade Six	Not applicable
Grade Five	<ul style="list-style-type: none"> • Compare and contrast the strengths and weaknesses of the American and British armies in the Revolutionary War (UNIT: The Revolutionary War) • Describe participants (groups of people, allies) in conflicts in United States history (UNITS: The Revolutionary War, Westward Expansion) • Describe the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) (UNITS: The Revolutionary War, Westward Expansion) • Describe important battles in the Revolutionary War (UNITS: The Revolutionary War) • Describe important battles in the Civil War (UNIT: The Civil War)
Grade Four	Not applicable
Grade Three	Not applicable
Grade Two	<ul style="list-style-type: none"> • Identify the causes of American wars (UNITS: War of 1812, The Civil War) • Describe participants in conflicts in United States history (UNITS: War of 1812, The Civil War)
Grade One	<ul style="list-style-type: none"> • Identify the causes of the Revolutionary War (UNIT: The American Revolution) • Compare and contrast “Minutemen” and “Redcoats” (American and British armies) in the battle of Lexington & Concord (UNIT: The American Revolution)
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Current Events in the Context of History (US History)</i>	
Grade Eight	Not applicable
Grade Seven	Not applicable
Grade Six	Not applicable
Grade Five	<ul style="list-style-type: none"> Describe and explain current events facing the United States relating to government and civil rights (UNIT: The US Constitution) Predict the impact that the current events will have on the future of the United States as well as the individual citizen (UNIT: The US Constitution)
Grade Four	<ul style="list-style-type: none"> Predict the impact that the current events will have on the future of their state (UNIT: State Studies)
Grade Three	Not applicable
Grade Two	Not applicable
Grade One	Not applicable
Kindergarten	<ul style="list-style-type: none"> Describe how the current president showed examples of Moral Focus concepts (UNIT: The Presidents)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Citizenship-Awareness, Rights, & Responsibilities</i>	
Grade Eight	<ul style="list-style-type: none"> Determining current examples of obtaining citizenship (real-life applications of the citizenship process) (UNIT: Late 19th Century-Early 20th Century) Evaluate the importance of knowing one's civil and legal responsibilities when entering a new country (UNIT: Late 19th Century-Early 20th Century)
Grade Seven	<ul style="list-style-type: none"> Compare and contrast rights and responsibilities of citizens in other countries to those in the United States (UNITS: Middle East Studies, Asia Studies)
Grade Six	<ul style="list-style-type: none"> Compare and contrast rights and responsibilities of citizens in other countries to those in the United States (UNIT: Latin America Studies)
Grade Five	Not applicable
Grade Four	<ul style="list-style-type: none"> Describe the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) (UNIT: State Studies) Identify the major officeholders within their individual state and federal government representatives (UNIT: State Studies)
Grade Three	<ul style="list-style-type: none"> Explain the origin of Core Democratic Values and how they help define what it means to be a citizen (UNIT: Our America) Use the definition of Core Democratic Values to explain why important American historical figures were good citizens (UNIT: Our America)
Grade Two	<ul style="list-style-type: none"> Explain what important specific national symbols represent (UNIT: Symbols & Figures of America) Explain "e pluribus unum" (UNIT: Immigration & Citizenship) Describe ways that people show citizenship in the United States and in other countries of the world (UNITS: Communities Around the World, Immigration & Citizenship) Identify the ways one can become an American citizen (UNIT: Immigration & Citizenship)
Grade One	<ul style="list-style-type: none"> Describe ways people can be good citizens (UNIT: My School & Community) Explain what important national symbols represent (UNIT: Symbols & Figures of America)
Kindergarten	<ul style="list-style-type: none"> Identify important symbols and landmarks of the United States (UNIT: Me & My World) Explain why rules and laws are important to have in a community (UNIT: Me & My World)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Government Systems</i>	
Grade Eight	<ul style="list-style-type: none"> Explain how the strengths and weaknesses of early forms of government and influential writings led to the formation of the current US Constitution (UNIT: The US Constitution) Defend each side of the major debates proposed at the Constitutional Convention and in the process of ratifying the Constitution (UNIT: The US Constitution) Determine current examples of the function of the federal government as outlined in the Constitution (real-life applications of the 3 Branches of Government and the Bill of Rights) (UNIT: The US Constitution)
Grade Seven	<ul style="list-style-type: none"> Describe different government systems used in countries around the world (UNITS: Canada Studies, Middle East Studies, Asia Studies, Australia Studies) Evaluate the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) (UNIT: Australia Studies)
Grade Six	<ul style="list-style-type: none"> Describe different government systems used in countries around the world (UNITS: Latin America Studies, Europe Studies) Evaluate the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) (UNIT: Europe Studies)
Grade Five	<ul style="list-style-type: none"> Explain the early forms of government in the United States (UNIT: The US Constitution) Explain the impact of individual influence on the Constitutional Convention (UNIT: The US Constitution) Compare and contrast the 3 Branches of Government and their functions (UNIT: The US Constitution) Define each of the amendments in the Bill of Rights (UNIT: The US Constitution)
Grade Four	<ul style="list-style-type: none"> Describe the 3 Branches of Government (UNIT: State Studies) Order the levels of government (local, state, and national) in a hierarchy (UNIT: State Studies)
Grade Three	<ul style="list-style-type: none"> Explain the basic principles of the American system of government (UNIT: Our America)
Grade Two	<ul style="list-style-type: none"> Identify leaders in the local community (UNIT: Communities Around the World) Explain James Madison's contribution to the Constitution of the United States (UNIT: American Government)
Grade One	<ul style="list-style-type: none"> Identify the ways a local government serves the community (UNIT: My School &

	Community)
Kindergarten	Not applicable

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Human Characteristics</i>	
Grade Eight	Not applicable
Grade Seven	<ul style="list-style-type: none"> Explain how historical events influenced the language spoken in regions of the world (UNIT: Canada Studies) Evaluate the lasting impact of gender roles and class structure on the culture in different world regions (UNITS: Middle East Studies, Asia Studies)
Grade Six	<ul style="list-style-type: none"> Explain how historical events influenced the language spoken in regions of the world (UNIT: Latin America Studies) Evaluate the lasting impact of gender roles and class structure on the culture in different world regions (UNIT: Latin America Studies)
Grade Five	Not applicable
Grade Four	<ul style="list-style-type: none"> Describe the cultural characteristics of people within their state (UNIT: State Studies)
Grade Three	Not applicable
Grade Two	<ul style="list-style-type: none"> Describe common characteristics of people within a culture group (UNIT: Communities Around the World)
Grade One	<ul style="list-style-type: none"> Describe human characteristics of various place on Earth, including their local community (UNIT: My School & Community) Describe the roles of various people in the school (UNIT: My School & Community) Define “community” (UNIT: My School & Community)
Kindergarten	<ul style="list-style-type: none"> Describe characteristics of themselves and their family (UNIT: Me & My World) Recall school rules and consequences (UNIT: Me & My World) Define respect as it relates to classroom rules and expected behaviors (UNIT: Me & My World)

Social Studies Vertical Alignment

Vertical Alignment for the Measurement Topic: <i>Historical Societies & Lifestyles</i>	
Grade Eight	<ul style="list-style-type: none"> Explain how political beliefs and government policies influenced society in the United States (UNITS: Early America, Life in the New Nation, 19th Century Culture & Reform, The Civil War) Evaluate the success of reform movements in regards to their impact on modern society (UNIT: 19th Century Culture & Reform) Describe how geographic and economic conditions led to changes in society (colonization, immigration, slavery)(UNITS: Early America, The Civil War, Late 19th Century-Early 20th Century) Describe how the growth of technology changed life in the United States in the 19th century (UNIT: Late 19th Century-Early 20th Century)
Grade Seven	<ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies) Explain the importance of specific people and places within society (UNITS: Middle East Studies, Asia Studies, Africa Studies) Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) (UNITS: Middle East Studies, Asia Studies, Africa Studies)
Grade Six	<ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) (UNITS: Latin America Studies, Europe Studies) Explain the importance of specific people and places within society (UNITS: Latin America Studies, Europe Studies) Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) (UNITS: Latin America Studies, Europe Studies)
Grade Five	<ul style="list-style-type: none"> Compare and contrast the way of life of various Native American tribes within the United States (UNIT: Native Americans) Compare and contrast early English settlements in the United States with French and Spanish settlements (UNIT: Early Exploration, Colonization) Explain how the way of life in the colonial regions (New England, Middle Atlantic, Southern Colonies) was influenced by social characteristics (families, class structure, religion, economies) (UNIT: Colonization)
Grade Four	<ul style="list-style-type: none"> Describe the way of life of Native American tribes within their state (e.g., homes, traditional dress, foods, transportation, crafts, tools and other accomplishments) (UNIT: State Studies) Explain Native American influences on their state (UNIT: State Studies)
Grade Three	<ul style="list-style-type: none"> Explain how geographic locations of settlements and migration patterns influence ancient societies (UNITS: Ancient Rome, The Vikings, Europe in the Middle



	<p>Ages, Early Exploration of North America)</p> <ul style="list-style-type: none"> Sequence the origins of civilizations and eras in time in chronological order (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages, Early Exploration of North America) Describe the structure of society in ancient civilizations (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages)
Grade Two	<ul style="list-style-type: none"> Explain how the local community has changed over time (UNIT: Communities Around the World) Explain the importance of available resources to ancient civilizations (UNIT: India & China) Compare and contrast the ways of life, customs, beliefs, and contributions to modern society of different ancient civilizations in the same geographical area (Asia, Ancient Greece) (UNITS: India & China, Ancient Greece) Describe the way of life of Native Americans in the 1800s (UNIT: Westward Expansion) Describe the relationship between Native Americans and the United States government (UNIT: Westward Expansion) Explain reasons why people migrated to the United States (UNIT: Immigration & Citizenship) Describe the journey of immigrants to the United States (how they traveled to the country, where they settled) (UNIT: Immigration & Citizenship)
Grade One	<ul style="list-style-type: none"> Explain the importance of available resources to ancient civilizations (UNITS: Early People & Civilizations, The New World) Describe the way of life of various ancient civilizations (e.g., important people in society, migration, and customs) (UNITS: Early People & Civilizations, The New World)
Kindergarten	<ul style="list-style-type: none"> Describe the history, customs, and beliefs shared by their personal family (UNIT: Me & My World) Describe the way of life of one Native American tribe (e.g., location, homes, traditional dress, foods, transportation, crafts, and tools) (UNIT: Native Americans)

NHA Academic Vocabulary List

Kindergarten

Social Studies

Geography

Continent
Map
North America
Ocean

Economics

Consumers
Goods
Needs
Producers
Services
Wants

Me & My World

Laws
Rules

Native American Peoples

Tribe

Early Exploration: The Voyage of Columbus

Christopher Columbus
Indies
New World

Early Settlement: The Pilgrims

Pilgrim
Thanksgiving
The Mayflower

July 4th-Independence Day

Democracy
Independence

Presidents Past & President

Abraham Lincoln
Barack Obama
Declaration of Independence
George Washington
President
Theodore Roosevelt
Thomas Jefferson

NHA Academic Vocabulary List

1st Grade

Social Studies

Geography

Equator
Globe
Hemisphere

Economics

Benefit
Choice
Money
Price
Scarcity

My School & Community

Citizen
Government

Early People & Civilizations

Civilization
Hieroglyphics
Land bridge
Montezuma
Nomad
Pharaoh

Early Exploration and Settlement in the New World

Conquistador
Plantation
Slavery

The American Revolution

Colony
Minutemen
Patriot
Paul Revere
Redcoat

Early Exploration of the American West

Daniel Boone
Lewis & Clark
Louisiana Purchase

Symbols and Figures of America

Liberty Bell

NHA Academic Vocabulary List

2nd Grade

Social Studies

Geography

Country
Great Lakes
Mississippi River

Economics

Barter
Capital resources
Human resources
Market
Natural resources

Communities Around the World

Rural
Suburban
Urban

Early Civilizations in Asia

Confucius
Great Wall of China

Ancient Greece

Alexander the Great
Athens
City-state
Sparta

American Government

Constitution
James Madison

The War of 1812

Andrew Jackson
Impressment
Star-Spangled Banner

Westward Expansion

Canal
Oregon Trail
Trail of Tears

The Civil War

Rebel
Underground Railroad
Yankee

Immigration & Citizenship

E Pluribus Unum
Immigrant
Migrate

Symbols & Figures of America

Lincoln Memorial

NHA Academic Vocabulary List

3rd Grade

Social Studies

Geography

Cardinal/Intermediate directions
Scale

Economics

Demand
Entrepreneur
Incentive
Opportunity cost
Specialization
Supply

Ancient Rome

Civil war
Julius Caesar
Patrician
Plebian

The Vikings

Norseman
Scandinavia

Europe in the Middle Ages

Black Plague
Feudalism
Magna Carta
Middle Ages

Early Exploration of North America

Ice age
Mission
Northwest Passage

13 Colonies

Debtors
Jamestown
Mayflower Compact
Persecution
Plantation
Plymouth
Quaker

Our America: Foundation & Principles

Core Democratic Values
Representative democracy

NHA Academic Vocabulary List

4th Grade

Social Studies

Geography

Five Themes of Geography
Human-Environment Interaction
Latitude
Longitude
Location
Map legend
Movement
Place
Prime Meridian

Economics

Budget
Economic system
Income
Wage
Salary
Taxation

US Region Studies

Canyon
Geyser
Region
Savanna
Volcano

State Studies

Local government
State government
Federal government
1st Amendment
Legislative branch
Executive branch
Judicial branch

NHA Academic Vocabulary List

5th Grade

Social Studies

Geography

Coordinates
Time zone
Tropic of Cancer/Capricorn

Economics

Bank
Capitalism
Command system (communism)
Competition
Credit
Export
Import
Labor productivity
Traditional system

Native American Cultures

Iroquois

Early Exploration of North America

Columbian exchange
Sacagawea

Colonization

Puritan
Triangle trade

The Revolutionary War

Boston Massacre
Boston Tea Party
French & Indian War
Loyalist
Stamp Act
Tea Act
Treaty of Paris

The US Constitution & Government

Amendment
Articles of Confederation
Bill of Rights

Westward Expansion & Growth

Manifest Destiny

Introduction to the Civil War

Abolitionist
Emancipation Proclamation
Gettysburg
Missouri Compromise
Secession

NHA Academic Vocabulary List

6th Grade

(Michigan, New York, North Carolina, Indiana, Colorado)

Social Studies

Geography

Deforestation
Desertification
Push/pull factors
Urbanization

Economics

Corporation
Exchange rate
Globalization
Gross Domestic Product (GDP)
Inflation
Labor union

Latin America Studies

Aztec
Dictatorship
Inca
Independence movement
Isthmus
Maya
Rainforest
Social pyramid

Europe Studies

Aristocracy
Christianity
Consul
Crusades
Enlightenment
European Union
Monarchy
Monastery
Pax Romana
Pope
Reformation
Renaissance
Tribune



NHA Academic Vocabulary List

7th Grade

(Michigan, New York, North Carolina, Indiana, Colorado)

Social Studies

Middle East Studies

Bronze Age
Judaism
Polytheism
Stone Age
Ziggurat
Zionism

Asia Studies

Buddhism
Caste system
Dynasty
Hinduism
Mahatma Gandhi

Africa Studies

Middle passage

Canada Studies

Bi-lingual
Inuit
NAFTA
Parliamentary system
Prime Minister
Province
Territory

Australia Studies

Commonwealth of Nations
Penal colony

NHA Academic Vocabulary List

8th Grade

Social Studies

Early America- An Overview

New England

The American Revolutionary Era

Boycott

Intolerable Acts

Mercantilism

Thomas Paine

The Constitutional Era

3/5 Compromise

Alexander Hamilton

Congress

Federalism

Northwest Ordinance

Ratification

Shays' Rebellion

Life in the New Nation

Cabinet

Democratic Republican

Monroe Doctrine

Political party

Precedent

Sectionalism

Spoils System

Westward Expansion

Annexation

Cession

The Alamo

19 Century American Culture & Reform

Reform

Suffrage

Temperance

The Civil War

Black Codes

Compromise of 1850

Freedman's Bureau

Fugitive Slave Laws

Impeachment

Segregation

Late 19th Century-Early 20th Century

Industrialization

Naturalization

Reservation

GRADE Kindergarten – MYSELF AND OTHERS

Using a familiar context for five and six year olds, kindergartners learn about the social studies disciplines (history, geography, civics and government, and economics) through the lens of “Myself and Others”. Accordingly, each discipline focuses on developing rudimentary understandings through an integrated approach to the field.

U1 - History

In history, students begin to develop a sense of time and chronology using events from their own lives setting the foundation for understanding the past in subsequent grades. The expectations are intended to enable teachers to integrate social studies with the language arts as students develop an understanding of the temporal order of stories. Additionally, students are introduced to how people learn about the past as a building block for understanding the discipline of history in later grades.

H2 Living and Working Together			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use historical thinking to understand the past</i> K-H2.0.1 Distinguish among yesterday, today, tomorrow. (new) K-H2.0.2 Create a timeline using events from their own lives (e.g., birth, crawling, walking, loss of first tooth, first day of school). (New) K-H2.0.3 Identify the beginning, middle, and end of historical narratives or stories. (new)			



<p>K-H2.0.4 Describe ways people learn about the past (e.g., photos, artifacts, diaries, stories, videos). (New)</p>			
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U2 - Geography

Using the immediate environment, students develop geographic awareness. They begin to recognize that geographers use maps to represent places. As a prerequisite to developing a spatial perspective, students explore positional and directional words and their meaning to identify significant locations in the classroom. The introduction of the concept that people use the environment to fulfill human needs and wants prepares students for a more in-depth study of human-environment interactions in subsequent grades.

G1 – The World in Spatial Terms			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic representations to acquire, process, and report information from a spatial perspective.</i></p> <p>K-G1.0.1 Recognize that maps and globes represent places. (new)</p> <p>K-G1.0.2 Use environmental directions or positional words (up/down, in/out, above/below) to identify significant locations in the classroom.</p>			Shares alignment at grade level NHA)
G2 – Places and Regions			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how regions are created from common physical and human characteristics.</i></p> <p>K-G2.0.1 Identify and describe places in the immediate environment (e.g., classroom, home, playground).</p>	<p>Political Features</p> <p><input type="checkbox"/> Identify and describe the immediate surroundings (neighborhood, address, phone number)</p>	<p>Physical Characteristics (Family)</p> <p>- Location</p> <p>- Neighborhood</p> <p>- Address & phone number</p>	



G5 – Environment and Society			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Understand the effects of human-environment interactions.</i> K-G5.0.1 Describe ways people use the environment to meet human needs and wants (e.g., food, shelter, and clothing)...			Shares alignment at grade level NHA

U3 – Civics and Government

The content expectations lay the foundation for the development of civics by focusing on the values and principles of American democracy. Using their classroom and own experiences, students begin to understand why rights have limits and are introduced to the concept of fairness in making group decisions. Students also begin to explore different symbols that represent ideals of our nation such as the American flag. Kindergarten also prepares students to become good citizens as they develop an appreciation of the importance of self-discipline and individual responsibility in a democratic republic.

C2 – Values and Principles of American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Understand values and principles of American constitutional democracy</i> K-C2.0.1 Describe our country's flag as an important symbol of the United States.	Citizenship-Awareness, Rights, & Responsibilities <input type="checkbox"/> Identify important symbols and landmarks of the United States	Civic Awareness – Symbols and Figures of	Shares alignment at K NHA



<p>K-C2.0.2 Explain why people do not have the right to do whatever they want (e.g., to promote fairness, ensure the common good, maintain safety). (new)</p> <p>K-C2.0.3 Describe fair ways for groups to make decisions. (new)</p>		<p>America -National Flag of the USA</p>	
C5 – Roles of the Citizen in American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain important rights and how, when, and where American citizens demonstrate their responsibilities by participating in government</i></p> <p>K-C5.0.1 Describe situations in which they demonstrated self-discipline and individual responsibility (e.g., caring for a pet, completing chores, following school rules, working in a group, taking turns). (new)</p>			<p>Shares alignment at grade level NHA</p>

U4 - Economics

Students develop an understanding of economic concepts through practical examples. Students describe economic wants, distinguish between goods and services that fulfill those wants, and recognize exchanges in which they participate. These foundational ideas prepare students for a deeper understanding of economics in succeeding grades.

E1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use fundamental principles and concepts of economics to understand economic activity in a market economy</i></p> <p>K-E1.0.1 Describe economic wants they have experienced. (shares alignment at grade level NHA)</p> <p>K-E1.0.2 Distinguish between goods and services. (shares alignment at K NHA)</p>	<p>Economic Concepts</p> <ul style="list-style-type: none"> □ Define basic economic concepts <p>Economic Concepts</p> <ul style="list-style-type: none"> • Define basic economic concepts 	<p>Economic Concepts</p> <ul style="list-style-type: none"> - Wants & needs • All people have wants and needs <p>Economic Concepts</p> <ul style="list-style-type: none"> - Goods • Things people buy or sell (objects that are capable of satisfying people's wants) - Services • Work that one person does for another (actions that are capable of satisfying people's wants) <p>Economic Exchanges</p> <ul style="list-style-type: none"> - In an exchange, people can trade goods and services for money • Economic exchanges in 	<p>Resources:</p> <ul style="list-style-type: none"> • Beginning Economics at Home • Goods and Services Song <p>Shares alignment at grade level NHA</p>



K-E1.0.3 Recognize situations in which people trade.	Resources <input type="checkbox"/> Give an example of an economic exchange from personal experience	which students participate - In an exchange, people can trade goods and services for other goods and services <ul style="list-style-type: none"> Trading exchanges students have observed 	
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U5 – Public Discourse, Decision Making, and Citizen Involvement

Using classroom issues as examples, kindergarten students are introduced to the idea of public issues and the importance of citizen action in a democratic republic. Kindergarten students learn that people have different opinions on issues and begun to develop competency in expressing their own opinions relative to classroom issues. Students also begin to construct and explain simple graphs as a way of interpreting and analyzing data relating to public issues. This foundational knowledge is built upon throughout the grades as students learn how, when, and where to communicate their positions on public issues with a reasoned argument.

P3.1 Identifying and Analyzing Public Issues			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Clearly state a problem as a public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions.</i> K-P3.1.1 Identify classroom issues. (new) K-P3.1.2 Use simple graphs to explain information about a classroom issue. (new)			



1-P3.1.3 Compare their viewpoint about a classroom issue with the viewpoint of another person. (new)			
P3.3 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Communicate a reasoned position on a public issue</i> K-P3.3.1 Express a position on a classroom issue. (new)			
P4.2 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Act constructively to further the public good</i> 1-P4.2.1 Develop and implement an action plan to address or inform others about a public issue. (new) 1-P4.2.2 Participate in projects to help or inform others. (new)			



Additional NHA Content

The following content and/or units are not required by the Kindergarten Michigan GLCE's:

<p>Maps and Globes</p> <ul style="list-style-type: none"> • Explain how maps and globes are used <p>Physical Features</p> <ul style="list-style-type: none"> • Identify and locate specific major landforms, bodies of water, and other features of the Earth <p>Economics</p> <ul style="list-style-type: none"> • Resources- Explain how money is used in our economy <p>Human Characteristics (Me and My Family)</p> <ul style="list-style-type: none"> • Describe characteristics of themselves and their family 	<ul style="list-style-type: none"> • Interpret a map using its features (cardinal directions, key) (MT: Maps & Globes) • Identify and locate specific major landforms and bodies of water (MT: Physical Features) <ul style="list-style-type: none"> • Describe the human characteristics (e.g. man-made structures, cultures, traditions) of various places on Earth, including the local community (MT: Human Characteristics) <ul style="list-style-type: none"> • Locate their wider geographical area (MT: Political Features) • Describe how major landforms, bodies of water, and other features of the Earth are represented on maps & globes <ul style="list-style-type: none"> • Land & Water: Continents, Oceans, & Poles <ul style="list-style-type: none"> - Asia - Europe - Africa - North America - Atlantic & Pacific <ul style="list-style-type: none"> - North and South Poles • Money can be used to buy goods • Money can be used to buy services Physical Characteristics (Self) <ul style="list-style-type: none"> - Gender - Physical attributes and ethnicity <ul style="list-style-type: none"> - Languages - Self-Concept <ul style="list-style-type: none"> • Uniqueness & importance <ul style="list-style-type: none"> • Talents & abilities • Likes & dislikes • Personal wants and needs - People are alike and different in physical characteristics
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<p>Human Characteristics</p> <ul style="list-style-type: none"> Recall school rules and consequences <ul style="list-style-type: none"> Define respect as it relates to classroom rules and expected behaviors 	<p>Role of school</p> <ul style="list-style-type: none"> School & classroom expectations <ul style="list-style-type: none"> Rules & consequences Respecting others Respecting property
<p>Human Characteristics</p> <ul style="list-style-type: none"> Describe characteristics of themselves and their family <p>Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> Describe the history, customs, and beliefs shared by their personal family <p>Economic Concepts</p>	<ul style="list-style-type: none"> Family members – roles & responsibilities <ul style="list-style-type: none"> Family wants & needs Celebrations – beliefs, customs & traditions in the family <ul style="list-style-type: none"> Family history Goods Examples such as parks, schools, food, toys, clothes etc. -Services & jobs people do Examples such as post office, public transport, police & fire department, parks,



<ul style="list-style-type: none"> - Give examples of basic economic concepts found in the community <p>Political Features</p> <ul style="list-style-type: none"> - Name and locate their geographical area using a map (school, city, state, and country) <p>Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> - Describe the way of life of one Native American tribe (e.g. location, homes, traditional dress, foods, transportation, crafts, and tools) <p>WH: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> - Describe important people, places, things, and events in the story of 	<p>etc.</p> <ul style="list-style-type: none"> - Producers & jobs people do - Examples such as farmers, Manufacturers, doctors, etc. <ul style="list-style-type: none"> - Consumers - All people who use goods and services - People work to earn money, save and buy things they want <p>Symbols and Figures of America</p> <ul style="list-style-type: none"> - Statue of Liberty - Mount Rushmore - The White House <p>State/City</p> <ul style="list-style-type: none"> - Name & location of the city, or community, as well as state where students live <p>Country</p> <ul style="list-style-type: none"> - Location of the continental United States, Alaska, and Hawaii <p>Native American Peoples and their Way of Life</p> <ul style="list-style-type: none"> - Choose at least one tribe or nation to study” <p>Pacific Northwest: Kwakiutl, Chinook</p> <p>Plateau: Nez Perce</p> <p>Great Basin: Shoshone, Ute</p> <p>Southwest: Dine (Navajo), Hopi, Apache</p> <p>Plains: Blackfoot, Comanche, Crow, Kiowa, Dakota, Cheyenne, Arapaho, Lakota (Sioux)</p> <p>Northeast: Huron, Iroquois</p> <p>Eastern Woodlands: Cherokee, Seminole, Delaware, Susquehanna, Mohican, Massachusetts, Wampanoag, Powhatan</p> <p>The Voyage of Columbus in 1492</p> <ul style="list-style-type: none"> - Queen Isabella and King Ferdinand of Spain <ul style="list-style-type: none"> - The Nina, Pinta, and Santa Maria - Columbus’s mistaken identification of “Indies” and “Indians” <ul style="list-style-type: none"> - The idea of what was, for Europeans, a “New World”
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<p>Columbus's voyage to the America</p> <ul style="list-style-type: none"> - Explain how and why Columbus named the land and people of the Americas - Give examples of Moral Focus concepts demonstrated by Columbus - Describe how the story of the Pilgrims led to the modern celebration of Thanksgiving Day - Explain the terms "independence" and "democracy" and their significance to the July 4th holiday - Identify the names of the four presidents on Mt. Rushmore and an important contribution of each - Describe how past presidents showed examples of Moral Focus concepts - Describe how the current president shows examples of Moral Focus concepts 	<ul style="list-style-type: none"> - Courage to do what no else had done <p>The Pilgrims</p> <ul style="list-style-type: none"> - Motivations for leaving England <ul style="list-style-type: none"> - The Mayflower - Plymouth Rock - Thanksgiving Day celebration <p>July 4, "Independence Day"</p> <ul style="list-style-type: none"> - Independence: what it means <ul style="list-style-type: none"> - The "birthday" of our nation - Democracy (freedom and rule of the people) <ul style="list-style-type: none"> ✓ Americans wanted to rule themselves instead of being ruled by a faraway king ✓ Some people were not free: slavery in early America <p>Presidents on Mt. Rushmore</p> <ul style="list-style-type: none"> - George Washington ✓ The "Father of his Country" <ul style="list-style-type: none"> ✓ Legend of George Washington and the cherry tree <ul style="list-style-type: none"> - Thomas Jefferson ✓ Author of Declaration of Independence <ul style="list-style-type: none"> - Abraham Lincoln <ul style="list-style-type: none"> ✓ Humble origins ✓ "Honest Abe" ✓ Freed slaves - Theodore Roosevelt ✓ "Speak softly and carry a big stick"
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	<ul style="list-style-type: none">✓ Concern with national preservation (national parks) Current Events✓ Current United States President
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GRADE ONE – Families and Schools

In first grade, students continue to explore the social studies disciplines of history, geography, civics and government, and economics through an integrated approach using the context of families and schools. This is the students' first introduction to social institutions as they draw upon knowledge learned in kindergarten to develop more sophisticated understandings of each discipline.

U1 - History

First grade students begin to develop the ability to think like a historian. Using a calendar, students begin to understand the passage of time. They then apply their understanding of time and chronology by using events from family and school, extending their understanding of the past to events beyond their own lifetimes. Using events to which they have a personal connection, students learn that history involves stories of the past. By exploring relevant primary sources such as photographs, diaries, and artifacts, students develop simple narratives of the history of families or school. Students also learn to draw generalizations and conclusions about changes over time by comparing family life, school, jobs, and methods of communication in their lives, to those in the past. In examining why certain events and people are celebrated through national holidays, students begin to appreciate the influence history has on their daily lives. The study of history through the lens of families and schools in first grade prepares students for more complex investigations of the past of their community, state, and country in later grades.

H2 Living and Working Together in Families and Schools			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use historical thinking to understand the past</i> 1-H2.0.1 Demonstrate chronological thinking by distinguishing among past, present, and future using family or school events. (new) 1-H2.0.2 Use a calendar to distinguish among days, weeks, and months (1st Grade Math)	Locate days, dates, and months on a calendar		<i>There are no ThinkMath! Lessons that match</i>



<p>1-H2.0.3 Investigate a family history for at least two generations, identifying various members and their connections in order to tell a narrative about family life. (new)</p> <p>1-H2.0.4 Retell in sequence important ideas and details from stories about families or schools. (1st Grade ELA?)</p> <p>1-H2.0.5 Use historical records and artifacts (e.g. photos, diaries, oral histories, and videos) to draw possible conclusions about family or school life in the past. (new)</p> <p>1-H2.0.6 Compare life today with life in the past using the criteria of family, school, jobs, or communication. (new, from 2nd Grade)</p> <p>1-H2.0.7 Identify the events or people</p>	<p>Write brief explanations of personal experiences with basic illustrations (personal narratives)</p> <p>Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> Explain how the local community has changed over time <p>USH: Significant Events, Individuals, & Contributions</p>	<p>Tell about an experience; use transitional words; show a logical sequence of events (beginning, middle, end); use descriptive words</p> <p>The Community Around Me</p> <p>My community history</p> <ul style="list-style-type: none"> Development and change <p>Martin Luther King, Jr. Day – no specific plan or resources</p> <p>Presidents’ Day – no specific plan or resources, possibly Mt.</p>	
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<p>celebrated during United States national holidays and why we celebrate them (e.g. Independence Day, Constitution Day, Martin Luther King, Jr. Day, Presidents' Day).</p> <p>(new, from K)</p>	<ul style="list-style-type: none"> • Explain the terms “independence” and “democracy” and their significance to the July 4th holiday. • Describe how the story of the Pilgrims led to the modern celebration of Thanksgiving Day • Identify the names of the four presidents on Mt. Rushmore and an important contribution of each • Describe how past presidents showed examples of Moral Focus concepts 	<p>Rushmore presidents??</p> <p>Presidents on Mt. Rushmore</p> <ul style="list-style-type: none"> - George Washington <ul style="list-style-type: none"> • The “Father of his Country” • Legend of George Washington and the cherry tree - Thomas Jefferson • Author of Declaration of Independence - Abraham Lincoln <ul style="list-style-type: none"> • Humble origins • “Honest Abe” • Freed slaves - Theodore Roosevelt • “Speak softly and carry a big stick” • Concern with national preservation (national parks) <p>July 4, “Independence Day”</p> <ul style="list-style-type: none"> - Independence: what it means - The “birthday” of our nation - Democracy (freedom and rule of the people) <ul style="list-style-type: none"> • Americans wanted to rule themselves instead of being ruled by a faraway king • Some people were not free: slavery The Pilgrims 	
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		Thanksgiving <ul style="list-style-type: none"> - Motivations for leaving England - The Mayflower - Plymouth Rock - Thanksgiving Day celebration in early America 	

U2 - Geography

The expectations in first grade build upon simple understandings of maps. Students' spatial perspective is deepened by constructing classroom maps to illustrate aerial perspective and introducing absolute and relative location using the familiar contexts of home and school. Students begin to use personal directions to describe the relative location of different places in the school environment. Students use maps and globes to distinguish physical characteristics of Earth, such as landmasses and oceans. In introducing students to the concepts of region and human systems, first grade sets the stage for more sophisticated study of these concepts in later grades. By using their immediate school environment, students learn to distinguish between physical and human characteristics of place, and describe unifying characteristics of different regions within their classroom and school. Students begin to build an understanding of the different aspects of culture through a comparison of family life. They learn that people not only use the environment, but also modify or adapt to the environment.

U1.1 – The World in Spatial Terms			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use geographic representations to acquire, process, and report information from a spatial perspective.</i> 1-G1.0.1 Construct simple maps of the classroom to demonstrate aerial perspective. (new)	Political Features <input type="checkbox"/> Identify and describe the	School <ul style="list-style-type: none"> - Geographic location My Local Neighborhood <ul style="list-style-type: none"> - Name & location of the 	

<p>1-G1.0.2 Give examples of places that have absolute locations (e.g., home address, school address). (from K Social Studies)</p>	<p>immediate surroundings (neighborhood, address, phone number)</p> <p><input type="checkbox"/> Name and locate their geographical area using a map (school, city, state, and country)</p>	<p>neighborhood or town within the greater city where students live</p> <p>State/City</p> <ul style="list-style-type: none"> - Name & location of the city, or community, as well as state where students live <p>Country</p> <ul style="list-style-type: none"> - Location of the continental United States, Alaska, and Hawaii <p>ThinkMath resources</p>
<p>1-G1.0.3 Use personal directions (left, right, front, back) to describe the relative location of significant places in the school environment. (from 1st Grade Math)</p>	<p>Lines, Angles and Geometric Objects</p> <p>Arrange and describe objects in space by position and direction (e.g., near, far, below, behind, above, in front of, next to, left, right)</p>	<p>Maps and Globes</p> <ul style="list-style-type: none"> - What they represent - How we use them <p>Land & Water: Rivers, Lakes, & Mountains</p> <ul style="list-style-type: none"> - What they are - How they are represented on maps and globes
<p>1-G1.0.4 Distinguish between landmasses and bodies of water using maps and globes. (from K Social Studies)</p>	<p>Maps and Globes</p> <p><input type="checkbox"/> Explain how maps and globes are used</p> <p><input type="checkbox"/> Describe how major landforms, bodies of</p>	<p>Land & Water: Continents, Oceans, & Poles</p> <ul style="list-style-type: none"> - Asia - Europe - Africa - North America - Atlantic & Pacific - North and South Poles



	<p>water, and other features of the Earth are represented on maps & globes</p> <p>Physical Features</p> <p><input type="checkbox"/> Identify and locate specific major landforms, bodies of water, and other features of the Earth</p>		
U1.2 – Places and Regions			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how regions are created from common physical and human characteristics.</i></p> <p>1-G2.0.1 Distinguish between physical (e.g., clouds, trees, weather) and human (e.g., buildings, playgrounds, sidewalks) characteristics of places. (?? Real vs. man-made? Science Five senses??)</p> <p>1-G2.0.2 Describe the unifying characteristics and/or boundaries of different school regions (e.g., playground, reading corner, library, and restroom). (New)</p>	<ul style="list-style-type: none"> Describe the human characteristics (e.g. man-made structures, cultures, traditions) of various places on Earth, including the local community (MT: Human Characteristics) 		



U1.4 – Human Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how human activities help shape the Earth's surface</i></p> <p>1-G4.0.1 Use components of culture (e.g., foods, language, religion, traditions) to describe diversity in family life. (new)</p>			
U1.5 – Environment and Society			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand the effects of human-environment interactions</i></p> <p>1-G5.0.1 Describe ways in which people modify (e.g., cutting down trees, building roads) and adapt to the environment (e.g. clothing, housing, transportation). (New??)</p>			

U3 – Civics and Government

The content expectations in civics use the school as a context for learning about the purposes of government, the values and principles of American democracy, and the roles of citizens. Building on the concept that people are not free to do whatever they want, students identify reasons for rules in school. Concepts of power and authority are introduced as students identify examples of people using power with and without authority in the school setting. Drawing upon the notion of fairness from Kindergarten, students explore fair ways to resolve conflicts at school. The expectations broaden students' understanding of the values and principles of American democracy using significant symbols of the United States. Notions of individual responsibilities introduced in Kindergarten are expanded to include civic responsibilities as members of a group or school community. Thus, students begin to recognize that respect for the rule of law and the rights of others is fundamental to our system of government.

U3.1 – Purposes of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain why people create governments</i></p> <p>1-C1.0.1 Identify some reasons for rules in school (e.g., provide order, predictability, and safety). (shares alignment at K NHA)</p> <p>1-C1.0.2 Give examples of the use of power with authority in school (e.g., principal, teacher or bus driver enforcing school rules). (New??shares alignment at grade level NHA)</p> <p>1-C1.0.3 Give examples of the use of power without authority in school (e.g., types of bullying, taking cuts in line).</p>	<p>Human Characteristics</p> <ul style="list-style-type: none"> Recall school rules and consequences Define respect as it relates to classroom rules and expected behaviors 	<ul style="list-style-type: none"> -Role of school -School & classroom expectations • Rules & consequences • Respecting others • Respecting property 	



(New)			
U3.2 – Values and Principles of American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand values and principles of American constitutional democracy</i></p> <p>1-C2.0.1 Explain how decisions can be made or how conflicts might be resolved in fair and just ways (e.g., majority rules). (Shares alignment at K NHA??)</p> <p>1-C2.0.2 Identify important symbols of the United States of America (e.g., Statue of Liberty, Uncle Sam, White House, and Bald Eagle). (shares alignment at grade level NHA)</p>	<p>Citizenship-Awareness, Rights, & Responsibilities</p> <ul style="list-style-type: none"> Identify important symbols and landmarks of the United States 	<p>Civic Awareness - Symbols & Figures of America</p> <ul style="list-style-type: none"> National Flag of the United States Statue of Liberty Mount Rushmore The White House Liberty Bell Eagle 	



Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
U3.5 – Roles of the Citizen in American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain important rights and how, when, and where American citizens demonstrate their responsibilities by participating in government</i></p> <p>1-C5.0.1 Describe some responsibilities people have at home and at school (e.g., taking care of oneself, respect for the rights of others, following rules, getting along with others). (New)</p> <p>1-C5.0.2 Identify situations in which people act as good citizens in the school community (e.g., thoughtful and effective participation in the school decisions, respect for the rights of others, respect for rule of law, voting, volunteering, compassion, courage, honesty). (New)</p>			

U4 - Economics

First grade students extend their understanding of basic economic concepts. They distinguish between producers and consumers and examine ways in which their families consume goods and services. Using practical examples and personal experiences, students begin to learn how scarcity forces people to make choices. Students develop a deeper understanding of trade as they explore the reasons why people trade, how money simplifies trade, and how people earn money. These concepts lay the foundation for more complex studies of economic principles in later years.

U4.1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use fundamental principles and concepts of economics to understand economic activity in a market economy</i></p> <p>1-E1.0.1 Distinguish between producers and consumers of goods and services. (shares alignment at grade level NHA)</p> <p>1-E1.0.2 Describe ways in which families consume goods and services. (shares alignment at K NHA)</p> <p>1-E1.0.3 Using examples, explain why people cannot have everything they want (scarcity) and describe how</p>	<p>Economic Concepts</p> <ul style="list-style-type: none"> • Define basic economic concepts • Distinguish between basic economic concepts (goods & services, benefits & costs) • Explain how choices influence economic decisions 	<p>Goods</p> <ul style="list-style-type: none"> • Are made or grown by people • People use goods to satisfy their wants <p>Services</p> <ul style="list-style-type: none"> • Can satisfy people's needs and wants • Governments provide some services: police departments, fire departments, etc. • People who use services <p>Choices</p> <ul style="list-style-type: none"> • Scarcity- wants are unlimited and people can't have everything they want due to lack of resources • People must make choices about 	



<p>people respond (choice). (shares alignment at grade level NHA)</p> <p>1-E1.0.4 Describe reasons why people voluntarily trade. (shares alignment at K NHA)</p> <p>1-E1.0.5 Describe ways in which people earn money (e.g., providing goods and services to others, jobs). (shares alignment at K NHA)</p> <p>1-E1.0.6 Describe how money simplifies trade.</p>	<p>Resources</p> <ul style="list-style-type: none"> ○ Give an example of an economic exchange from personal experience <p>Explain the concept of “price”</p> <p>Resources</p> <ul style="list-style-type: none"> ● Explain the purpose of using money as opposed to bartering 	<p>which goods to purchase and which services to use in satisfying wants</p> <ul style="list-style-type: none"> ● A benefit is something that satisfies your wants ● A cost is something you give up when you make a decision <p>Money</p> <ul style="list-style-type: none"> ● Price is usually an amount of money ● People pay a price when they buy a good or service <p>Economic Exchanges</p> <ul style="list-style-type: none"> - In an exchange, people can trade goods and services for money ● Economic exchanges in which students participate - In an exchange, people can trade goods and services for other goods and services ● Trading exchanges students have observed <p>Market</p> <ul style="list-style-type: none"> - Money reduces the problem of bartering <ul style="list-style-type: none"> ● easy to divide ● easy to carry ● easy to store 	
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(shares alignment at 3 rd Grade NHA)			
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U5 – Public Discourse, Decision Making, and Citizen Involvement

In first grade, students continue to develop an understanding of public issues and the importance of citizen action in a democratic republic. First grade students identify public issues in the school community and analyze data about them. They investigate different resolutions to these issues. Students begin to develop competency in expressing their own opinions relative to a public issue in school by justifying their opinions with reasons. This foundational knowledge is built upon throughout the grades as students develop a greater understanding of how, when, and where to communicate their positions on public issues with a reasoned argument.

U5.1 Identifying and Analyzing Public Issues			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Clearly state a problem as a public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions.</i></p> <p>1-P3.1.1 Identify public issues in the school community. (new)</p> <p>1-P3.1.2 Use graphic data to analyze information about a public issue in the school community. (new)</p> <p>1-P3.1.3 Identify alternative resolutions to a public issue in the school community. (new)</p>			



U5.2 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Communicate a reasoned position on a public issue</i> 1-P3.3.1 Express a position on a public policy issue in the school community and justify the position with a reasoned argument. (new)			
U5.3 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Act constructively to further the public good</i> 1-P4.2.1 Develop and implement an action plan to address or inform others about a public issue. (new) 1-P4.2.2 Participate in projects to help or inform others. (new)			

Additional NHA Content

The following content and/or units are not required by the 1st grade Michigan GLCE's and should no longer be taught in 1st grade:



<p>Maps & Globes</p> <ul style="list-style-type: none"> • Oceans • Continents • Features of the Earth <p>My Local Community</p> <p>People in Communities</p> <p>Describe ways people can be good citizens</p>	<ul style="list-style-type: none"> • Interpret a map using its features (cardinal directions, key) (MT: Maps & Globes) • Identify and locate specific major landforms and bodies of water (MT: Physical Features) <ul style="list-style-type: none"> • Locate their wider geographical area (MT: Political Features) <ul style="list-style-type: none"> • Maps have keys or legends with symbols and their uses <ul style="list-style-type: none"> • Find directions on a map: east, west, north, south • Physical characteristics: mountains, bodies of water (oceans, rivers, lakes), landforms (trees, forest, desert) <p>Definition of a community</p> <ul style="list-style-type: none"> • Define “community” <p>Describe the physical features of various places on Earth, including the local community</p> <ul style="list-style-type: none"> • Human characteristics: roads, parks, neighborhoods, buildings (shopping malls, airport, hospitals etc.) <p>Describe the human characteristics of various places on Earth, including the local community</p> <ul style="list-style-type: none"> - Government <ul style="list-style-type: none"> • Elected and appointed leaders • Workers – facilities, services and resources to supply needs and wants <ul style="list-style-type: none"> • Taxes - Government Systems • Identify the ways a local government serves the community <ul style="list-style-type: none"> - Citizenship • Rules and laws • Rights and responsibilities of people (e.g. voting to make group decisions) <ul style="list-style-type: none"> • Cooperation
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<p>The Wider Community</p> <ul style="list-style-type: none"> - Locate their wider geographical area <p>Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> • Explain the importance of available resources to ancient civilizations • Describe the way of life of various ancient civilizations (e.g., important people in society, migration, and customs) • Describe important people and places and their impact on Ancient Mesopotamian civilization • Explain how written language and laws are important in developing a civilization <p>Political Features</p> <ul style="list-style-type: none"> • Locate the geographical area of the world where ancient civilizations existed <p>Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> - Describe the way of life of various ancient civilizations (e.g., important 	<ul style="list-style-type: none"> • Community projects <p>*Citizenship-Awareness, Rights, & Responsibilities</p> <p>North America and its countries</p> <ul style="list-style-type: none"> • Continental United States, Alaska, and Hawaii <ul style="list-style-type: none"> • Canada • Mexico • Central America <p>Political Features</p> <p>Hunters & Nomads</p> <ul style="list-style-type: none"> • Use of fire • Transition from hunting to farming <ul style="list-style-type: none"> • Crossing the land bridge from Asia to North America <p>Ancient Mesopotamia</p> <ul style="list-style-type: none"> • Importance of Tigris & Euphrates River <ul style="list-style-type: none"> Provided irrigation for farming, fertile soil • Development of Writing <p>Why writing is important to the development of civilization</p> <ul style="list-style-type: none"> • Code of Hammurabi (early code of laws), <p>Why rules and laws are important to the development of civilization</p> <p>Geography</p> <ul style="list-style-type: none"> • Africa • Sahara Desert <ul style="list-style-type: none"> • Importance of Nile River, floods and farming <ul style="list-style-type: none"> • Pharaohs • Pyramids, mummies and Sphinx • Writing: hieroglyphics <p>Maya, Inca, & Aztec Civilizations</p> <ul style="list-style-type: none"> - Geography - Maya in Mexico and Central America
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<p>people in society, migration, and customs</p> <p>WH: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> - Identify conquistadors and locate the civilizations they conquered - Describe the reasons for conquering new land - Describe the explorers' influence on the conquered land <p>- Conquistadors: Spanish for Conquerors</p> <ul style="list-style-type: none"> - Searching for gold, silver and treasures - Forcing their religion - Diseases devastate Native American population <p>USH: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> - Describe how the Roanoke and Virginia colonies were established - Identify important individuals and their contributions to the development of the United States <ul style="list-style-type: none"> - Identify the causes of the 	<ul style="list-style-type: none"> - Aztecs in Tenochtitlan (Mexico City) - Inca in South America (Peru: cities in Andes, Machu Picchu; Chile) <ul style="list-style-type: none"> - Maya (Artisans and builders) - Aztecs - Montezuma (also called Montezuma) <p>The Conquistadors</p> <p>Hernan Cortes and the Aztecs (Destruction of the Aztec empire and wealth for Spain)</p> <p>Francisco Pizarro and the Incas</p> <p>English Settlers</p> <p>The story of the Lost Colony</p> <ul style="list-style-type: none"> - Sir Walter Raleigh - Virginia Dare <p>Virginia</p> <ul style="list-style-type: none"> - Jamestown - Captain John Smith - Pocahontas and Powhatan <p>Massachusetts</p> <ul style="list-style-type: none"> - Massachusetts Bay Colony, the Puritans - Slavery, plantations in Southern colonies <p>The Revolutionary War</p> <ul style="list-style-type: none"> - Original thirteen colonies - The Boston Tea Party - Paul Revere's ride, "One if by land, two if by sea" - Thomas Jefferson and the Declaration of Independence, "We hold these truths to be self-evident, that all men are created equal..." <ul style="list-style-type: none"> - Fourth of July - George Washington: from military commander to our first president(and Martha Washington) - Our national capital city named Washington
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<p style="text-align: center;">Revolutionary War</p> <ul style="list-style-type: none"> - Compare and contrast “Minutemen” & “Redcoats” (American and British armies) in the battle of Lexington & Concord <p>USH: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> - Identify important individuals and their contributions to the development of the United States - Explain how early explorers of the American west showed <ul style="list-style-type: none"> - Moral Focus concepts 	<ul style="list-style-type: none"> - Benjamin Franklin: patriot, inventor, writer <ul style="list-style-type: none"> - Legend of Betsy Ross and the flag - French and Indian War as a cause of conflict - Minutemen and Redcoats, the “shot heard round the world” <p style="text-align: center;">Westward Growth</p> <ul style="list-style-type: none"> - Daniel Boone and the Wilderness Road <ul style="list-style-type: none"> Appalachian Mountains The Louisiana Purchase Mississippi River - Exploration of Lewis and Clark <ul style="list-style-type: none"> Rocky Mountains Sacagawea
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GRADE TWO – The Local Community

In second grade, students continue the integrative approach to social studies through the context of the local community. This is the first time students are introduced to a social environment larger than their immediate surroundings and they draw upon knowledge learned in previous grades to develop more sophisticated understandings to explore the social studies disciplines of history, geography, civics and government, and economics.

U1 - History

In second grade, students further develop abilities to think like a historian by using the tools of the discipline. Students use a timeline of local community events to demonstrate chronological thinking. Using examples from the past, students start to understand the significant role of the individual in shaping history. The context expectations also introduce students to the concept of perspective by asking students to explain why people can describe the same event differently. Additionally, the expectations expand students' ability to think historically as they explore changes over time as well as localized events. In preparing students to evaluate decisions from the past in later grades, the expectations ask students to examine how a local community problem in the past was addressed. Students demonstrate their understanding of history by constructing a historical narrative of the local community, which serves as a building block for more sophisticated analysis and writing in subsequent grades.

U1.1 Living and Working Together in Communities			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use historical thinking to understand the past</i> 2-H2.0.1 Demonstrate chronological thinking by distinguishing among years and decades using a timeline of local community events (new)		The Community Around Me My community history <ul style="list-style-type: none"> Development and change Government and community leaders <ul style="list-style-type: none"> Mayor, City 	



<p>2-H2.0.2 Explain why descriptions of the same event in the local community can be different (new)</p> <p>2-H2.0.3 Use an example to describe the role of the individual in creating history (shares alignment at grade level NHA)</p> <p>2-H2.0.4 Describe changes in the local community over time (e.g., types of business, architecture and landscape, jobs, transportation, population) (shares alignment at grade level NHA)</p> <p>2-H2.0.5 Identify a problem in a community's past and describe how it was resolved (shares alignment at grade level NHA)</p> <p>2-H2.0.6 Construct a historical narrative about this history of the local community from a variety of sources (e.g., data gathered from local residents, artifacts, photographs)</p>	<p>Identify leaders in the local community (<i>Communities Around the World</i>)</p> <p>Explain how the local community has changed over time (<i>Communities Around the World</i>)</p>	<p>Council, business leaders</p>	
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(shares alignment at grade level NHA)			
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U2 - Geography

In developing geographic understandings, students draw upon prior knowledge of spatial awareness, place, human systems, and human-environment interactions from earlier grades to create more complex understandings using the context of the local community. Geographic representations (maps) of areas outside their immediate environment introduce students to the use of symbols, labels, and legends to demote human and natural features. Students use maps to describe the spatial organization of their local community, applying relative location and using distance, direction, and scale. In addition to learning more elaborate distinctions between human and physical characteristics by studying the local community, students compare these characteristics to those of another community. They use these attributes to further their understanding of region by exploring how their local community is part of larger regions such as a county, state, and country. Students expand upon their concept of human systems and human-environment interactions by examining local land use, as well as the positive and negative consequences of changing the physical environment. As a starting point for understanding the global economy in later grades, the second grade expectations introduce students to the geographic theme of movement as they explore how people, goods, and ideas move within the local community. These foundations prepare students for a more elaborate understanding of geography, as they examine their state, country, and world in subsequent grades.

U2.1 – The World in Spatial Terms			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use geographic representations to acquire, process, and report information from a spatial perspective</i> 2-G1.0.1 Construct maps of the local community that contain symbols, labels, and legends denoting human and natural characteristics of place (new) 2-G1.0.2 Use maps to describe the spatial			



<p>organization of the local community by applying concepts including relative location and using distance, direction, and scale (shares alignment at 3rd grade NHA)</p>			
U2.2 – The World in Spatial Terms			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how regions are created from common physical and human characteristics</i></p> <p>2-G2.0.1 Compare the physical and human characteristics of the local community with those of another community (shares alignment at grade level NHA)</p> <p>2-G2.0.2 Describe how the local community is part of a larger region (e.g., county, metropolitan area, state)</p>	<p>Describe common characteristics of people within a culture group (<i>Communities around the world</i>)</p>	<p>Communities Around the World Groups of people with similar characteristics</p> <p>Cultural and social similarities</p> <ul style="list-style-type: none"> • Language • Values • Celebration of accomplishments and achievements • Shared legends/histories 	



(shares alignment at K NHA)			
U2.3 – Human Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how human activities help shape the Earth's surface</i></p> <p>2-G4.0.1 Describe land use in the community (e.g., where people live, where services are provided, where products are made) (shares alignment at grade level NHA)</p> <p>2-G4.0.2 Describe the means people create for moving people, goods, and ideas within the local community (shares alignment at grade level NHA)</p> <p>2-G4.0.3 Use components of culture (e.g., foods, language, religion, traditions) to describe diversity in the local community (shares alignment at grade level NHA)</p>	<p>Evaluate the advantages and disadvantages of different modes of transportation (<i>Communities around the world</i>)</p>	<p>Communities and Transportation</p> <p>Modes of transportation used to move people, products, and ideas from place to place</p> <ul style="list-style-type: none"> • Barges • Airplanes • Automobiles • Pipelines • Railroads • Computers <p>Advantages and disadvantages of different modes of transportation.</p>	
U2.4 – Environment and Society			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand the effects of human-</i></p>			



<p><i>environment interactions</i></p> <p>2-G5.0.1 Suggest ways people can responsibly interact with the environment in the local community (shares alignment at grade level NHA)</p> <p>2-G5.0.2 Describe positive and negative consequences of changing the physical environment of the local community (shares alignment at grade level NHA)</p>			
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U3 – Civics and Government

In second grade, students explore government in the United States. Building upon earlier understandings of the purposes for rules in the classroom, second grade students explore the reasons why people form governments. Students begin to understand the distinction between government action and private action, which sets the foundation for understanding the powers and limits of governmental authority in later grades. Students also examine situations in which the local government seeks to balance individual rights with the common good in solving community problems. They describe how the Pledge of Allegiance reflects the core democratic value in patriotism. Using examples of how the local government makes, enforces, and interprets the laws, students begin to explore formal structures of government and how government influences the lives of citizens. These understandings provide foundations for the study of state and national government in later grades.

In second grade, students are introduced to the role of government in the economy as they learn about the role of taxes and fees in paying for government services. The expectations help to prepare students for responsible citizenship by exploring how citizens participate in community decisions and by examining why both personal and civic responsibility are important aspects of community life. Students apply this knowledge by designing and participating in community improvement projects.



U3.1 – Purpose of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain why people create governments</i></p> <p>2-C1.0.1 Explain why people form governments (shares alignment at 3rd grade NHA)</p> <p>2-C1.0.2 Distinguish between government action and private action (shares alignment at 3rd grade NHA)</p>			
U3.2 – Values and Principles of American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand values and principles of American constitutional democracy</i></p> <p>2-C2.0.1 Explain how local governments balance individual rights with the common good to solve local community problems (shares alignment at 1st grade NHA)</p> <p>2-C2.0.2 Describe how the Pledge of Allegiance reflects the core democratic value of patriotism</p>			



(shares alignment at 3 rd grade NHA)			
U3.3 – Structure and Functions of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the structure of government in the United States and how it functions to serve citizens</i></p> <p>2-C3.0.1 Give examples of how local governments make, enforce, and interpret laws (ordinances) in the local community (shares alignment at 1st grade NHA)</p> <p>2-C3.0.2 Use examples to describe how local government affects the lives of its citizens (shares alignment at 1st grade NHA)</p> <p>2-C3.0.3 Identify services commonly provided by local governments (e.g., police, fire department, schools, libraries, parks) (shares alignment at K NHA)</p>			
U3.4 – Roles of the Citizen in American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Explain important rights and how, when</i>			



<p><i>,and where American citizens demonstrate their responsibilities by participating in government</i></p> <p>2-C5.0.1 Identify ways citizens participate in community decisions (shares alignment at 1st grade NHA)</p> <p>2-C5.0.2 Distinguish between personal and civic responsibilities and explain why they are important in community life (shares alignment at grade level NHA)</p> <p>2-C5.0.3 Design and participate in community improvement projects that help or inform others (See P4.2.2) (shares alignment at 1st grade NHA)</p>	<p>Describe ways that people show citizenship in the US and in other countries of the world (<i>Communities Around the World</i>)</p>	<p>Citizenship in world communities National Anthems</p> <p>National Flags</p> <p>Celebration of holidays and festivals</p> <p>Monuments and memorials used to commemorate events and achievements</p>	
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U4 - Economics

Second grade students build upon basic economic concepts they have applied to personal experiences in previous grades. They continue to work with the concepts of scarcity and choice and learn to identify opportunity cost in consumer decisions. Significantly, the expectations broaden the context of study of communities. Using the lens of the local community, students identify different types of businesses and make connections between local businesses and the economic wants of people or other businesses. Students are introduced to the concepts of natural, human, and capital resources using local community examples. In doing so, they begin to recognize examples of economic specialization and its relationship to trade.

U4.1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use fundamental principles and concepts of economics to understand economic activity in a market economy</i></p> <p>2-E1.0.1 Identify the opportunity cost involved in a consumer decision (shares alignment at grade level NHA)</p> <p>2-E1.0.2 Identify businesses in the local community (shares alignment at grade level NHA)</p> <p>2-E1.0.3 Describe how businesses in the local community meet economic wants of consumers (shares alignment at grade level NHA)</p> <p>2-E1.0.4 Describe the natural, human, and capital resources needed for</p>	<p>Give examples of categories of resources (natural, human, and capital) (<i>Grade 2 Economics</i>)</p> <p>Explain the concept of “market” (<i>Grade 2 Economics</i>)</p> <p>Describe how people make choices regarding resources (e.g., opportunity cost and scarcity) (<i>Grade 2 Economics</i>)</p>	<p>Natural Resources</p> <ul style="list-style-type: none"> • “Gifts” of nature • Present without intervention of humans • Role of natural resources in daily lives (use of trees for lumber in buildings) <p>Capital Resources</p> <ul style="list-style-type: none"> • Made by people • Used to make other goods • Used to provide other services • Role of capital resources in daily lives (production of automobiles) 	



<p>production of a good or service in a community (shares alignment at grade level NHA)</p> <p>2-E1.0.5 Use examples to show that people cannot produce everything they want (specialization) and depend on trade with others to meet their wants (shares alignment at grade level NHA)</p>		<p>Human Resources</p> <ul style="list-style-type: none"> • Also known as labor or human capital • The effort of people to produce goods or services • Used to provide other services • Role of human resources in daily lives (production of food) <p>Choices</p> <ul style="list-style-type: none"> • Scarcity • Opportunity cost • Peoples choices determine how resources are used <ul style="list-style-type: none"> • Scarcity of resources determine that some natural resources will be used in multiple ways <p>Market</p> <ul style="list-style-type: none"> • The concept of market <p>Economic Exchanges</p> <ul style="list-style-type: none"> • Bartering: People can trade goods and services for other goods and services to satisfy wants and 	
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		needs. (does not use money)	
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U5 – Public Discourse, Decision Making, and Citizen Involvement

Students develop a more sophisticated understanding of public issues, and the importance of citizen action in a democratic republic. Second grade students begin to recognize that conflicts among core democratic values often lead people to want different resolutions to a public policy issue in the local community. They identify public issues in the local community, analyze data about these community issues, and evaluate alternatives resolutions. They use core democratic values to demonstrate why people may differ on the resolution of a community issue as they continue to develop competency in expressing their own opinions relative to these issues and justify their opinions with reasons. This foundational knowledge is built upon throughout the grades as students develop a greater understanding of how, when, and where to communicate their positions on public issues with a reasoned argument.

U5.1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Clearly state a problem as a public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions</i></p> <p>2-P3.1.1 Identify public issues in the local community that influence the daily lives of its citizens (new)</p> <p>2-P3.1.2 Use graphic data and other sources to analyze information about a public issue in the local community and evaluate alternative resolutions (new)</p>			



<p>2-P3.1.3 Give examples of how conflicts over core democratic values lead people to differ on resolutions to a public policy issue in the local community (new)</p>			
U5.2 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Communicate a reasoned position on a public issue</i></p> <p>2-P3.3.1 Compose a statement expressing a position on a public policy issue in the local community and justify the position with a reasoned argument (new)</p>			
U5.3 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good</i></p> <p>2-P4.2.1 Develop and implement an action plan to address or inform others about a public issue (new)</p> <p>2-P4.2.2 Participate in projects to help or inform others (new)</p>			

Additional NHA Content

The following content and/or units are not required by the 2nd grade Michigan GLCE's and should not longer be taught in 2nd grade:

NHA Social Studies Units

Geography: Grade Two - 2nd grade geography should focus on the local community, not the North American Continent

Early Civilizations: Asia – 7th grade GLCE's

Ancient Greece – 7th grade GLCE's

The Constitution - 8th grade GLCE's

The War of 1812 – 8th grade GLCE's

Westward Expansion - 8th grade GLCE's

The Civil War - 8th grade GLCE's

Immigration and Citizenship - 8th grade GLCE's

Symbols and Figures of America – Kindergarten GLCE

GRADE THREE – MICHIGAN STUDIES

Third grade students explore the social studies disciplines of history, geography, civics and government, and economics through the context of Michigan studies. Building on prior social studies knowledge and applying new concepts of each social studies discipline to the increasingly complex social environment of their state, the third grade content expectations prepare students for more sophisticated studies of their country and world in later grades.

U1 - History

In third grade, students refine their abilities to think like a historian by identifying the types of questions that historians ask. Building upon experiences of timeline construction, students sequence early periods of Michigan history from exploration through attaining statehood. The expectations move students from examining a variety of simple sources to understanding how historians use both primary and secondary sources to learn about the past. Students use both types of sources as they explore the early history of Michigan, providing a rich connection to the English language arts. Through traditional stories, students learn about the beliefs of American Indians. They compare how American Indians and settlers interacted with their environment through informational text. The skill of constructing historical narratives is developed using the context of daily life in the early settlements. The expectations build on students' sense of chronology by requiring students to describe causal relationships among events. These foundational understandings prepare students for more sophisticated writing and analyses as they prepare to study United States history in subsequent grades.

U1.1 History of Michigan (through Statehood)			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use historical thinking to understand the past</i>	None	None	<u>Needs to be developed</u>
3-H3.0.1 Identify questions historians ask in examining the past in Michigan (e.g., What happened? When did it happen? Who was involved? How and why did it happen?) (new)	None	None	<u>Incorporate in ELA??</u>
3-H3.0.2 Explain how historians use primary and secondary sources to answer questions about the past.			



<p>(new)</p> <p>3-H3.0.3 Describe the causal relationships between three events in Michigan's past (e.g., Erie Canal, more people came, statehood). (shares alignment at 4th grade NHA)</p>	<p>Sequencing important historical events of their individual state (UNIT: State Studies)</p>	<p>Major historical events in the state in chronological order</p> <ul style="list-style-type: none"> <input type="checkbox"/> The role of the state in significant national events <input type="checkbox"/> Specific national events that influenced the state <input type="checkbox"/> Events may include but is not limited to: <ul style="list-style-type: none"> o The Colonial period: lifestyles o The Revolutionary periods: key individuals or groups o The American Revolution: key events and people o Statehood: key events and people o The Civil War: key events and people o Industrial growth and 	<p><u>Be sure the events are MI specific</u></p>
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<p>3-H3.0.4 Draw upon traditional stories of American Indians (e.g., Anishinaabeg - Ojibway (Chippewa), Odawa (Ottawa), Potawatomi; Menominee; Huron Indians) who lived in Michigan in order to make generalizations about their beliefs. (shares alignment at 4th grade NHA)</p> <p>3-H3.0.5 Use informational text and visual data to compare how American Indians and settlers in the early history of Michigan adapted to, used, and modified their environment. (shares alignment at 4th grade NHA)</p>	<p>Describing the way of life of Native American tribes within their state (e.g., homes, traditional dress, foods, transportation, crafts, tools and other accomplishments) (UNIT: State Studies)</p> <p>· Explaining Native American influences on their state (UNIT: State Studies)</p> <p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p>	<p>expansion: key events and people in agricultural, industrial and business development</p> <ul style="list-style-type: none"> o Immigration o Urbanization: economic, political and social impacts o World War I & II o The Great Depression o Civil Rights Movement <p>Native Americans: origins and culture</p> <ul style="list-style-type: none"> <input type="checkbox"/> First inhabitants <input type="checkbox"/> Tribes inhabiting the state <input type="checkbox"/> Relationship with the environment: food, clothing, shelter, etc. <input type="checkbox"/> Culture: customs, traditions, arts, etc. <input type="checkbox"/> Important accomplishments or contributions 	<p><u>NHA covers more here than what the GLCE states</u></p> <p><u>More geography than history</u></p>
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<p>3-H3.0.6 Use a variety of sources to describe interactions that occurred between American Indians and the first European explorers and settlers in Michigan. (shares alignment at 4th grade NHA)</p> <p>3-H3.0.7 Use a variety of primary and secondary sources to construct a historical narrative about daily life in the early settlements of Michigan (pre-statehood). (shares alignment at 4th grade NHA)</p> <p>3-H3.0.8 Use case studies or stories to describe how the ideas or actions of individuals affected the history of Michigan. (shares alignment at 4th grade NHA)</p>	<p>Sequencing important historical events of their individual state (UNIT: State Studies)</p> <p>Sequencing important historical events of their individual state (UNIT: State Studies)</p> <p>Sequencing important historical events of their individual state (UNIT: State Studies)</p>	<p>Five Themes of Geography</p> <ul style="list-style-type: none"> □ <u>Human-Environment Interaction</u>: Describe how the environment impacts the way people live and how humans alter the environment <ul style="list-style-type: none"> o Climate and weather on clothing, housing styles, recreational activity and food choice o Location, use and importance of natural resources o Development of roads, buildings and cities <p>Exploration & settlement</p> <ul style="list-style-type: none"> □ Explorers through the state and motivations □ Impact of exploration: social, cultural, economic, political, and geographic □ First settlers who migrated to the state and motivations 	<p><u>Good for a research project in ELA</u></p> <p><u>Also good ELA connections</u></p>
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<p>3-H3.0.9 Describe how Michigan attained statehood. (shares alignment at 4th grade NHA)</p> <p>3-H3.0.10 Create a timeline to sequence early Michigan history (American Indians, exploration, settlement, and statehood). (shares alignment at 4th grade NHA)</p>	<p>Sequencing important historical events of their individual state (UNIT: State Studies)</p> <p>Sequencing important historical events of their individual state (UNIT: State Studies)</p>	<p>Exploration & settlement</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explorers through the state and motivations <input type="checkbox"/> Impact of exploration: social, cultural, economic, political, and geographic <input type="checkbox"/> First settlers who migrated to the state and motivations <p>Exploration & settlement</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explorers through the state and motivations <input type="checkbox"/> Impact of exploration: social, cultural, economic, political, and geographic <input type="checkbox"/> First settlers who migrated to the state and motivations <p>Major historical events in the state in chronological order</p> <ul style="list-style-type: none"> <input type="checkbox"/> Events may include but is not limited to: <ul style="list-style-type: none"> o Statehood: key events and people 	<p><u>What specific events should be included?</u></p>
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U2 – Geography

Third grade students draw upon prior knowledge to create more complex understandings of geographic concepts using the context of Michigan. They further develop spatial awareness through the use of more complex maps of Michigan. Students refine the concept of regions as they explore different ways Michigan can be divided into regions and learn about the different geographic regions to which Michigan belongs. Building upon their knowledge of human systems, students investigate current economic activities in Michigan and explore factors that influence the location of these economic activities. The expectations also extend the geographic theme of movement as students describe current movements of goods, people, jobs, or information to, from, or within Michigan, and investigate the reasons for the movements. In addressing human-environment interactions, the expectations integrate history as students apply their knowledge of how people adapt to, use, and modify the environment to the more complex social environment of their state. More sophisticated understandings are also created as students locate different natural resources in Michigan and analyze the consequences of their use. These foundations prepare students for a more elaborate understanding of geography as they examine their country and world in subsequent grades.

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic representations to acquire, process, and report information from a spatial perspective</i></p> <p>3-G1.0.1 Use cardinal directions (north, south, east, and west) to describe the relative location of significant places in the immediate environment.</p> <p>3-G1.0.2 Use thematic maps to identify and describe the physical and</p>	<p>Determine a location and distance (cardinal directions, scale, grid) (UNIT: Geography)</p> <p>Interpret different types of maps (UNIT: Maps and Globes)</p>	<p>Maps and Globes</p> <p>-Cardinal and intermediate directions</p> <p>Maps and Globes</p> <p>-Types of maps: Political, physical, climate, natural resources/land use,</p>	<p><u>Not the right kind of maps listed: political, physical, climate, natural resources/land</u></p>



human characteristics of Michigan. (shares alignment with 4 th grade NHA)		population	<u>use, population</u>
U2.2 – Places and Regions			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how regions are created from common physical and human characteristics</i></p> <p>3-G2.0.1 Use a variety of visual materials and data sources to describe ways in which Michigan can be divided into regions. (shares alignment with 4th grade NHA)</p> <p>3-G2.0.2 Describe different regions to which Michigan belongs (e.g., Great Lakes Region, Midwest). (shares alignment with 4th grade NHA)</p>	<p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p> <p>Comparing physical features of their state to regions in the United States (UNITS: US Regions Studies, State Studies)</p>	<p>Introduction to the 5 Themes of Geography Region: An area with places which share similar features and processes Environmental regions (landforms and climate) Cultural regions (urban, suburban, rural) Economic regions (industries, farming)</p> <p>The United States can be broken into different types of regions <input type="checkbox"/> Regions of the U.S are described in various terms or ways <input type="checkbox"/> By landforms (e.g. Rocky Mountain Region; Plains Region, Mid-</p>	



		West can also be known as Great Lakes region)	
U2.3 – Human Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how human activities help shape the Earth's surface</i></p> <p>3-G4.0.1 Describe major kinds of economic activity in Michigan today, such as agriculture (e.g., corn, cherries, dairy), manufacturing (e.g., automobiles, wood products), services and tourism, research and development (e.g., Automation Alley, life sciences corridor, university communities), and explain the factors influencing the location of these economic activities. (E) (shares alignment with 4th grade NHA)</p> <p>3-G4.0.2 Describe diverse groups that have come into a region of Michigan and reasons why they came (push/pull factors). (H) (shares alignment with 4th grade NHA)</p> <p>3-G4.0.3 Describe some of the current movements of goods, people, jobs or information to, from, or within Michigan and explain reasons for the movements. (E)</p>	<p>Describe the economy of their state (UNIT: State Studies)</p> <p>Describing the cultural characteristics of people within their state (UNIT: State Studies)</p> <p>Describe the economy of their state (UNIT: State Studies)</p> <p>Describing the cultural</p>	<p>Economics</p> <p>- Major products (goods), services and industries produced by the state</p> <p>□ Natural resources</p> <p>□ State specialization</p> <p>Culture</p> <p>- Cultural characteristics of various peoples, regions in the state</p> <p>Economics</p> <p>- State trade: major imports and exports</p>	



<p>(shares alignment with 4th grade NHA)</p> <p>3.G4.0.4 Use data and current information about the Anishinaabeg and other American Indians living in Michigan today to describe the cultural aspects of modern American Indian life; give an example of how another cultural group in Michigan today has preserved and built upon its cultural heritage.</p> <p>(shares alignment with 4th grade NHA)</p>	<p>characteristics of people within their state (UNIT: State Studies)</p>	<p>Culture</p> <p>- Cultural characteristics of various peoples, regions in the state</p>	
U2.4 – Environment and Society			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand the effects of human-environment interactions</i></p> <p>3-G5.0.1 Locate natural resources in Michigan and explain the consequences of their use.</p> <p>(shares alignment with 4th grade NHA)</p> <p>3-G5.0.2 Describe how people adapt to, use, and modify the natural resources of Michigan. (H)</p> <p>(shares alignment with 4th grade NHA)</p>	<p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p> <p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p>	<p>□ <u>Human-Environment Interaction</u>: Describe how the environment impacts the way people live and how humans alter the environment</p> <ul style="list-style-type: none"> o Climate and weather on clothing, housing styles, recreational activity and food choice o Location, use and importance of natural resources o Development of roads, buildings and cities 	<p>Find where the natural resources are and what would happen if they are used.</p> <p>Make this more about natural resources and how people adapt to, use, and modify them.</p>

U3 – Civics and Government

In extending students’ civic perspective beyond the family, neighborhood, and community to the state, the third grade content expectations prepare students for their role as responsible and informed citizens of Michigan. Building upon their knowledge of government of the local community, students distinguish the roles of state government from local government. Using the context of state government, students examine the concept of separation of powers by exploring the powers of each branch of state government. By examining how the state courts function to resolve conflicts, students deepen their understanding of the rule of law. The idea of representative government is introduced. By focusing on key concepts, such as citizens’ rights and responsibilities, separation of powers, individual rights, rules of law, representative government, and justice, students are prepared for the roles of citizens in our democratic republic.

U3.1 – Purpose of Government			
Michigan GLCE’s	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain why people create governments</i></p> <p>3-C1.0.1 Give an example of how Michigan state government fulfills one of the purposes of government (e.g., protecting individual rights, promoting the common good, ensuring equal treatment under the law).</p>	<p>Explaining the origin of Core Democratic Values and how they help define what it means to be a citizen (UNIT: America: Founding & Principles)</p>	<p>Are the fundamental beliefs and constitutional principles of American society which unite all Americans</p> <ul style="list-style-type: none"> <input type="checkbox"/> Liberty: Includes the freedom to believe what you want, freedom to choose your own friends, and to have your own ideas and opinions, to express your ideas in public, the right for people to meet in groups, and the right to have any lawful job or business. <input type="checkbox"/> Common Good: People should work together for the good of all. The government should make laws that are good for 	<p><u>Be sure to make these Michigan state government specific</u></p>



		<p>everyone.</p> <p><input type="checkbox"/> Equality: Everyone should get the same treatment regardless of where your parents or grandparents were born, your race or religion, or how much money you have. All people have political, social and economic equality.</p>	
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U3.2 – Values and Principles of American Democracy

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand values and principles of American constitutional democracy</i></p> <p>3-C2.0.1 Describe how Michigan state government reflects the principle of representative government. (new)</p>	None	None	

U3.3 – Structure and Functions of Government

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the structure of government in the United States and how it functions to serve citizens</i></p>	Ordering the levels of		



<p>3-C3.0.1 Distinguish between the roles of state and local government. (shares alignment with 4th grade NHA)</p> <p>3-C3.0.2 Identify goods and services provided by the state government and describe how they are funded (e.g., taxes, fees, fines). (new)</p> <p>3-C3.0.3 Identify the three branches of state government in Michigan and the powers of each. (shares alignment with 4th grade NHA)</p> <p>3-C3.0.4 Explain how state courts function to resolve conflict. (new)</p> <p>3-C3.0.5 Describe the purpose of the Michigan Constitution. (shares alignment with 4th grade NHA)</p>	<p>government (local, state, and national) in a hierarchy (UNIT: State Studies)</p> <p>None</p> <p>Describing the 3 Branches of Government (UNIT: State Studies)</p> <p>None</p> <p>Ordering the levels of government (local, state, and national) in a hierarchy (UNIT: State Studies)</p>	<p>- Levels & function of government <input type="checkbox"/> Local, state & federal</p> <p>None</p> <p><input type="checkbox"/> Structure and function of the branches of government: checks and balances to limit power o Legislative Branch: Congress – makes laws o Executive Branch: office of President – carries out laws o Judicial Branch: Supreme Court – interprets law</p> <p>None</p> <p>- Levels & function of government <input type="checkbox"/> State and US Constitution</p>	<p>Take out the national from NHA objective</p>
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U3.4 – Roles of the Citizen in American Democracy

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain important rights and how, when, and where American citizens demonstrate their responsibilities by participating in government</i></p> <p>3-C5.0.1 Identify rights (e.g., freedom of speech, freedom of religion, right to own property) and responsibilities of citizenship (e.g., respecting the rights of others, voting, obeying laws).</p>	<p>Explaining the origin of Core Democratic Values and how they help define what it means to be a citizen (UNIT: America: Founding & Principles)</p>	<ul style="list-style-type: none"> - Origins in the Declaration of Independence, the Preamble to the Constitution, United States Constitution, Bill of Rights, Pledge of Allegiance, speeches, songs and stories - Are the fundamental beliefs and constitutional principles of American society which unite all Americans <ul style="list-style-type: none"> <input type="checkbox"/> Life: Each person has the right to the protection of life. <input type="checkbox"/> Liberty: Includes the freedom to believe what you want, freedom to choose your own friends, and to have your own ideas and opinions, to express your ideas in public, the right for people to meet in groups, and the right to have any lawful job or business. <input type="checkbox"/> Pursuit of Happiness: Each person can find happiness in their own way, so long as they do not step on the rights of others. <input type="checkbox"/> Common Good: People should work together for 	<p>Do we need to cover all of these?</p>



		<p>the good of all. The government should make laws that are good for everyone.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Justice: All people should be treated fairly in getting the advantages and disadvantages of our country. No group or person should be favored. <input type="checkbox"/> Diversity: Differences in language, dress, food, where parents or grandparents were born, race, and religion are not only allowed but accepted as important. <input type="checkbox"/> Equality: Everyone should get the same treatment regardless of where your parents or grandparents were born, your race or religion, or how much money you have. All people have political, social and economic equality. <input type="checkbox"/> Truth: The government and citizens should not lie. <input type="checkbox"/> Popular Sovereignty: The power of the government comes from the people. <input type="checkbox"/> Patriotism: A devotion to 	
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		<p>our country and the core democratic values in word or deed.</p> <p><input type="checkbox"/> Rule of Law: Both the government and the people must obey the law.</p>	
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U4 - Economics

Third grade students refine their understanding of the principles and concepts of economics. Building on a basic understanding of scarcity and choice, students learn to appreciate the relationships among scarcity, choice, and opportunity costs in making economic decisions. In addition, students are introduced to how incentives impact economic decision making. Students explore Michigan's economy by examining how natural resources have influenced economic development in the state. An introduction to the concepts of entrepreneurship, specialization, and interdependence allows students to explore the relationship of Michigan to the national and global economies. Finally, students use these concepts to consider the role of new business development in Michigan's future.

U4.1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use fundamental principles and concepts of economics to understand economic activity in a market economy</i></p> <p>3-E1.0.1 Explain how scarcity, opportunity costs, and choices affect what is produced and consumed in Michigan.</p>	<p>Describing basic economic concepts (UNIT: Economics)</p> <p>Proposing a way needs can be met considering choices available (opportunity cost) (UNIT: Economics)</p>	<p>- Supply & demand</p> <p><input type="checkbox"/> People buy less of a product when its price goes up</p> <p><input type="checkbox"/> People buy more of a product when its price goes down</p> <p>- Choices include trade-offs</p>	<p><u>Make it specific to Michigan</u></p>

<p>3-E1.0.2 Identify incentives (e.g., sales, tax breaks) that influence economic decisions people make in Michigan.</p>	<p>Describing basic economic concepts (UNIT: Economics)</p>	<p>(also known as opportunity cost)</p> <p><input type="checkbox"/> It may include giving up buying or doing little of one thing, in order to buy or do a little of something else</p>	<p><u>Specific to Michigan again</u></p>
<p>3-E1.0.3 Analyze how Michigan’s location and natural resources influenced its economic development (e.g., how waterways and other natural resources have influenced economic activities such as mining, lumbering, automobile manufacturing, and furniture making). (H, G) (new)</p>	<p>None</p>	<p>- Supply & demand</p> <p><input type="checkbox"/> People buy less of a product when its price goes up</p> <p><input type="checkbox"/> People buy more of a product when its price goes down</p> <p>None</p>	
<p>3-E1.0.4 Describe how entrepreneurs combine natural, human, and capital resources to produce goods and services in Michigan. (H, G)</p>	<p>Comparing and contrasting different categories of resources (natural, human, and capital) (UNIT: Economics)</p> <p>Explaining the concept of “entrepreneurship” (UNIT: Economics)</p> <p>None</p>	<p>Entrepreneurship</p> <p>- Combining natural,</p>	<p><u>Make it Michigan specific</u></p>



3-E1.0.5 Explain the role of business development in Michigan's economic future. (new)		human and capital resources to produce various goods and services None	
U4.2 National Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use fundamental principles and concepts of economics to understand economic activity in the United States.</i> 3-E2.0.1 Using a Michigan example, describe how specialization leads to increased interdependence (cherries grown in Michigan are sold in Florida; oranges grown in Florida are sold in Michigan).	Describing basic economic concepts (UNIT: Economics)	- Specialization <input type="checkbox"/> The concentration of production on fewer kinds of goods/services <input type="checkbox"/> The performance of a specific task or job (division of labor)	<u>Make it Michigan specific</u>
U4.3 International Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use fundamental principles and concepts of economics to understand economic activity in the global economy.</i> 3-E3.0.1 Identify products produced in other countries and consumed by people in Michigan. (new)	None	None	

U5 – Public Discourse, Decision Making, and Citizen Involvement

Students continue to develop a more sophisticated understanding of public issues and the importance of citizen action in a democratic republic. Using the context of Michigan, third grade students identify public policy issues facing citizens in Michigan, use graphic data and other sources to analyze information about the issue, and evaluate alternative resolutions. By utilizing core democratic values to demonstrate why people may differ on the resolution of a state issue, students continue to develop competency in expressing their own opinions relative to these issues and justify their opinions with reasons. This foundational knowledge is built upon throughout the grades as students develop a greater understanding of how, when, and where to communicate their positions on public issues with a reasoned argument.

U5.1 Identifying and Analyzing Issues			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Clearly state a problem as a public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions</i>			
3-P3.1.1 Identify public issues in the local community that influence the daily lives of its citizens (standard aligns with 4th grade NHA)	Predicting the impact that the current events will have on the future of their state (UNIT: State Studies)	Current Events - Examine current state issues in the news	
3-P3.1.2 Use graphic data and other sources to analyze information about a public issue in the local community and evaluate alternative resolutions	None	None	
3-P3.1.3 Give examples of how conflicts over core democratic values lead people to differ on resolutions to a public policy issue in Michigan.	None	None	

U5.2 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Communicate a reasoned position on a public issue</i></p> <p>3-P3.3.1 Compose a statement expressing a position on a public policy issue in the local community and justify the position with a reasoned argument</p>	None	None	
U5.3 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good</i></p> <p>3-P4.2.1 Develop and implement an action plan to address or inform others about a public issue</p> <p>3-P4.2.2 Participate in projects to help or inform others</p>	None	None	
	None	None	



Additional NHA Content

The following content and/or units are not required by the 3rd grade Michigan GLCE's and should not longer be taught in 3rd grade:

NHA Social Studies Unit: Geography	
Content	Unit Objectives
Economics the bartering concept (Covered in 1st) Economics choices based on positive and negative incentives (Covered in 4th) Our America (just why historical figures were good citizens and the basic principles of government) Ancient Rome Vikings Middle Ages Explorers 13 Colonies	<p>Explaining the purpose of using money as opposed to bartering (UNIT: Economics) Analyze choices based on positive and negative incentives (UNIT: Economic Concepts)</p> <p>Using the definition of Core Democratic Values to explain why important American historical figures were good citizens (UNIT: America: Founding & Principles)</p> <p>Explaining the basic principles of the American system of government (UNIT: America: Founding & Principles)</p> <p>Locating the geographic area of the world where ancient civilizations existed (UNITS: Ancient Rome, The Vikings)</p> <p>Describing significant individuals in ancient history and the impact their accomplishments had on ancient and modern society (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages)</p> <p>Summarizing the causes and effects of major events in ancient world history (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages)</p> <p>Explaining the impact of individual warriors on 15th century Europe (Joan of Arc, William the Conqueror) (UNITS: Europe in the Middle Ages)</p> <p>Describing the major causes and outcome of the Hundred Years War (UNIT: Europe in the Middle Ages)</p> <p>Explaining the impact of the explorers' discoveries on modern society (UNIT: Early Exploration of North America)</p> <p>Comparing and contrasting the colonies as a region and individually (UNIT: The 13 Colonies)</p> <p>Sequencing the origins of civilizations and eras in time in chronological order (UNIT: Early Exploration of North America, Europe in the Middle Ages, The Vikings, Ancient Rome)</p> <p>Explaining how geographic locations of settlements and migration patterns influence</p>



	ancient societies (UNIT: Early Exploration of North America, Europe in the Middle Ages, The Vikings, Ancient Rome) Describing the structure of society in Europe in ancient civilizations (UNIT: Europe in the Middle Ages, The Vikings, Ancient Rome)
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— *Journal of the American Medical Association*, 1997

U1 - History

U1.1 History of Michigan (Beyond Statehood)			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical thinking to understand the past</i></p> <p>4-H3.0.1 Use historical inquiry questions to investigate the development of Michigan’s major economic activities (agriculture, mining, manufacturing, lumbering, tourism, technology, and research) from statehood to present. (C, E)</p> <ul style="list-style-type: none"> • What happened? • When did it happen? • Who was involved? • How and why did it happen? • How does it relate to other events or issues in the past, in the present, or in the future? • What is its significance? (new) 	<p>Describe the economy of their state (UNIT: State Studies)</p> <p>Sequencing important historical events of their</p>	<p>Major products (goods), services and industries produced by the state</p> <ul style="list-style-type: none"> □ Natural resources □ State specialization <p>- State trade: major imports and exports</p> <p>Major historical events in the state in chronological order</p>	<p><u>Incorporate in ELA?</u></p>



<p>4-H3.0.2 Use primary and secondary sources to explain how migration and immigration affected and continue to affect the growth of Michigan. (G) (new)</p> <p>4-H3.0.3 Describe how the relationship between the location of natural resources and the location of industries (after 1837) affected and continues to affect the location and growth of Michigan cities. (G, E)</p> <p>4-H3.0.4 Draw upon stories, photos, artifacts, and other primary sources to compare the life of people in towns and</p>	<p>individual state (UNIT: State Studies) Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p> <p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p> <p>Sequencing important historical events of their individual state (UNIT: State Studies)</p>	<p><input type="checkbox"/> Events may include but is not limited to: o Immigration</p> <p><input type="checkbox"/> <u>Movement</u>: Describe some of the major movements of materials, people, or ideas among places o Migration</p> <p><input type="checkbox"/> <u>Movement</u>: Describe some of the major movements of materials, people, or ideas among places o Tourism</p> <p>o Transportation routes <input type="checkbox"/> <u>Region</u>: Describe areas which share similar features o Environmental regions (e.g. landforms and climate)</p> <p>o Cultural regions (e.g. cities - urban, suburban, rural)</p> <p>o Economic region (e.g. industries, farming)</p>	<p><u>Fits in best with the region section of 5 Themes</u></p> <p><u>Not sure if these events are specific enough to Michigan history</u></p>
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<p>cities in Michigan and in the Great Lakes region during a variety of time periods from 1837 to the present (e.g., 1837-1900, 1900-1950, 1950-2000). (G)</p> <p>4-H3.0.5 Use visual data and informational text or primary accounts to compare a major Michigan economic activity today with that same or a related activity in the past. (E)</p> <p>4-H3.0.6 Use a variety of primary and secondary sources to construct a historical narrative about the beginnings of the automobile industry and the labor movement in Michigan. (G, E)</p>	<p>Describe the economy of their state (UNIT: State Studies)</p> <p>Sequencing important historical events of their individual state (UNIT :State Studies)</p>	<p>Major historical events in the state in chronological order</p> <ul style="list-style-type: none"> <input type="checkbox"/> The role of the state in significant national events <input type="checkbox"/> Specific national events that influenced the state <input type="checkbox"/> Events may include but is not limited to: <ul style="list-style-type: none"> o The Civil War: key events and people o Industrial growth and expansion: key events and people in agricultural, industrial and business development o Immigration o Urbanization: economic, political and social impacts o World War I & II o The Great Depression o Civil Rights Movement <p>- Major products (goods), services and industries</p>	<p><u>Good narrative idea for ELA</u> <u>NHA's list of events is not specific enough to MI standard</u></p>
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<p>4-H3.0.7 Use case studies or stories to describe the ideas and actions of individuals involved in the Underground Railroad in Michigan and in the Great Lakes region. (See 8-U4.2.2; 8-U4.3.2; 8-U5.1.5; USHG 7.2.4) (G, C, E)</p> <p>4-H3.0.8 Describe past and current threats to Michigan's natural resources; describe how Michigan worked in the past and continues to work today to protect its natural resources. (G, C, E)</p>	<p>Sequencing important historical events of their individual state (UNIT: State Studies)</p> <p>Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)</p>	<p>produced by the state <input type="checkbox"/> Natural resources <input type="checkbox"/> State specialization</p> <p>Major historical events in the state in chronological order</p> <p>Events may include but is not limited to:</p> <ul style="list-style-type: none"> o The Civil War: key events and people o Industrial growth and expansion: key events and people in agricultural, industrial and business development o Immigration o Urbanization: economic, political and social impacts o World War I & II o The Great Depression o Civil Rights Movement 	<p><u>NHA's list of events is not specific enough to MI standard</u></p> <p><u>Make sure events are specific to Michigan</u></p>
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<p>4-H3.0.9 Create timelines (using decades after 1930) to sequence and describe important events in Michigan history; annotate with connections to the past and impact on the future.</p>	<p>Sequencing important historical events of their individual state (UNIT: State Studies)</p>	<p>Same list as above</p> <p><u>5 Themes of Geography</u> <u>Human-Environment Interaction:</u> Describe how the environment impacts the way people live and how humans alter the environment</p> <ul style="list-style-type: none"> o Location, use and importance of natural resources o Development of roads, buildings and cities <p>Major historical events in the state in chronological order</p> <ul style="list-style-type: none"> □ Events may include but is not limited to: <ul style="list-style-type: none"> o The Civil War: key events and people o Industrial growth and expansion: key 	
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		events and people in agricultural, industrial and business development o Immigration o Urbanization: economic, political and social impacts o World War I & II o The Great Depression o Civil Rights Movement	
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U2 - Geography

Students draw upon their knowledge of spatial awareness, regions, human systems, and human-environment interactions to create more sophisticated understandings of these concepts within the context of the United States. By focusing on the work of geographers, students explore the types of questions geographers ask and the tools they use to answer these questions. Students learn that maps can be used to describe elevation and climate, as well as to analyze patterns of population density. In preparation for the study of American history, students concentrate on the geography of the United States. Students expand their knowledge of human systems using case studies and stories to understand push and pull factors of migration and the influence of migration on culture within the United States. Students deepen their understanding of human-environment interactions by assessing positive and negative effects of human activities on the physical environment of the United States. The firm understanding of United States geography established in fourth grade prepares students for the study of American history in fifth grade and world geography in grades six and seven.

U2.1 – The World in Spatial Terms			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use geographic representations to acquire, process, and report information from a spatial perspective</i> 4-G1.0.1 Identify questions geographers	None	None	



<p>ask in examining the United States (e.g., Where it is? What is it like there? How is it connected to other places?). (new)</p> <p>4-G1.0.2 Use cardinal and intermediate directions to describe the relative location of significant places in the United States. (possibly new unless incorporated into US region studies)</p> <p>4-G1.0.3 Identify and describe the characteristics and purposes (e.g., measure distance, determine relative location, classify a region) of a variety of geographic tools and technologies (e.g., globe, map, satellite image). (second objective taken from 5th NHA)</p> <p>4-G1.0.4 Use geographic tools and technologies, stories, songs, and pictures to answer geographic questions about the United States. (Shares alignment with 5th grade NHA)</p>	<p>Determine a location and distance (cardinal directions, scale, grid) (UNIT: Geography)</p> <p>Determining location and distance using map features and scale (UNIT: Geography)</p> <p>Interpret different types of maps and geographical representations (UNIT: Maps and Globes)</p> <p>Interpret different types of maps and geographical representations (UNIT: Maps and Globes)</p>	<p>Maps and Globes -Cardinal and intermediate directions</p> <p>Longitude and latitude <input type="checkbox"/> Prime Meridian (0 degrees):Greenwich, England <input type="checkbox"/> 180° Line (International Date Line) <input type="checkbox"/> Equator</p> <p>Geographic Tools and Information Resources Satellite-produced images</p> <p>Geographic Tools and Information Resources - Geographic representation <input type="checkbox"/> Aerial photographs</p>	<p>Required at third as well but third only has to know directions not used to describe the relative location of significant places in the US</p>
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<p>4-G1.0.5 Use maps to describe elevation, climate, and patterns of population density in the United States.</p>	<p>Interpret different types of maps (UNIT: Maps and Globes)</p>	<p>- Types of maps:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Political <input type="checkbox"/> Physical <input type="checkbox"/> Climate <input type="checkbox"/> Natural Resources/Land Use <input type="checkbox"/> Population 	
<p>U2.2 – Places and Regions</p>			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how regions are created from common physical and human characteristics</i></p> <p>4-G2.0.1 Describe ways in which the United States can be divided into different regions (e.g., political regions, economic regions, landform regions, vegetation regions).</p>	<p>Grouping the United States into regions in a variety of ways (political, physical, economical) (UNIT: US Region Studies)</p>	<p>- Regions are areas with places which share similar features and processes</p> <p>- The United States can be broken into different types of regions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Regions of the U.S are described in various terms or ways <ul style="list-style-type: none"> o By landforms (e.g. Rocky Mountain Region; Plains Region, Mid-West can also be known as Great Lakes region) 	<p>3^r grade describes just Michigan</p>



<p>4-G2.0.2 Compare human and physical characteristics of a region to which Michigan belongs (e.g., Great Lakes, Midwest) with those of another region in the United States.</p>	<p>Locating geographical areas within regions of the United States (states, capital cities, & major cities) (UNIT: US Region Studies) Comparing physical features of their state to regions in the United States (UNITS: US Regions Studies, State Studies)</p>	<p>o By political description (e.g. Northeast as New England etc.) o Described in a variety of ways according to the source of information: economic information, geographic information, climate information, vegetation/land use information, etc.</p> <p>US Region – The Northeast Political features (states and capitals, major cities) and physical features (landforms and bodies of water) US Region – The Southeast Political features (states and capitals, major cities) and physical features (landforms and bodies of water) US Region – The Mid-West Political features (states and capitals, major cities) and physical features (landforms</p>	<p>Ensure if 4th has to include significant events for each region</p> <p>See Teacher Central for a list of specific states, capitals, major cities, landforms, and bodies of water to cover</p> <p>3rd describes the regions to which Michigan belongs. No comparison btw human and physical at 3rd.</p>
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		<p>and bodies of water)</p> <p>US Region – The Plains (Great Plains)</p> <p>Political features (states and capitals, major cities) and physical features (landforms and bodies of water)</p> <p>US Region – The Southwest</p> <p>Political features (states and capitals, major cities) and physical features (landforms and bodies of water)</p> <p>US Region – The Rocky Mountain</p> <p>Political features (states and capitals, major cities) and physical features (landforms and bodies of water)</p> <p>US Region – The Pacific</p> <p>Political features (states and capitals, major cities) and physical features (landforms and bodies of water)</p>	
U2.3 – Human Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand how human activities help shape the Earth's surface</i></p> <p>4-G4.0.1 Use a case study or story about migration within or to the United States to identify push and pull factors (why they</p>			



<p>left, why they came) that influenced the migration. (H)</p> <p>4-G4.0.2 Describe the impact of immigration to the United States on the cultural development of different places or regions of the United States (e.g., forms of shelter, language, food). (H)</p>	<p>Describing the important individuals and events within each region of the United States (UNIT: US Region Studies)</p> <p>Explaining how the geographical location of these regions impact historical events in that region (UNIT: US Region Studies)</p> <p>Describing the important individuals and events within each region of the United States (UNIT: US Region Studies)</p> <p>Explaining how the</p>	<ul style="list-style-type: none"> - Significant events <ul style="list-style-type: none"> <input type="checkbox"/> Exploration <input type="checkbox"/> Colonization <input type="checkbox"/> The Revolutionary War - Significant Events <ul style="list-style-type: none"> <input type="checkbox"/> First settlements & colonies: St Augustine, Lost Colony & Jamestown <input type="checkbox"/> The Civil War <input type="checkbox"/> Civil Rights Movement <ul style="list-style-type: none"> <input type="checkbox"/> Hurricane Katrina - Significant events <ul style="list-style-type: none"> <input type="checkbox"/> Northwest Territory <input type="checkbox"/> Industrial Revolution <ul style="list-style-type: none"> o John Deere o The automobile - Significant events <ul style="list-style-type: none"> <input type="checkbox"/> Louisiana Purchase <input type="checkbox"/> Homestead Act 1862 <input type="checkbox"/> Indian territory and conflict - Significant Events <ul style="list-style-type: none"> <input type="checkbox"/> Spanish missions <input type="checkbox"/> The Alamo <input type="checkbox"/> Border control and 	<p>Exploration and colonization fit best with G4.0.1</p> <p>The rest of the events are copied off from Teacher central in the same order of the US regions as above. Would make sense to cover these as you teach each region.</p> <p>All the significant events listed match up with G4.0.2</p>
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	geographical location of these regions impact historical events in that region (UNIT: US Region Studies)	<p>illegal immigrants</p> <ul style="list-style-type: none"> - Significant Events <ul style="list-style-type: none"> <input type="checkbox"/> Lewis and Clark exploration <input type="checkbox"/> Mining and “boomtowns” <input type="checkbox"/> Transcontinental Railroad - Significant events <ul style="list-style-type: none"> <input type="checkbox"/> Oregon Trail <input type="checkbox"/> Discovery of gold <input type="checkbox"/> Westward movement & settlement <input type="checkbox"/> Indian removal: reservations 	
U2.4 – Environment and Society			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand the effects of human-environment interactions</i></p> <p>4-G5.0.1 Assess the positive and negative effects of human activities on the physical environment of the United States.</p>	<p>Defining and listing an example of each of the 5 Themes of Geography (UNIT: Geography)</p>	<p>- Human / Environment Interaction: How people have changed their environment or how the environment influences the way people live</p>	<p>Some of the above significant events be tied into this objective.</p>

U3 – Civics and Government

Fourth grade students learn how the United States government works. Students examine the purposes of government as set forth in the Preamble to the U.S. Constitution, how our current form of government functions to serve those purposes, and the probable consequences of not having government, rules, or laws. Building upon their understanding of the structure and functions of government in Michigan, students use examples to explore how the powers of the federal government are limited. Students also begin to understand that the federal and state governments have different powers as a foundation for learning about federalism in fifth grade. Concepts of governmental taxing and spending are expanded from previous grades as students apply these concepts to the federal government. Students explore how key concepts such as popular sovereignty, rule of law, checks and balances, separation of powers, and individual rights serve to limit the power of government and how these ideas are manifested in the Constitution and Bill of Rights. Students learn how government affects their daily lives by identifying examples of rights guaranteed by the Constitution and Bill of Rights. Students explain why all rights have limits, describe the relationship between rights and responsibilities, and investigate ways people can work together to promote the values and principles of American democracy.

U3.1 – Purpose of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain why people create governments</i></p> <p>4-C1.0.1 Identify questions political scientists ask in examining the United States (e.g., What does government do? What are the basic values and principles of American democracy? What is the relationship of the United States to other nations? What are the roles of the citizen in American democracy?). (new)</p> <p>4-C1.0.2 Explain probable consequences of an absence of government and of rules and laws.</p>	<p>Describing the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) (UNIT: State Studies)</p> <p>Identifying the major officeholders within their individual state and federal government representatives (UNIT: State Studies)</p>	<p>- Citizenship</p> <ul style="list-style-type: none"> □ Citizenship Rights <ul style="list-style-type: none"> o 1st Amendment rights o Opportunities to be educated □ Citizenship Responsibilities o Understanding and participating in the election process and voting <p>- Citizenship</p> <ul style="list-style-type: none"> o Knowing your representatives at local, state, and 	<p><u>A possible match</u></p> <p><u>Did not seem like a direct link from NHA to MI standards but might work?</u></p>



<p>4-C1.0.3 Describe the purposes of government as identified in the Preamble of the Constitution. (shares alignment with 5th grade NHA)</p>	<p>Explaining the early forms of government in the United States (UNIT: US Constitution & Government)</p>	<p>national levels o Know major state offices, duties and how they are chosen (elected or appointed) □ Governor, Lieutenant Governor, Secretary of State, state senators, and local representatives in the US Congress, etc.</p> <p>- Purpose of government □ To protect the rights of individuals, maintain order, and promote the common good as stated in the Preamble to the Constitution</p>	
<p>U3.2 – Values and Principles of American Democracy</p>			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Understand values and principles of American constitutional democracy</i></p>	<p>Comparing and contrasting the 3 Branches of Government and their</p>	<p>- 3 Branches of Government: Checks and Balances to limit</p>	



<p>4-C2.0.1 Explain how the principles of popular sovereignty, rule of law, checks and balances, separation of powers, and individual rights (e.g., freedom of religion, freedom of expression, freedom of press) serve to limit the powers of the federal government as reflected in the Constitution and Bill of Rights. (shares alignment with 5th NHA)</p> <p>4-C2.0.2 Identify situations in which specific rights guaranteed by the Constitution and Bill of Rights are involved (e.g., freedom of religion, freedom of expression, freedom of press). (shares alignment with 5th NHA)</p>	<p>functions (UNIT: US Constitution & Government) Defining each of the amendments in the Bill of Rights (UNIT: US Constitution & Government)</p> <p>Defining each of the amendments in the Bill of Rights (UNIT: US Constitution & Government)</p>	<p>power</p> <ul style="list-style-type: none"> □ Legislative Branch: Congress - made up of the Senate & House of Reps creates laws □ Executive Branch: Office of President – carries out laws made by the legislative branch □ Judicial Branch: Supreme Court – interprets laws made by the legislative branch to determine if they are constitutional <p>- The Bill of Rights: The first ten amendments guaranteeing individual freedoms</p> <p>- The Bill of Rights: The first ten amendments guaranteeing individual freedoms</p>	
U3.3 – Structure and Functions of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the structure of government in the United States and how it functions to serve citizens</i></p> <p>4-C3.0.1 Give examples of ways the</p>	<p>Ordering the levels of government (local, state, and</p>	<p>- Levels & function of</p>	



<p>Constitution limits the powers of the federal government (e.g., election of public officers, separation of powers, checks and balances, Bill of Rights).</p> <p>4-C3.0.2 Give examples of powers granted to the federal government (e.g., coining of money, declaring war) and those reserved for the states (e.g., driver's license, marriage license).</p> <p>4-C3.0.3 Describe the organizational structure of the federal government in the United States (legislative, executive, and judicial branches).</p> <p>4-C3.0.4 Describe how the powers of the federal government are separated among the branches.</p> <p>4-C3.0.5 Give examples of how the</p>	<p>national) in a hierarchy (UNIT: State Studies)</p> <p>None</p> <p>Describing the 3 Branches of Government (UNIT: State Studies)</p> <p>Describing the 3 Branches of Government (UNIT: State Studies)</p> <p>Describing the 3 Branches of Government (UNIT: State Studies)</p>	<p>government</p> <p><input type="checkbox"/> Local, state & federal</p> <p>None</p> <p><input type="checkbox"/> Structure and function of the branches of government: checks and balances to limit power</p> <ul style="list-style-type: none"> o Legislative Branch: Congress – makes laws o Executive Branch: office of President – carries out laws o Judicial Branch: Supreme Court – interprets laws <p><input type="checkbox"/> Same as above</p>	
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<p>system of checks and balances limits the power of the federal government (e.g., presidential veto of legislation, courts declaring a law unconstitutional, congressional approval of judicial appointments).</p> <p>4-C3.0.6 Describe how the President, members of the Congress, and justices of the Supreme Court come to power (e.g., elections versus appointments). (new)</p> <p>4-C3.0.7 Explain how the federal government uses taxing and spending to serve the purposes of government.</p>	<p>Studies)</p> <p>None</p> <p>Ordering the levels of government (local, state, and national) in a hierarchy (UNIT: State Studies)</p>	<p>Same as above</p> <p>None</p> <p>- Levels & function of government <input type="checkbox"/> State and US Constitution</p>	
U3.4 – Roles of the Citizen in American Democracy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain important rights and how, when, and where American citizens demonstrate their responsibilities by participating in government</i></p> <p>4-C5.0.1 Explain responsibilities of citizenship (e.g., initiating changes in laws or policy, holding public office, respecting the law, being informed and attentive to public issues, paying taxes, registering to vote and voting knowledgeably, serving as a juror).</p>	<p>Describing the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) (UNIT: State Studies)</p>	<p>- Citizenship <input type="checkbox"/> Citizenship Rights o 1st Amendment rights o Opportunities to be educated <input type="checkbox"/> Citizenship</p>	



<p>4-C5.0.2 Describe the relationship between rights and responsibilities of citizenship.</p> <p>4-C5.0.3 Explain why rights have limits. (shares alignment with 3rd grade NHA)</p> <p>4-C5.0.4 Describe ways citizens can work together to promote the values and principles of American democracy. (Shares alignment with 3rd grade NHA)</p>	<p>Describing the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) (UNIT: State Studies)</p> <p>Explaining the origin of Core Democratic Values and how they help define what it means to be a citizen (UNIT: America: Founding & Principles)</p>	<p>Responsibilities o Understanding and participating in the election process and voting</p> <p>Same as above</p> <p>- Are the fundamental beliefs and constitutional principles of American society which unite all Americans</p> <p><input type="checkbox"/> Life: Each person has the right to the protection of life.</p> <p><input type="checkbox"/> Liberty: Includes the freedom to believe what you want, freedom to choose your own friends, and to have your own ideas and opinions, to express your ideas in public, the right for people to meet in groups, and the right to have any</p>	<p>Both C5.0.3 and C5.0.4 are aligned with 3rd grades objectives and content listed on the left. However 3rd teaches a basic understanding of what the values mean NOT explaining why each has limits and NOT describing ways citizens can work together to promote these values</p>
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		<p>lawful job or business.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pursuit of Happiness: Each person can find happiness in their own way, so long as they do not step on the rights of others. <input type="checkbox"/> Common Good: People should work together for the good of all. The government should make laws that are good for everyone. <input type="checkbox"/> Justice: All people should be treated fairly in getting the advantages and disadvantages of our country. No group or person should be favored. <input type="checkbox"/> Diversity: Differences in language, dress, food, where parents or grandparents were born, race, and religion are not only allowed but accepted as important. <input type="checkbox"/> Equality: Everyone should get the same treatment regardless of where your parents or grandparents were born, your race or religion, or how much money you have. All people have political, 	
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		<p>social and economic equality.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Truth: The government and citizens should not lie. <input type="checkbox"/> Popular Sovereignty: The power of the government comes from the people. <input type="checkbox"/> Patriotism: A devotion to our country and the core democratic values in word or deed. <input type="checkbox"/> Rule of Law: Both the government and the people must obey the law. 	
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U4 - Economics

Fourth grade students continue to deepen their understanding of economic principles with a focus on the characteristics of market economies. They move beyond applying the economic concepts of scarcity, choice, and opportunity costs in personal economic decisions and begin to think like an economist, identifying the types of questions economists ask. Economic decision making is examined by applying the concepts of price, competition, and incentives. Students develop an understanding of specialization, division of labor, competition, and interdependence and explore their effects on productivity. Moreover, the circular flow model is introduced in fourth grade, providing a foundation for future studies in economics. Students build upon their knowledge of governmental taxing and spending as they explore why certain public goods are not privately owned. Students also take an increasingly sophisticated look at the global economy as the expectations explore the impact of global competition on the national economy.

U4.1 Market Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use fundamental principles and concepts of economics to understand economic activity in a market economy</i>	Categorizing real-life	- Are the natural, human	



<p>4-E1.0.1 Identify questions economists ask in examining the United States (e.g., What is produced? How is it produced? How much is produced? Who gets what is produced? What role does the government play in the economy?).</p> <p>4-E1.0.2 Describe some characteristics of a market economy (e.g., private property rights, voluntary exchange, competition, consumer sovereignty, incentives, and specialization).</p> <p>4-E1.0.3 Describe how positive and negative incentives influence behavior in a market economy. (shares alignment with 3rd grade NHA)</p> <p>4-E1.0.4 Explain how price affects</p>	<p>examples of productive resources (natural, human, capital resources) (UNIT: Economics)</p> <p>Explaining how the government is an example of an economic system (UNIT: Economics)</p> <p>Analyzing the strengths and weaknesses of the concept of specialization (UNIT: Economics)</p> <p>Analyzing choices based on positive and negative incentives (UNIT: Economics)</p>	<p>and capital resources utilized by entrepreneurs to produce goods and services</p> <ul style="list-style-type: none"> - Role of government <ul style="list-style-type: none"> <input type="checkbox"/> Local, state and federal governments have the problem of scarcity o Limited budgets and may pay for goods and services through taxation and borrowing - Specialization: the concentration of production on fewer kinds of goods/services and/or the performance of a specific task or job <ul style="list-style-type: none"> <input type="checkbox"/> Advantages of specialization <input type="checkbox"/> Weaknesses of specialization - Peoples choices are 	
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<p>decisions about purchasing goods and services (substitute goods). (shares alignment with 5th grade NHA)</p> <p>4-E1.0.5 Explain how specialization and division of labor increase productivity (e.g., assembly line). (H)</p> <p>4-E1.0.6 Explain how competition among buyers results in higher prices and competition among sellers results in lower prices (e.g., supply, demand). (shares alignment with 5th grade NHA)</p> <p>4-E1.0.7 Demonstrate the circular flow model by engaging in a market simulation, which includes households and businesses</p>	<p>Describing consequences of competition on an economy (among producers & sellers, consumers & buyers) (UNIT: Economics)</p> <p>Describing the relationships of economic concepts in a competitive market (UNIT: Economics)</p> <p>Analyzing the strengths and weaknesses of the concept of specialization (UNIT: Economics)</p> <p>Describing consequences of competition on an economy (among producers & sellers, consumers & buyers) (UNIT: Economics)</p> <p>Describing the relationships of economic concepts in a competitive market (UNIT: Economics)</p>	<p>influenced by positive and negative incentives</p> <ul style="list-style-type: none"> <input type="checkbox"/> Positive incentive is a reward that makes people better off <input type="checkbox"/> Negative incentive is a penalty that makes people worse off <p>- Relationship between supply, demand and price in a competitive market</p> <p>- Competition among producers/sellers results</p> <ul style="list-style-type: none"> <input type="checkbox"/> In lower costs and prices <input type="checkbox"/> Higher product quality <input type="checkbox"/> Better customer service <p>- Competition among consumers/buyers results in higher product prices</p> <p>- Specialization: the concentration of production on fewer kinds of goods/services and/or the performance of a specific task or job</p>	
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<p>and depicts the interactions among them. (new)</p> <p>4-E1.0.8 Explain why public goods (e.g., libraries, roads, parks, the Mackinac Bridge) are not privately owned. (H)</p>	<p>None</p>	<p><input type="checkbox"/> Advantages of specialization</p> <p><input type="checkbox"/> Weaknesses of specialization</p> <p>- Relationship between supply, demand and price in a competitive market</p> <p>- Competition among producers/sellers results</p> <p><input type="checkbox"/> In lower costs and prices</p> <p><input type="checkbox"/> Higher product quality</p> <p><input type="checkbox"/> Better customer service</p> <p>- Competition among consumers/buyers results in higher product prices</p> <p>None</p>	
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U4.2 National Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use fundamental principles and concepts of economics to understand economic activity in the United States.</i> 4-E2.0.1 Explain how changes in the United States economy impact levels of employment and unemployment (e.g., changing demand for natural resources, changes in technology, and changes in competition). (H) (new)	None	None	
U4.3 International Economy			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Use fundamental principles and concepts of economics to understand economic activity in the global economy.</i> 4-E3.0.1 Describe how global competition affects the national economy (e.g., outsourcing of jobs, Increased supply of goods, opening new markets, quality controls). (new)	None	None	

U5 – Public Discourse, Decision Making, and Citizen Involvement

Students deepen their understanding of public issues and the importance of citizen action in a democratic republic. Using the context of the United States, fourth grade students identify public policy issues facing citizens in the United States, use graphic data and other sources to analyze information about the issue, and evaluate alternative resolutions. By utilizing examples, students expand their understanding of how conflicts among core democratic values often lead people to want different resolutions to a public policy question. Students demonstrate competency in expressing their own opinions relative to a public issue in the United States and justify their opinions with a reasoned argument with increasing complexity. This foundational knowledge is built upon throughout the grades as students use their knowledge of how, when, and where to communicate and become more proficient in communicating positions on sophisticated public issues with a reasoned argument.

U5.1 Identifying and Analyzing Issues			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<i>Clearly state a problem as a public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions</i>			
4-P3.1.1 Identify public issues in the local community that influence the daily lives of its citizens.	Predicting the impact that the current events will have on the future of their state (UNIT: State Studies)	Current Events - Examine current state issues in the news	
4-P3.1.2 Use graphic data and other sources to analyze information about a public issue in the local community and evaluate alternative resolutions	None	None	
4-P3.1.3 Give examples of how conflicts over core democratic values lead people to differ on resolutions to a public policy issue in Michigan.	None	None	



U5.2 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Communicate a reasoned position on a public issue</i></p> <p>4-P3.3.1 Compose a brief essay expressing a position on a public policy issue in the United States and justify the position with a reasoned argument.</p>	None	None	
U5.3 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good</i></p> <p>4-P4.2.1 Develop and implement an action plan to address or inform others about a public issue</p> <p>4-P4.2.2 Participate in projects to help or inform others</p>	<p>None</p> <p>None</p>	<p>None</p> <p>None</p>	



Additional NHA Content

The following content and/or units are not required by the 4th grade Michigan GLCE's and should not longer be taught in 4th grade:

NHA Social Studies Unit: Economics _____	
Content	Unit Objectives
<p>Explain the concept of “income: (generating income and using income) (UNIT: Resources)</p>	<p>Money</p> <ul style="list-style-type: none"> -Generating income: wages, salaries, rent, etc. -How income (money) can be used <p>Spending, saving, other</p>
<p>Define the purpose of an economic system (UNIT: Economies of the World)</p>	<p>Economics Systems</p> <ul style="list-style-type: none"> -All societies have an economic system -Systems have developed to allocate resources, and produce goods and services <p>To answer the fundamental economic questions of what to produce, how to produce, and for whom to produce</p>
<p>Explain how the government is an example of an economic system (UNIT: Economies of the World)</p>	<p>Role of Government</p> <p>Local, state, and federal governments have the problem of scarcity: limited budgets and may pay for goods and services through taxation and borrowing</p>

NHA Social Studies Unit: State Studies _____	
Content	Unit Objectives
<ul style="list-style-type: none"> · Describe the way of life of Native American tribes within their state (e.g., homes, traditional dress, foods, transportation, crafts, tools, and other accomplishments) · Explain Native American influences on their state (UNIT: Historical Societies & Lifestyles) 	<ul style="list-style-type: none"> - Native Americans: origins and culture <ul style="list-style-type: none"> □ First inhabitants □ Tribes inhabiting the state □ Relationship with the environment: food, clothing, shelter, etc. □ Culture: customs, traditions, arts, etc.



	<input type="checkbox"/> Important accomplishments or contributions
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GRADE FIVE – Integrated U.S. History

The fifth grade social studies content expectations mark a departure from the social studies approach taken in previous grades. Building upon the geography, civics and government, and economics concepts of the United States mastered in fourth grade and historical inquiry from earlier grades, the fifth grade expectations begin a more discipline-centered approach concentrating on the early history of the United States. Students begin their study of American history with American Indian peoples before the arrival of European explorers and conclude with the adoption of the Bill of Rights in 1791. Although the content expectations are organized by historical era, they build upon students' understandings of the other social studies disciplines from earlier grades and require students to apply these concepts within the context of American history.

U1 - Era 1- Beginnings to 1620

Beginning with pre-Columbian times, the expectations focus on American Indians living in North America before European exploration. The geographic concepts of spatial awareness, places and regions, human systems, and human environment interactions are addressed throughout the era as students study American history to 1620. The expectations deliberately expand upon students' knowledge of American Indians living in Michigan and the concept of regions from previous grades. In examining European exploration and conquest, the expectations embed geographic, civics, and economic concepts, and revisit the case study method used by historians to explain the technological and political developments that made exploration possible. In deepening understanding of perspective, students also explore the goals, obstacles, motivations, and consequences of European exploration and the subsequent colonization of the Americas. The expectations also include an introduction to life in Africa as a foundation for examining interactions among Europeans, American Indians, and Africans from the 15th through the 17th centuries with a focus on how economic concepts influenced the behavior of people and nations. Students apply the tools of the historian by using primary and secondary sources to compare European and American Indian cultures, using previously established criteria. The expectations also focus on the interaction among Europeans, American Indians, and Africans, by exploring the impact of European contact on American Indian cultures, comparing the approaches of the British and French in their interactions with American Indians, and examining the Columbian Exchange and its impact on all three groups.



U1.1 American Indian Life in the Americas			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Describe the life of peoples living in North America before European exploration.</i></p> <p>5-U1.1.1 Use maps to locate peoples in the desert Southwest, the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River (Eastern Woodland).</p> <p>5-U1.1.2 Compare how American Indians in the desert Southwest and the Pacific Northwest adapted to or modified the environment.</p> <p>5-U1.1.3 Describe Eastern Woodland American Indian life with respect to governmental and family structures, trade, and views</p>	<p>Compare and contrast the way of life of various Native American tribes within the United States (MT: Historical Societies & Lifestyles)</p>	<p>Native American Regions Main characteristics and lifestyles (shelter, food, clothing, natural resources, tribes) of North American Indian groups</p> <ul style="list-style-type: none"> • Northeast Woodlands (Iroquois League – Confederation) <ul style="list-style-type: none"> • Southeast • Plains • Great Basin & Plateau <ul style="list-style-type: none"> • Southwest • Pacific Northwest 	



on property ownership and land use.			
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U1.2 European Exploration			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Identify the causes and consequences of European exploration and colonization.</i></p> <p>5-U1.2.1 Explain the technological and political developments that made sea exploration possible.</p> <p>5-U1.2.2 Use case studies of individual explorers and stories of life in Europe to compare the goals, obstacles, motivations, and consequences for European exploration and colonization of the Americas.</p>	<p>Determine the reasons that motivated the explorers toward discovery (MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Explain the impact of new technology on the voyages of the explorers (MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Describe the explorers' influence on the conquered land (e.g. trade) (MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Compare and contrast early</p>	<p>Explorer Motivations</p> <p>Economic opportunity</p> <p>Missionary zeal</p> <p>Improvements in technology</p> <ul style="list-style-type: none"> • Astrolabe & compass • Improved maps <p>Explorers</p> <p>Portuguese</p> <ul style="list-style-type: none"> • Henry the Navigator • West Africa: gold, ivory & slaves <p>Spanish</p> <ul style="list-style-type: none"> • Columbus • Ponce de Leon • De Soto • Coronado <p>French & English search for the Northwest Passage: Spanish control of Central/South America forced them to explore further north</p>	



	English settlements in the United States with French and Spanish settlements (MT: Historical Societies & Lifestyles)	<ul style="list-style-type: none"> • Cartier & Champlain (French) • Cabot & Hudson (England) European Land Claims Development of “New England”, “New France”, “New Netherland,” and “New Spain”	
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U1.3 African Life Before the 17th Century

Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Describe the lives of peoples living in western Africa prior to the 16th century.</i></p> <p>New 5-U1.3.1 Use maps to locate the major regions of Africa (northern Africa, western Africa, central Africa, eastern Africa, and southern Africa). <i>Currently taught in 7th grade</i></p> <p>New 5-U1.3.2 Describe the life and cultural development of people living in western Africa before the 16th century with respect to economic (the ways people made a living) and family structures, and the growth of states, towns, and trade.</p>	New unit		

U1.4 Three World Interactions			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Describe the environmental, political, and cultural consequences of the interactions among European, African, and American Indian peoples in the late 15th through the 17th century.</i></p> <p>New 5-U1.4.1 Describe the convergence of Europeans, American Indians and Africans in North America after 1492 from the perspective of these three groups.</p> <p>New 5-U1.4.2 Use primary and secondary sources to compare Europeans and American Indians who converged in the western hemisphere after 1492 with respect to governmental structure, and views on property ownership and land use.</p> <p>5-U1.4.3 Explain the impact of European contact on American Indian cultures</p>	<p>Compare and contrast early English settlements in the United States with French and Spanish settlements (MT: Historical Societies & Lifestyles)</p> <p>Describe the explorers' influence on the conquered land (e.g. trade) (MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p>	<p>French Colonies Quebec</p> <p>English Colonies Earliest colonies</p> <ul style="list-style-type: none"> • Roanoke • Jamestown <p>Columbian Exchange Effect on Native Americans, Europeans and Africans</p>	<p>NHA Unit – Colonization</p> <p>NHA Unit – Early Exploration of N. America</p> <p>NHA Unit - Colonization</p>



<p>by comparing the different approaches used by the British and French in their interactions with American Indians.</p> <p>5-U1.4.4 Describe the Columbian Exchange and its impact on Europeans, American Indians, and Africans.</p>			
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U2 - Era 2- Colonization and Settlement (1585-1763)

In learning about the regional settlement patterns and significant developments of the three distinct colonial regions prior to the American Revolution, students apply their conceptual understanding of regions and the geography of the United States. They explore how the geography influenced peoples' daily lives and economic activities as three distinct colonial regions developed. The expectations require students to apply concepts of government and economics to further understand the Southern, New England, and Middle colonies as they learn about the establishment of colonial settlements, development of colonial governments, role of religion, relationships between colonists and American Indians, and development of the institution of slavery. Using geography, students explore how human systems such as religion, movement of people, and ethnic diversity led to the establishment of other colonies within particular regions. Special attention is paid to the European slave trade and slavery in Colonial America as students explore the lives of enslaved peoples and free Africans living in the American colonies. Fifth grade students enhance their understanding of historical perspective by analyzing the perspectives of different groups living in colonial America. By comparing the different colonial regions that developed with respect to politics, economics, religion, social institutions, and human-environment interactions, the expectations prepare students for American history in middle school serving as the precursor for the regional and racial issues that culminated in the Civil War.



U2.2 European Slave Trade and Slavery in Colonial America			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Analyze the development of the slave system in the Americas and its impact upon the life of Africans.</i></p> <p>5-U2.2.1 Describe Triangular Trade including: The trade routes The people and goods that were traded The Middle Passage Its impact on life in Africa</p> <p>5-U2.2.2 Describe life of enslaved Africans and free Africans in the American colonies.</p> <p>5-U2.2.3 Describe how Africans living in North America drew upon their African past and adapted elements of new cultures to develop a distinct African-American culture.</p>	<p>Analyze contributions of colonial regions on modern society (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>	<p>The 13 English colonies: New England, Middle Atlantic & Southern colonies: settled for a variety of economic, political, and religious reasons:</p> <ul style="list-style-type: none"> • Social characteristics <ul style="list-style-type: none"> ○ Indentured servants and free black communities ○ Plantations and slave labor in the South • Economics: Triangle Trade 	<p>NHA Unit - Colonization</p>



U2.3 Life in Colonial America			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Distinguish among and explain the reasons for regional differences in colonial America.</i></p> <p>5-U2.3.1 Locate the New England, Middle, and Southern colonies on a map.</p> <p>5-U2.3.2 Describe the daily life of people living in the New England, Middle, and Southern Colonies.</p> <p>New 5-U2.3.3 Describe colonial life in America from the perspectives of at least three different groups of people.</p> <p>5-U2.3.4 Describe the development of the emerging labor force in the colonies.</p> <p>New 5-U2.3.5 Make generalizations about the reasons for regional differences in colonial America.</p>	<p>Analyze contributions of colonial regions on modern society (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Explain how the way of life in the colonial regions (New England, Middle Atlantic, Southern Colonies) was influenced by social characteristics (families, class structure, religion, economies) (MT: Historical Societies & Lifestyles)</p>	<p>The 13 English colonies: New England, Middle Atlantic & Southern colonies: settled for a variety of economic, political, and religious reasons:</p> <ul style="list-style-type: none"> • Geographical characteristics • Religion <ul style="list-style-type: none"> ○ Separatists (Pilgrims) ○ Puritans ○ Quakers • Social characteristics <ul style="list-style-type: none"> ○ Hierarchical social order ○ Nuclear families ○ Indentured servants and free black communities ○ Plantations and slave labor in the South 	NHA Unit - Colonization



U3 - Era 3- Revolution and the New Nation (1754-1800)

In studying the American Revolution and the New Nation, the expectations deliberately build upon students' prior knowledge in government and economics. The political and economic aspects of the French and Indian War and its aftermath are stressed. Students deepen their understanding of perspective by comparing patriot and loyalist perspectives with respect to events that eventually culminated in the American Revolution. The expectations in this historical era emphasize significant ideas about government as reflected in the Declaration of Independence and the role of key individuals and groups in declaring independence. Students also apply concepts of power and authority to the perspectives of the colonists and the British during the revolutionary era. Emphasis is placed on how colonial experiences and ideas about government influenced the decision of the colonists to declare independence. Students examine the course, character, and consequences of the American Revolution using geography and economics students to compare the advantages and disadvantages of each side in the war. Students also describe the significant events and turning points during the war. In examining the challenges faced by the new nation under the Articles of Confederation, the expectations continue to build upon students' understanding of government. By exploring the political ideas underlying the Articles of Confederation and the subsequent adoption of the U.S. Constitution and Bill of Rights (with particular emphasis on the rights contained in first four amendments), the values and principles of American democracy are revisited through a historical context. Students examine how the Founders sought to limit the power of government through principles of separation of powers, checks and balances, dual sovereignty (federalism), protection of individual rights, popular sovereignty, and rule of law.

U3.1 Causes of the American Revolution			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Identify the major political, economic, and ideological reasons for the American Revolution.</i></p> <p>5-U3.1.1 Describe the role of the French and Indian War, how British policy toward the colonies in America changed from 1763 to</p>	<p>Explain important events in the Revolutionary Era that led to the independence of the United States from Britain (MT: Significant Events, Individuals, & Contributions (US History Exemplar)</p> <p>Analyze the impact of important individuals on the history of the United States (MT: Significant Events, Individuals, &</p>	<p><u>NHA Content</u></p> <p>Background Causes</p> <ul style="list-style-type: none"> • War debt (French and Indian War) • Taxation without representation <ul style="list-style-type: none"> ○ Stamp Act ○ Tea Act ○ “Intolerable Acts” <p>Shift from Protest to Separation</p> <ul style="list-style-type: none"> • Public forum shaped attitudes <ul style="list-style-type: none"> ○ Political bodies <ul style="list-style-type: none"> ▪ Sons of Liberty ▪ Committees of Correspondence 	<p>NHA Unit – The Revolutionary War</p>



<p>1775, and colonial dissatisfaction with the new policy.</p> <p>5-U3.1.2 Describe the causes and effects of events such as the Stamp Act, Boston Tea Party, the Intolerable Acts, and the Boston Massacre.</p> <p>5-U3.1.3 Using an event from the Revolutionary era, explain how British and colonial views on authority and the use of power without authority differed.</p> <p>5-U3.1.4 Describe the role of the First and Second Continental Congress in unifying the colonies.</p> <p>5-U3.1.5 Use the Declaration of Independence to explain why the colonists wanted to separate from Great Britain and why they believed they had the</p>	<p>Contributions (US History Exemplar)</p> <p>Describe participants (groups of people, allies) in conflicts in United States history (MT: Historical Conflict (US History Exemplar)</p> <p>Describe the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) (MT: Historical Conflict (US History Exemplar)</p> <ul style="list-style-type: none"> ○ Wide variety of viewpoints <ul style="list-style-type: none"> ▪ Loyalists & Patriots 	<ul style="list-style-type: none"> ○ Publications <ul style="list-style-type: none"> ▪ Thomas Paine & “Common Sense” ○ Public display & demonstration <ul style="list-style-type: none"> ▪ Boston Tea Party <p>Early Confrontations</p> <ul style="list-style-type: none"> • Boston Massacre • Lexington & Concord <p>Continental Congress</p> <ul style="list-style-type: none"> • Declaration of Independence <p>Important Leaders</p> <ul style="list-style-type: none"> • Samuel Adams • John Adams • Benjamin Franklin • Thomas Jefferson George Washington 	
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<p>right to do so.</p> <p>5-U3.1.6 Identify the role that key individuals played in leading the colonists to revolution, including George Washington, Thomas Jefferson, Benjamin Franklin, Patrick Henry, Samuel Adams, John Adams, and Thomas Paine.</p> <p>5-U3.1.7 Describe how colonial experiences with self-government and ideas about government influenced the decision to declare independence.</p> <p>5-U3.1.8 Identify a problem confronting people in the colonies, identify alternative choices for addressing the problem with possible consequences, and describe the course of action taken.</p>			
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U3.2 The American Revolution and Its Consequences			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Explain the multi-faceted nature of the American Revolution and its consequences.</i></p> <p>5-U3.2.1 Describe the advantages and disadvantages of each side during the American Revolution with respect to military leadership, geography, types of resources, and incentives.</p> <p>5-U3.2.2 Describe the importance of Valley Forge, Battle of Saratoga, and Battle of Yorktown in the American Revolution.</p> <p>5-U3.2.3 Compare the role of women, African Americans, American Indians, and France in helping shape the outcome of the war.</p>	<ul style="list-style-type: none"> Describe important battles in the Revolutionary War (MT: Historical Conflict (US History Exemplar)) Explain important events in the Revolutionary Era that led to the independence of the United States from Britain (MT: Significant Events, Individuals, & Contributions (US History Exemplar)) Analyze the impact of important individuals on the history of the United States (MT: Significant Events, Individuals, & Contributions (US History Exemplar)) Compare and contrast the strengths and weaknesses of the American and British armies in the Revolutionary War (MT: Historical Conflict (US History Exemplar)) Describe participants (groups of people, allies) in conflicts in United States history (MT: Historical Conflict (US History Exemplar)) Describe the causes and 	<p><u>NHA Content</u></p> <p>Continental Congress</p> <ul style="list-style-type: none"> Continental Army <ul style="list-style-type: none"> George Washington Declaration of Independence <p>Important Leaders</p> <ul style="list-style-type: none"> George Washington <ul style="list-style-type: none"> Valley Forge <ul style="list-style-type: none"> Against the elements & morale: Washington's leadership <p>The Continental Army</p> <ul style="list-style-type: none"> Advantages <ul style="list-style-type: none"> Familiar with the land - tactics <ul style="list-style-type: none"> Access to resources/supplies Motivation - freedom Disadvantages <ul style="list-style-type: none"> Training and discipline <ul style="list-style-type: none"> Financing <p>The British Army</p> <ul style="list-style-type: none"> Advantages <ul style="list-style-type: none"> Professional & trained Disadvantages <ul style="list-style-type: none"> Hostile surroundings 	<p>NHA Unit – The Revolutionary War</p>



<p>5-U3.2.4 Describe the significance of the Treaty of Paris.</p>	<p>effects of conflicts in United States history (reasons for wars, lasting impact of treaties) (MT: Historical Conflict (US History Exemplar)</p>	<p>and environment</p> <p>Allies in the War</p> <ul style="list-style-type: none"> Assistance of women, African Americans <ul style="list-style-type: none"> Countries <ul style="list-style-type: none"> France <p>Significant Battles</p> <ul style="list-style-type: none"> Saratoga Yorktown <p>Treaty of Paris</p> <p>British give up claims to govern</p>	
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U3.3 Creating New Government(s) and a New Constitution			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Explain some of the challenges faced by the new nation under the Articles of Confederation, and analyze the development of the Constitution as a new plan for governing.</i></p> <p>5-U3.3.1 Describe the powers of the national government and state governments under the Articles of Confederation.</p> <p>5-U3.3.2 Give examples of problems the country faced under the Articles</p>	<ul style="list-style-type: none"> Explain the early forms of government in the United States (MT: Government Systems) Explain the impact of individual influence on the Constitutional Convention (MT: Government Systems) Compare and contrast the 3 Branches of Government and their functions (MT: Government Systems) Define each of the amendments in the Bill of Rights (MT: Government Systems) 	<p>Early Self-Governance</p> <ul style="list-style-type: none"> Mayflower Compact: established a form of self-government for the Pilgrims Articles of Confederation <ul style="list-style-type: none"> The first government of the United States that failed because the federal government did not have enough power. <ul style="list-style-type: none"> Each state had equal representation Power to: make war/peace, pass laws Weakness of: difficulty in passing legislation, lack of 	<p>NHA Unit – The U.S. Constitution and Government</p>



<p>of Confederation.</p> <p>5-U3.3.3 Explain why the Constitutional Convention was convened and why the Constitution was written.</p> <p><i>New</i> 5-U3.3.4 Describe the issue over representation and slavery the Framers faced at the Constitutional Convention and how they were addressed in the Constitution. <i>Currently taught in 8th grade</i></p> <p><i>New</i> 5-U3.3.5 Give reasons why the Framers wanted to limit the power of government. <i>Currently taught in 8th grade</i></p> <p>5-U3.3.6 Describe the principle of federalism and how it is expressed through the sharing and distribution of power as stated in the Constitution.</p> <p>5-U3.3.7 Describe the concern that some people had about individual rights</p>		<p>taxing power</p> <p>Constitutional Convention</p> <ul style="list-style-type: none"> • The Constitution: “Supreme law of the Land” <ul style="list-style-type: none"> ○ James Madison <p>Elements of the Constitution</p> <ul style="list-style-type: none"> • Democracy: government run by the people, where supreme power is given to the citizens <ul style="list-style-type: none"> ○ Citizens are the source of the government’s authority; run directly by people through elected representatives • Purpose of government <ul style="list-style-type: none"> ○ To protect the rights of individuals, maintain order, and promote the common good as stated in the Preamble to the Constitution • 3 Branches of Government: Checks and Balances to limit power <ul style="list-style-type: none"> ○ Legislative Branch: Congress - made up of the Senate & House of Reps creates laws ○ Executive Branch: Office of President – carries out laws made by the legislative branch ○ Judicial Branch: Supreme 	
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<p>and why the inclusion of the Bill of Rights was needed for ratification.</p> <p>5-U3.3.8 Describe the rights found in the First, Second, Third, and Fourth Amendments to the United States Constitution.</p>		<p>Court – interprets laws made by the legislative branch to determine if they are constitutional</p> <p>The Bill of Rights: The first ten amendments guaranteeing individual freedoms</p>	
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P3.1 Identifying and Analyzing Public Issues			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Clearly state a problem as public policy issue, analyze various perspectives, and generate and evaluate possible alternative resolutions.</i></p> <p>5-P3.1.1 Identify contemporary public issues related to the United States Constitution and their related factual, definitional, and ethical questions.</p> <p>5-P3.1.2 Use graphic data and other sources to analyze information about a contemporary public issue related to the United States Constitution and</p>	<ul style="list-style-type: none"> Describe and explain current events facing the United States relating to government and civil rights (MT: Current Events in the Context of History (US History Exemplar)) Predict the impact that the current events will have on the future of the United States as well as the individual citizen (MT: Current Events in the Context of History (US History Exemplar)) 	<p>Elements of the Constitution</p> <ul style="list-style-type: none"> Democracy: government run by the people, where supreme power is given to the citizens <ul style="list-style-type: none"> Citizens are the source of the government's authority; run directly by people through elected representatives <ul style="list-style-type: none"> Purpose of government <ul style="list-style-type: none"> To protect the rights of individuals, maintain order, and promote the common good as stated in the Preamble to the Constitution 3 Branches of Government: Checks and Balances to limit power <ul style="list-style-type: none"> Legislative Branch: Congress - made up of the Senate & House of Reps creates laws Executive Branch: Office of 	<p>NHA Unit – The U.S. Constitution and Government</p>



<p>evaluate alternative resolutions.</p> <p>5-P3.1.3 Give examples of how conflicts over core democratic values lead people to differ on contemporary constitutional issues in the United States.</p>		<p>President – carries out laws made by the legislative branch</p> <ul style="list-style-type: none"> ○ Judicial Branch: Supreme Court – interprets laws made by the legislative branch to determine if they are constitutional • The Bill of Rights: The first ten amendments guaranteeing individual freedoms <p>Current Events Constitutional issues, civic responsibilities, individual rights etc.</p>	
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P3-4 Public Discourse, Decision Making, and Citizen Involvement

The expectations continue to stress the importance of citizen action in a democratic republic as students expand their ability to address public policy issues. Students address contemporary public issues related to the Constitution and identify the related factual, definitional, and ethical questions. They use graphic data and other sources to analyze information about the issue, evaluate alternative resolutions, and use core democratic values to explain why people may differ on the resolution to a constitutional issue. Students are required to demonstrate increasing sophistication in their abilities to communicate a position on more complex national public policy issue and support it with a reasoned argument.

P3.3 Persuasive Communication About a Public Issue			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Communicate a reasoned position on a public issue.</i></p> <p>New 5-P3.3.1 Compose a short essay expressing a position on a contemporary public policy issue related to the Constitution and justify the position with a reasoned argument (5th Grade MT: Writing Applications)</p>	New unit		



P4.2 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Content	Notes
<p><i>Act constructively to further the public good.</i></p> <p>New 5-P4.2.1 Develop and implement an action plan and know how, when, and where to address or inform others about a public issue.</p> <p>New 5-P4.2.2 Participate in projects to help or inform others.</p>	New unit		

Additional NHA Content

The following content and/or units are not required by the 5th grade Michigan GLCE's and should no longer be taught in 5th grade.

NHA Social Studies Unit: Geography	
Content	Unit Objectives



<p style="text-align: center;">Maps & Globes</p> <ul style="list-style-type: none"> • Using longitude and latitude, coordinates, degrees <ul style="list-style-type: none"> • Tropic of Cancer and Tropic of Capricorn <ul style="list-style-type: none"> • Distance using different map scales <ul style="list-style-type: none"> ➢ Miles/kilometers ➢ Distance in time <p style="text-align: center;">Types of Maps</p> <ul style="list-style-type: none"> • Relief (elevations and depressions) & contour <ul style="list-style-type: none"> • Time zone • Road maps • Historical • Sketch <p style="text-align: center;">Geography of the United States</p> <ul style="list-style-type: none"> • Physical features <ul style="list-style-type: none"> ○ The Appalachian, Rocky, and Sierra Nevada Mountains ○ The Mississippi, Missouri, Columbia, Rio Grande and St Lawrence Rivers <p style="text-align: center;">Geographic Tools and Information Resources</p> <ul style="list-style-type: none"> • Geographic representation <ul style="list-style-type: none"> ○ Aerial photographs ○ Satellite-produced images 	<p style="text-align: center;">Determine location and distance (MT: Maps & Globes)</p> <p style="text-align: center;">Describe specific landforms and rivers of the United States (MT: Physical Features)</p> <p style="text-align: center;">Interpret different types of maps and geographical representations (MT: Maps & Globes)</p> <p style="text-align: center;">Geography content covered by 4th and 6th grade GLCE's</p>
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NHA Social Studies Unit: Economics	
Content	Unit Objectives
<p>Resources and Productivity (Business Choices & Practices)</p> <ul style="list-style-type: none"> • Labor (human) productivity <ul style="list-style-type: none"> ○ May be increased through specialization ○ May be increased through division of labor <ul style="list-style-type: none"> • Labor (human) resources ○ May be improved through education & training <p>Money</p> <ul style="list-style-type: none"> • Budgets <ul style="list-style-type: none"> ○ Spending ○ Saving ○ Credit <p>Economic Systems</p> <ul style="list-style-type: none"> • Market system (capitalism) <ul style="list-style-type: none"> ○ System used by the United States • Command system (socialism/communism) • Traditional (tribal/family & hierarchical – based on customs, beliefs, religion, habit etc.) <ul style="list-style-type: none"> • The U.S. as one world economic leader ○ Major products (goods), services and industries of the United States ○ Trade: major exports and imports of the United States <ul style="list-style-type: none"> ○ Role of local, state & federal governments ○ Limited budgets and may pay for goods and services through taxation or borrowing <p>Market Economy</p> <ul style="list-style-type: none"> • Relationship between supply, demand and price in a competitive market • Competition among producers/sellers results <ul style="list-style-type: none"> ○ In lower costs and prices ○ Higher product quality ○ Better customer service • Competition among consumers/buyers results in higher product prices <ul style="list-style-type: none"> • Banks ○ Key role in providing currency and other forms of money to customers ○ Intermediaries between savers and borrowers: funds are 	<p>Explain ways to improve human productivity and resources and the impact that would have on an economy (MT: Resources)</p> <p>Evaluate personal choices made with money (e.g., budgets, spending vs. saving, and credit) (MT: Resources)</p> <p>Describe different economic systems and where they are practiced around the world (MT: Economies of the World)</p> <p>Describe the economy of the United States (MT: Economies of the World)</p> <p>Explain the role of banks in the economic system (MT: Economic Institutions)</p> <p>Describe consequences of competition on an economy (among producers & sellers, consumers & buyers) (MT: Economic Concepts)</p> <p>Describe the relationships of economic concepts in a competitive market (MT: Economic Concepts)</p> <ul style="list-style-type: none"> • Content covered by 4th grade GLCE's



channeled from savers to borrowers

NHA Social Studies Unit: Colonization

Content	Unit Objectives
<p>Spanish Colonies</p> <ul style="list-style-type: none"> St Augustine Settlement – established by the military 	<p>Compare and contrast early English settlements in the United States with French and Spanish settlements (MT: Historical Societies & Lifestyles)</p>

NHA Social Studies Unit: Westward Expansion and Growth

Content	Unit Objectives
<p>Louisiana Purchase</p> <ul style="list-style-type: none"> Purchased from France Authorized by Thomas Jefferson Explored by Lewis & Clark <p>War of 1812</p> <ul style="list-style-type: none"> Causes <ul style="list-style-type: none"> British trade barriers/obstacles Impressment of American sailors by British ships <ul style="list-style-type: none"> Second War of Independence Francis Scott Key & “Star Spangled Banner” <p>Westward Migration</p> <ul style="list-style-type: none"> Manifest Destiny Right, belief and divine mission in expansionism <ul style="list-style-type: none"> Pioneers <ul style="list-style-type: none"> Santa Fe Trail & Oregon Trail Mormons settle in Utah ’49ers and California Responses of Native Americans <ul style="list-style-type: none"> Resistance 	<p>Analyze the impact of important individuals on the history of the United States (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Describe participants (groups of people, allies) in conflicts in United States history (MT: Historical Conflict (US History Exemplar))</p> <p>Describe the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) (MT: Historical Conflict (US History Exemplar))</p> <p>Explain the concept “Manifest Destiny” (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>



NHA Social Studies Unit: Introduction to the Civil War	
Content	Unit Objectives
<p>Events Leading to War</p> <ul style="list-style-type: none"> Industrial North versus agricultural South <ul style="list-style-type: none"> Missouri Compromise of 1820 Publication of <i>Uncle Tom's Cabin</i> (1852) <ul style="list-style-type: none"> Slavery as an institution Kansas-Nebraska Act (1854) <ul style="list-style-type: none"> Secession The Confederate States of America <p>Social Issues</p> <ul style="list-style-type: none"> The Underground Railroad Emancipation Proclamation <p>Major Personalities</p> <ul style="list-style-type: none"> Abraham Lincoln Jefferson Davis Ulysses S. Grant Robert E. Lee William Lloyd Garrison Frederick Douglass Harriet Tubman <p>Major Battles</p> <ul style="list-style-type: none"> Antietam Gettysburg <ul style="list-style-type: none"> Gettysburg Address <p>Concluding Events</p> <ul style="list-style-type: none"> Assassination of Lincoln 	<p>Explain the causes and eventual effects of events leading to the Civil War (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Describe important battles in the Civil War (MT: Historical Conflict (US History Exemplar))</p> <p>Analyze the impact of important individuals on the history of the United States (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>

GRADE SIX – Western Hemisphere Studies

Sixth grade students will explore the tools and mental constructs used by historians and geographers. They will develop an understanding of Ancient World History, Eras 1 – 3, of the Western Hemisphere and will study contemporary geography of the Western Hemisphere. Contemporary civics/government and economics content is integrated throughout the year. As a capstone, the students will conduct investigations about past and present global issues. Using significant content knowledge, research, and inquiry, they will analyze an issue and propose a plan for the future. As part of the inquiry, they compose civic, persuasive essays using reasoned argument. Sixth Grade includes North America, Central America, the Caribbean, and South America. Europe and Russia are listed in the document in grade 7, but may be included with either Western or Eastern Hemisphere Studies. World History Eras 1, 2, and 3 are included in Grades 6 and 7 as a foundation for High School World History and Geography.

Note: The World in Temporal Terms and The World in Spatial Terms become foundational expectations for the 7th Grade study of the Eastern Hemisphere.

HISTORY

H1 The World in Temporal Terms: Historical Habits of Mind (Ways of Thinking)

Evaluate evidence, compare and contrast information, interpret the historical record, and develop sound historical arguments and perspectives on which informed decisions in contemporary life can be based.

Historians use conceptual devices (eras, periods, and calendars and time lines) to organize their study of the world. Chronology is based on time and reflects cultural and historical interpretations, including major starting points, and calendars based on different criteria (religious, seasonal, Earth-sun-and-moon relationships). Historians use eras and periods to organize the study of broad developments that have involved large segments of world's population and have lasting significance for future generations and to explain change and continuity. History is a process of reasoning based on evidence from the past. Historians use and interpret a variety of historical documents (including narratives), recognize the difference between fact and opinion, appreciate multiple historical perspectives while avoiding present mindedness (judging the past solely in term of norms and values of today), and explain that historical events often are the result of multiple causation. Students will conduct their own inquiry and analysis in their studies about the ancient history of the Western Hemisphere. Historians apply temporal perspective, historical inquiry, and analysis to spheres of human society to construct knowledge as historical understandings. These understandings are drawn from the record of human history and include human aspirations, strivings, accomplishments, and failures in spheres of human activity.



H1.1 Temporal Thinking			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical conceptual devices to organize and study the past.</i></p> <p>6 – H1.1.1 Explain why and how historians use eras and periods as constructs to organize and explain human activities over time.</p> <p>6 – H1.1.2 Compare and contrast several different calendar systems used in the past and present and their cultural significance (e.g., Olmec and Mayan calendar systems, Aztec Calendar Stone, Sun Dial, Gregorian calendar – B.C./A.D.; contemporary secular – B.C.E./C.E. Note: in 7th grade Eastern Hemisphere the Chinese, Hebrew, and Islamic/Hijri calendars are included).</p>			



H1.2 Historical Inquiry and Analysis

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical inquiry and analysis to study the past.</i></p> <p>6 – H1.2.1 Explain how historians use a variety of sources to explore the past (e.g., artifacts, primary and secondary sources including narratives, technology, historical maps, visual/mathematical quantitative data, radiocarbon dating, DNA analysis).</p> <p>6 – H1.2.2 Read and comprehend a historical passage to identify basic factual knowledge and the literal meaning by indicating who was involved, what happened, where it happened, what events led to the development, and what consequences or outcomes followed.</p> <p>6 – H1.2.3 Identify the point of view (perspective of the author) and context</p>			



<p>when reading and discussing primary and secondary sources.</p> <p>6 – H1.2.4 Compare and evaluate competing historical perspectives about the past based on proof.</p> <p>6 – H1.2.5 Identify the role of the individual in history and the significance of one person's ideas.</p>			
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H1.4 Historical Understanding			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical concepts, patterns, and themes to study the past.</i></p> <p>6 – H1.4.1 Describe and use cultural institutions to study an era and a region (political, economic, religion/ belief, science/technology, written language, education, family).</p> <p>6 – H1.4.2 Describe and use themes of history to study patterns of change and continuity.</p> <p>6 – H1.4.3 Use historical perspective to analyze global issues faced by humans long ago and today.</p>			

W1 WHG Era 1 – The Beginnings of Human Society: Beginnings to 4000 B.C.E. /B.C.

Explain the basic features and differences between hunter-gatherer societies and pastoral nomads. Analyze and explain the geographic, environmental, biological, and cultural processes that influenced the rise of the earliest human communities, the migration and spread of people throughout the world, and the causes and consequences of the growth of agriculture.

In the first era of human history, people spread throughout the world. As communities of hunters, foragers, or fishers, they adapted creatively and continually to a variety of contrasting, changing environments in the Americas. The Agricultural Revolution was a major turning point in history that resulted in people and civilizations viewing and using the land in a systematic manner to grow food crops, raise animals, produce food surpluses, and the development of sedentary settlement.

W1.1 Peopling of the Earth			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the spread of people in the Western Hemisphere in Era 1.</i></p> <p>6 – W1.1.1 Describe the early migrations of people among Earth's continents (including the Beringa Land Bridge).</p> <p>6 – W1.1.2 Examine the lives of hunting and gathering people during the earliest eras of human society (tools and weapons, language, fire).</p>	<p><u>NHA Unit Objectives</u></p> <p>Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophy, trade, tools weapons, agriculture, migration/settlement) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate how the social structure in ancient civilizations contributed to their success(or lack of) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate lasting effects of gender roles and class structure</p>	<p>Native Inuit migration and way of life</p> <p>Native American Regions</p> <p>Native Central/Latin Americans</p> <p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands <ul style="list-style-type: none"> • South America • Central America 	<p>Parts of the following - Grade 5 NHA Unit: Native American Cultures; Grade 6 NHA Unit Latin America Studies; Grade 7 NHA Unit: Canada Studies</p>



	<p>on the culture in different world regions(MT: Human Characteristics)</p> <p>Explain how historical events influenced the language spoken in regions of the world (MT: Human Characteristics)</p>		
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W1.2 Agricultural Revolution			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the Agricultural Revolution and Explain why it is a turning point in history.</i></p> <p>6 – W1.2.1 Describe the transition from hunter gatherers to sedentary agriculture (domestication of plants and animals).</p> <p>6 – W1.2.2 Describe the importance of the natural environment in</p>	<p><u>NHA Unit Objectives</u></p> <p>Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophy, trade, tools weapons, agriculture, migration/settlement) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate how the social structure in ancient civilizations contributed to their success(or lack of) (MT:</p>	<p>Native Inuit migration and way of life</p> <p>Native American Regions</p> <p>Native Central/Latin Americans</p> <p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands 	<p>Parts of the following - Grade 5 NHA Unit: Native American Cultures; Grade 6 NHA Unit Latin America Studies; Grade 7 NHA Unit: Canada Studies</p> <p>GLCE not specifically addressed</p>



<p>the development of agricultural settlements in different locations (e.g., available water for irrigation, adequate precipitation, and suitable growing season).</p> <p>6 – W1.2.3 Explain the impact of the Agricultural Revolution (stable food supply, surplus, population growth, trade, division of labor, development of settlements).</p>	<p>Historical Societies & Lifestyle)</p> <p>Evaluate lasting effects of gender roles and class structure on the culture in different world regions(MT: Human Characteristics)</p> <p>Explain how historical events influenced the language spoken in regions of the world (MT: Human Characteristics)</p>	<ul style="list-style-type: none"> • Mexico • Caribbean Islands • South America Central America 	
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W2 WHG Era 2 – Early Civilizations and Cultures and the Emergence of Pastoral Peoples, 4000 to 1000 B.C.E. /B.C.

Describe and differentiate defining characteristics of early civilization and pastoral societies, where they emerged, and how they spread.

During this era early agrarian civilizations and pastoral societies emerged. Many of the world's most fundamental institutions, discoveries, inventions, and techniques appeared. Pastoral societies developed cultures that reflected the geography and resources that enabled them to inhabit the more challenging physical environments such as the tundra and semi-arid regions of North and South America.

W2.1 Early Civilizations and Early Pastoral Societies			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics of early Western Hemisphere civilizations and pastoral societies.</i></p> <p>6 – W2.1.1 Explain how the environment favored hunter gatherer, pastoral and small scale agricultural ways of life in different parts of the Western Hemisphere.</p> <p>6 – W2.1.2 Describe how the invention of agriculture led to the emergence of agrarian civilizations (seasonal harvests, specialized crops, cultivation, and development of villages and towns).</p>	<p><u>NHA Unit Objectives</u></p> <p>Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophy, trade, tools weapons, agriculture, migration/settlement) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate how the social structure in ancient civilizations contributed to their success(or lack of) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate lasting effects of gender roles and class structure on the culture in different world regions(MT: Human Characteristics)</p>	<p>Native Inuit migration and way of life</p> <p>Native American Regions</p> <p>Native Central/Latin Americans</p> <p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands • South America • Central America 	<p>Parts of the following - Grade 5 NHA Unit: Native American Cultures; Grade 6 NHA Unit Latin America Studies; Grade 7 NHA Unit: Canada Studies</p> <p>GLCE not specifically addressed</p>



<p>6 – W2.1.3 Use multiple sources of evidence to describe how the culture of early peoples of North America reflected the geography and natural resources available (e.g., Inuit of the Arctic, Kwakiutl of the Northwest Coast; Anasazi and Apache of the Southwest).</p> <p>6 – W2.1.4 Use evidence to identify defining characteristics of early civilizations and early pastoral nomads (government, language, religion, social structure, technology, and division of labor).</p>	<p>Explain how historical events influenced the language spoken in regions of the world (MT: Human Characteristics)</p>		
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W3 WHG Era 3 – Classical Traditions and Major Empires, 1000 B.C.E. /B.C. to 300 C.E. /A.D.

(Note: Mayan, Aztec, and Incan societies had their beginnings in Era 3 but became more prominent as civilizations in Era 4.) Analyze the civilizations and empires that emerged during this era, noting their political, economic, and social systems and their changing interactions with the environment. Analyze the innovations and social, political, and economic changes that occurred through the emergence of agrarian societies of Mesoamerica and Andean South America and the subsequent urbanization and trading economies that occurred in the region. (Grade 6)

Civilizations and empires that emerged during this era were noted for their political, economic and social systems and their changing interactions with the environment and the agrarian civilizations that emerged in Mesoamerica and South America.

W3.1 Classical Traditions and Major Empires in the Western Hemisphere			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe empires and agrarian civilizations in Mesoamerica and South America.</i></p> <p>6 – W3.1.1 Analyze the role of environment in the development of early empires, referencing both useful environmental features and those that presented obstacles.</p> <p>6 – W3.1.2 Explain the role of economics in shaping the development of early civilizations (trade routes and their significance – Inca Road, supply and demand for products).</p> <p>6 – W3.1.3 Describe similarities and difference among Mayan, Aztec, and Incan societies, including economy,</p>	<p><u>NHA Unit Objectives</u></p> <p>Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophy, trade, tools weapons, agriculture, migration/settlement) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate how the social structure in ancient civilizations contributed to their success(or lack of) (MT: Historical Societies & Lifestyle)</p> <p>Evaluate lasting effects of gender roles and class structure on the culture in different world regions(MT: Human Characteristics)</p> <p>Explain how historical events influenced the language spoken in regions of the world (MT: Human Characteristics)</p>	<p>Physical Geography of Latin America</p> <p>The Olmec Civilization</p> <ul style="list-style-type: none"> • 1st in Latin America • Located near the Gulf of Mexico <p>The Maya Civilization</p> <ul style="list-style-type: none"> • Accomplishments as architects: pyramids and temples • Knowledge of astronomy and mathematics: developed 365 day calendar <p>The Inca Civilization</p> <ul style="list-style-type: none"> • Built great cities(Machu Picchu, Cuzco) high in the Andes, connected by a system of roads <p>The Aztec Civilization</p> <ul style="list-style-type: none"> • Warrior Culture • Island of Tenochtitlan: aqueducts, temples, etc. <ul style="list-style-type: none"> • Montezuma (Montezuma) • Ruler priests and human sacrifice 	<ul style="list-style-type: none"> • NHA Unit Latin American Studies



<p>religion, and role and class structure.</p> <p>6 – W3.1.4 Describe the regional struggles and changes in governmental systems among the Mayan, Aztec, and Incan Empires.</p> <p>6 – W3.1.5 Construct a timeline of main events on the origin and development of early and classic ancient civilizations of the Western Hemisphere (Olmec, Mayan, Aztec, and Incan).</p>		<p>Spanish exploration & Conquistadors</p> <ul style="list-style-type: none"> • Cortez and Pizzaro • Spanish weapons • Spread of European disease • Beginning of colonization 	<p>GLCE not specifically addressed</p>
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GEOGRAPHY

G1 The World in Spatial Terms: Geographical Habits of Mind

Describe the relationships between people, places, and environments by using information that is in a geographic (spatial) context. Engage in mapping and analyzing the information to explain the patterns and relationships they reveal both between and among people, their cultures, and the natural environment. Identify and access information, evaluate it using criteria based on concepts and themes, and use geography in problem solving and decision making. Explain and use key conceptual devices (places and regions, spatial patterns and processes) that geographers use to organize information and inform their study of the world.

Geographers use published maps, sketch (mental) maps, and other geographic representations, tools, and technologies to acquire, organize, process, and report information from a spatial perspective. World maps made for specific purposes (population distribution, climate patterns, and vegetation patterns) are used to explain the importance of maps in presenting information that can be compared, contrasted, and examined to answer the questions “Where is something located?” and “Why is it located there?” Students will begin with global scale and then refocus the scale to study the region of the Western Hemisphere, and, finally, focus on a specific place. Geographers use information and skills to reach conclusions about significant questions regarding the relationships between people, their cultures, the environments in which they live, and the relationships within the larger world context. Students will reach their own conclusions using this information and make a reasoned judgment about the most justifiable conclusion based on the authenticity of the information, their skill at critically analyzing the information, and presenting the results of the inquiry. The nature and uses of geography as a discipline and the spatial perspective require that students observe, interpret, assess, and apply geographic information and skills. The uses of the subject and content of geography are essential in the development of geographical understanding. A spatial perspective enables student to observe, describe, and analyze the organizations of people, places, and environments at different scales and is central to geographic literacy.

G1.1 Spatial Thinking			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use maps and other geographic tools to acquire and process information from a spatial perspective.</i></p> <p>6 – G1.1.1 Describe how geographers use mapping to represent places and natural and human phenomena in the world.</p> <p>6 – G1.1.2 Draw a sketch map from memory of the Western Hemisphere showing the major</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Maps and Globes</p> <p>Types of Maps</p> <ul style="list-style-type: none"> • Political • Physical • Relief & Contour • Climate • Natural Resources / Land Use • Population • Time Zone • Roadways • Historical • Sketch <p>Physical Geography of the western Hemisphere</p>	<p>NHA Grade Six Geography</p>



regions (Canada, United States, Mexico, Central America, South America, and Caribbean).		<ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands <ul style="list-style-type: none"> • South America • Central America 	
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G1.2 Geographical Inquiry and Analysis			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic inquiry and analysis to answer important questions about relationships between people, cultures, their environment, and relations within the larger world context.</i></p> <p>6 – G1.2.1 Locate the major landforms, rivers (Amazon, Mississippi, Missouri, Colorado), and climate regions of the Western Hemisphere.</p> <p>6 – G1.2.2 Explain why maps of the same place may vary, including cultural perspectives of the Earth and new knowledge based on</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands <ul style="list-style-type: none"> • South America • Central America <p>Maps and Globes</p> <p>Types of Maps</p> <ul style="list-style-type: none"> • Political • Physical • Relief & Contour <ul style="list-style-type: none"> • Climate • Natural Resources / Land Use <ul style="list-style-type: none"> • Population • Time Zone 	<p>NHA Grade Six Geography Unit</p> <p>GLCE not specifically addressed</p>



<p>science and modern technology.</p> <p>6 – G1.2.3 Use data to create thematic maps and graphs showing patterns of population, physical terrain, rainfall, and vegetation, analyze the patterns and then propose two generalizations about the location and density of the population.</p> <p>6 – G1.2.4 Use observations from air photos, photographs (print and CD), films (VCR and DVD) as the basis for answering geographic questions about the human and physical characteristics of places and regions.</p> <p>6 – G1.2.5 Use information from modern technology such as Geographic Positioning System (GPS), Geographic Information System (GIS), and</p>		<ul style="list-style-type: none"> • Roadways • Historical • Sketch 	
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<p>satellite remote sensing to locate information and process maps and data to analyze spatial patterns of the Western Hemisphere to answer geographic questions.</p> <p>6 – G1.2.6 Apply the skills of geographic inquiry (asking geographic questions, acquiring geographic information, organizing geographic information, analyzing geographic information, and answering geographic questions) to analyze a problem or issue of importance to a region of the Western Hemisphere.</p>			
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G1.3 Geographical Understanding			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic themes, knowledge about processes and concepts to study the Earth.</i></p> <p>6 – G1.3.1 Use the fundamental themes of geography (location, place, human environment interaction, movement, region) to describe regions or places on earth.</p> <p>6 – G1.3.2 Explain the locations and distributions of physical and human characteristics of Earth by using knowledge of spatial patterns.</p> <p>6 – G1.3.3 Explain the different ways in which places are connected and how those connections demonstrate interdependence and accessibility.</p>	<p><u>NHA Unit Objectives</u></p> <p>Describe features of different world regions using the 5 themes of geography(MT: 5 Themes of Geography)</p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>5 Themes of Geography</p> <ul style="list-style-type: none"> • Location • Place • Human / Environment Interaction • Movement • Region <p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands <ul style="list-style-type: none"> • South America • Central America 	<p>NHA Grade Six Geography Unit</p>

G2 Places and Regions

Describe the cultural groups and diversities among people that are rooted in particular places and in human constructs called regions. Analyze the physical and human characteristics of places and regions.

G2.1 Physical Characteristics of Place			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the physical characteristics of places.</i></p> <p>6 – G2.1.1 Describe the landform features and the climate of the region (within the Western or Eastern Hemispheres) under study.</p> <p>6 – G2.1.2 Account for topographic and human spatial patterns (where people live) associated with tectonic plates such as volcanoes, earthquakes, settlements (Ring of Fire, recent volcanic and seismic events, settlements in proximity to natural hazards in the Western Hemisphere) by using information from GIS,</p>	<p><u>NHA Unit Objectives</u></p> <p>Predict the impact of natural disasters on both the physical environment and human response to the disasters(MT: 5 Themes of Geography)</p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Physical Geography of the western Hemisphere</p> <ul style="list-style-type: none"> • Appalachia • Canadian Shield <ul style="list-style-type: none"> • Plains • Arctic Islands <ul style="list-style-type: none"> • Mexico • Caribbean Islands <ul style="list-style-type: none"> • South America • Central America <p>The Environment & Society</p> <p>Impact of Natural disasters on the environment and human population</p> <ul style="list-style-type: none"> • Volcanic eruptions • Hurricanes and tornadoes <ul style="list-style-type: none"> • Earthquakes • Mudslides <p>Human responses in preparing for natural disasters</p> <ul style="list-style-type: none"> • Earthquake monitoring • House Construction <ul style="list-style-type: none"> • Shelters • Evacuation Routes 	<p>NHA Grade Six Geography Unit</p>



remote sensing, and the World Wide Web.			
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G2.2 Human Characteristics of Place			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the human characteristics of places.</i></p> <p>6 – G2.2.1 Describe the human characteristics of the region under study (including languages, religion, economic system, governmental system, cultural traditions).</p> <p>6 – G2.2.2 Explain that communities are affected positively or negatively by changes in technology (e.g., Canada with regard to mining, forestry, hydroelectric power generation, agriculture, snowmobiles, cell phones, air travel).</p> <p>6 – G2.2.3 Analyze how culture and experience influence people's</p>	<p><u>NHA Unit Objectives</u></p> <p>Predict the consequences of movement on the physical environment (MT: 5 Themes of Geography)</p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Maps and Globes</p> <p>Types of Maps</p> <ul style="list-style-type: none"> • Political • Physical • Relief & Contour • Climate • Natural Resources / Land Use • Population • Time Zone • Roadways • Historical • Sketch 	<p>NHA Grade Six Geography Unit</p> <p>GLCE not specifically addressed</p>



<p>perception of places and regions (e.g., the Caribbean Region that presently displays enduring impacts of different immigrant groups – Africans, South Asians, Europeans – and the differing contemporary points of view about the region displayed by islanders and tourists).</p>			
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G3 Physical Systems

Describe the physical processes that shape the Earth's surface which, along with plants and animals, are the basis for both sustaining and modifying ecosystems. Identify and analyze the patterns and characteristics of the major ecosystems on Earth.

G3.1 Physical Processes			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the physical processes that shape the patterns of the Earth's surface.</i></p> <p>6 – G3.1.1 Construct and analyze climate graphs for two locations at different latitudes and elevations in the region to answer geographic questions and make predictions based on</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Maps and Globes</p> <p>Types of Maps</p> <ul style="list-style-type: none"> • Political • Physical • Relief & Contour • Climate • Natural Resources / Land Use • Population • Time Zone • Roadways 	<p>NHA Grade Six Geography Unit</p>



<p>patterns. (e.g., compare and contrast Buenos Aires and La Paz; Mexico City and Guatemala City; Edmonton and Toronto).</p>		<ul style="list-style-type: none"> • Historical • Sketch 	
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G3.2 Ecosystems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics and spatial distribution of ecosystems on the Earth's surface.</i></p> <p>6 – G3.2.1 Explain how and why ecosystems differ as a consequence of differences in latitude, elevation, and human activities (e.g., South America's location relative to the equator, effects of elevations on temperature and growing season, proximity to bodies of water and the effects on temperature and rainfall, effects of annual flooding on vegetation along river flood plains such as the Amazon).</p> <p>6 – G3.2.2 Identify ecosystems and explain why some are more attractive for humans to use than are others (e.g., mid-latitude forest in North America, high</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Maps and Globes</p> <p>Types of Maps</p> <ul style="list-style-type: none"> • Political • Physical • Relief & Contour • Climate • Natural Resources / Land Use <ul style="list-style-type: none"> • Population • Time Zone • Roadways • Historical • Sketch <p>Consequences of Migration on Ecosystems</p> <ul style="list-style-type: none"> • Urbanization • Desertification • Deforestation 	<p>NHA Grade Six Geography Unit</p>



latitude of Peru, tropical forests in Honduras, fish or marine vegetation in coastal zones).			
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G4 Human Systems

Explain that human activities may be seen on Earth's surface.

Human systems include the way people divide the land, decide where to live, develop communities that are part of the larger cultural mosaic, and engage in the cultural diffusion of ideas and products within and among groups.

G4.1 Cultural Mosaic			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics, distribution and complexity of Earth's cultural mosaic.</i></p> <p>6 – G4.1.1 Identify and explain examples of cultural diffusion within the Americas (e.g., baseball, soccer, music, architecture, television, languages, health care, Internet, consumer brands, currency, restaurants, international migration).</p>			



G4.2 Technology Patterns and Networks			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how technology creates patterns and networks that connect people, products, and ideas.</i></p> <p>6 – G4.2.1 List and describe the advantages and disadvantages of different technologies used to move people, products, and ideas throughout the world (e.g., call centers in the Eastern Hemisphere that service the Western Hemisphere; the United States and Canada as hubs for the Internet; transport of people and perishable products; and the spread of individuals' ideas as voice and image messages on</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Movement</p> <p>Push - pull factors that cause people to migrate</p>	<p>NHA Grade Six Geography Unit</p>



G4.4 Forces of Cooperation and Conflict			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain how forces of conflict and cooperation among people influence the division of the Earth's surface and its resources.</i></p> <p>6 – G4.4.1 Identify factors that contribute to conflict and cooperation between and among cultural groups (control/use of natural resources, power, wealth, and cultural diversity).</p> <p>6 – G4.4.2 Describe the cultural clash of First Peoples, French and English in Canada long ago, and the establishment of Nunavut in 1999.</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Movement</p> <p>Push - pull factors that cause people to migrate</p>	<p>NHA Grade Six Geography Unit GLCE not specifically addressed</p>



G5 Environment and Society

Explain that the physical environment is modified by human activities, which are influenced by the ways in which human society's value and use Earth's natural resources, and by Earth's physical features and processes. Explain how human action modifies the physical environment and how physical systems affect human systems.

G5.1 Humans and the Environment			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how human actions modify the environment.</i></p> <p>6 – G5.1.1 Describe the environmental effects of human action on the atmosphere (air), biosphere (people, animals, and plants), lithosphere (soil), and hydrosphere (water) (e.g., changes in the tropical forest environments in Brazil, Peru, and Costa Rica).</p> <p>6 – G5.1.2 Describe how variations in technology affect human modifications of the landscape (e.g., clearing forests for agricultural land in South America, fishing in the Grand Banks of the Atlantic, expansion of cities in</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>	<p>Consequences of Migration on Ecosystems</p> <ul style="list-style-type: none"> • Urbanization • Desertification • Deforestation 	<p>NHA Grade Six Geography Unit</p>



<p>South America, hydroelectric developments in Canada, Brazil and Chile, and mining the Kentucky and West Virginia).</p> <p>6 – G5.1.3 Identify the ways in which human-induced changes in the physical environment in one place can cause changes in other places (e.g., cutting forests in one region may result in river basin flooding elsewhere; building a dam floods land upstream and may permit irrigation in another region).</p>			
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G5.2 Physical and Human Systems

Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how physical and human systems shape patterns on the Earth's surface.</i></p> <p>6– G5.2.1 Describe the effects that a change in the physical environment could have on human activities and the choices people would have to make in adjusting to the change (e.g., drought in northern Mexico, disappearance of forest vegetation in the Amazon, natural hazards and disasters from volcanic eruptions in Central America and the Caribbean and earthquakes in Mexico City and Colombia).</p>	<p><u>NHA Unit Objectives</u></p> <p>Analyze the appropriate use and purposes of different types of maps (MT: Maps & Globes)</p>		<p>NHA Grade Six Geography Unit</p>

G6 Global Issues Past and Present (H1.4.3, G1.2.6)

Throughout the school year the students are introduced to topics that address global issues that integrate time and place. Included are capstone projects that entail the investigation of historical and contemporary global issues that have significance for the student and are clearly linked to the world outside the classroom. The topics and issues are developed as capstone projects within units and at the end of the course. Regular experiences with those topics and issues are necessary during each grade in order to build the background students will require to complete in-depth capstone projects.

Capstone projects require the student to use geography, history, economics, and government to inquire about major contemporary and historical issues and events linked to the world outside the classroom. The core disciplines are used to interpret the past and plan for the future. During the school year the students will

Complete at least three capstone projects. (National Geography Standards 17 and 18, p. 179 and 181)

G6.1 Global Topic Investigation and Issue Analysis (P2)			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
6 – G6.1.1 - Contemporary Investigations – Conduct research on contemporary global topics and issues, compose persuasive essays, and develop a plan for action. (H1.4.3, G1.2.6, See P3 and P4) Contemporary Investigation Topics Global Climate Change – Investigate the impact of global climate change and describe the significance for human/environment relationships. Globalization – Investigate the significance of	<u>NHA Unit Objectives</u> Describe conflict and cooperation that occurs in current events(when they arise) (MT: Current Events in the Context of History(World History Exemplar))	World Conflict & Cooperation Factors that contribute to cooperation within regions and countries – similarities in: <ul style="list-style-type: none"> • Religion • Language • Political Beliefs • Values Factors that contribute to conflict within regions and countries: <ul style="list-style-type: none"> • Economic competition for scarce resources • Boundary Disputes • Cultural Differences • Control of Strategic Locations 	NHA Grade Six Geography Unit GLCE not specifically addressed



<p>globalization and describe its impact on international economic and political relationships.</p> <p>Migration – Investigate issues arising from international movement of people and the economic, political, and cultural consequences.</p> <p>Human-Environmental Interactions – Investigate how policies from the past and their implementation have had positive or negative consequences for the environment in the future.</p> <p>Natural Disasters – Investigate the significance of natural disasters and describe the effects on human and physical systems, and the economy, and the responsibilities of government.</p> <p>6 – G6.1.2 - Investigations Designed for Ancient World History Eras –</p>			
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<p>Conduct research on global topics and issues, compose persuasive essays, and develop a plan for action. (H1.4.3, G1.2.6, See P3 and P4) Note: Additional global investigation topics have been identified for connections to World History Eras 1, 2, and 3 studies. Students investigate contemporary topics and issues that they have studied in an ancient world history context. The investigations may be addressed at the conclusion of each Era or may be included at the conclusion of the course.</p> <p>Contemporary Investigation Topics – Related to Content in World History and Contemporary Geography</p> <p>WHG Era 1 Population Growth and</p>			
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<p>Resources – Investigate how population growth affects resource availability.</p> <p>Migration – Investigate the significance of migrations of peoples and the resulting benefits and challenges.</p> <p>WHG Era 2</p> <p>Sustainable Agriculture – Investigate the significance of sustainable agriculture and its role in helping societies produce enough food for people.</p> <p>WHG Era 3</p> <p>Development – Investigate economic effects on development in a region and its ecosystems and societies.</p>			
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Civics and Government

C1 Purposes of Government

Analyze how people identify, organize, and accomplish the purposes of government.

C1.1 Nature of Civic Life, Politics, and Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe Civic Life, Politics, and Government and explain their relationships.</i></p> <p>6 – C1.1.1 Analyze competing ideas about the purposes government should serve in a democracy and in a dictatorship (e.g., protecting individual rights, promoting the common good, providing economic security, molding the character of citizens, or promoting a particular religion).</p>	<p><u>NHA</u></p>		<p>Sections of NHA Units: Latin America Studies and Canada Studies</p>

C3 Structure and Functions of Government

Describe the major activities of government, including making and enforcing laws, providing services and benefits to individuals and groups, assigning individual and collective responsibilities, generating revenue, and providing national security.

C3.6 Characteristics of Nation-States			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics of nation-states and how they may interact.</i></p> <p>6 – C3.6.1 Define the characteristics of a nation-state (a specific territory, clearly defined boundaries, citizens, and jurisdiction over people who reside there, laws, and government), and how Western Hemisphere nations interact.</p> <p>6 – C3.6.2 Compare and contrast a military dictatorship such as Cuba, a presidential system of representative democracy such as the United States, and a parliamentary system of representative democracy such as Canada.</p>	<p><u>NHA Unit Objectives</u></p> <p>Describe Different government systems used in countries around the world (MT: Government Systems)</p>	<p>Communism & dictatorships</p> <ul style="list-style-type: none"> • Cuba <p>Instability: History of Dictatorships</p> <ul style="list-style-type: none"> • Bolivia, Panama, Chile, Argentina <p>Parliamentary System</p> <ul style="list-style-type: none"> • Canadian Government <p>Citizen Rights and roles</p>	<p>Sections of NHA Units: Latin America Studies and Canada Studies</p>



C4 Relationship of United States to Other Nations AND World Affairs

Explain that nations interact with one another through trade, diplomacy, treaties and agreements, humanitarian aid, economic sanctions and incentives, and military force, and threat of force.

C4.3 Conflict and Cooperation Between and Among Nations			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain the various ways that nations interact both positively and negatively.</i></p> <p>6 – C4.3.1 Explain the geopolitical relationships between countries (e.g., petroleum and arms purchases in Venezuela and Ecuador; foreign aid for health care in Nicaragua).</p> <p>6 – C4.3.2 Explain the challenges to governments and the cooperation needed to address international issues in the Western Hemisphere (e.g., migration and human rights).</p> <p>6 – C4.3.3 Give examples of how countries work</p>	<p><u>NHA Unit Objectives</u></p> <p>Compare and Contrast rights and responsibilities of citizens in other countries to those in the United States (MT: Citizenship-Awareness, Rights, & Responsibilities)</p>		<p>Sections of NHA Units: Latin America Studies and Canada Studies</p>



together for mutual benefits through international organizations (e.g. North American Free Trade Agreement (NAFTA), Organization of American States (OAS), United Nations (UN)).			
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Economics

E1 The Market Economy

Describe the market economy in terms of the relevance of limited resources, how individuals and institutions make and evaluate decisions, the role of incentives, how buyers and sellers interact to create markets, how markets allocate resources, and the economic role of government in a market economy.

E1.1 Individual, Business, and Government Choices			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how individuals, businesses and government make economic decisions when confronting scarcity in the market economy.</i></p> <p>6 – E1.1.1 Explain how incentives vary in different economic systems (e.g. acquiring money, profit, goods, wanting to avoid loss in position in society, job</p>	<p><u>NHA Unit Objectives</u></p> <p>Describe the importance of banks within economic institutions (MT: Economic Institutions)</p> <p>Explain how economies are influenced by competition and the impact of that on modern society (MT: Economic Concepts)</p>	<p>Economic Systems</p> <p>Market System</p> <ul style="list-style-type: none"> Individual households/firms make decisions about production and distribution in a decentralized manner <p>Command System</p> <ul style="list-style-type: none"> A central authority makes the major decisions about production and 	<p>NHA Grade Six Economics Unit</p>



placement).		<p>distribution</p> <p>Traditional (tribal system)</p> <ul style="list-style-type: none"> • Found in rural / non-developed countries where decisions are based on customs and traditions 	
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E2 The National Economy

Use economic concepts, terminology, and data to identify and describe how a national economy functions and to study the role of government as a provider of goods and services within a national economy.

E2.3 Role of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how national governments make decisions that affect the national economy</i></p> <p>6 – E2.3.1 Describe the impact of governmental policy (sanctions, tariffs, treaties) on that country and on other countries that use its resources.</p>	<p><u>NHA Unit Objectives</u></p> <p>Describe the importance of labor unions within economic institutions (MT: Economic Institutions)</p> <p>Describe how economies are influenced by a variety of factors (MT: Economic Concepts)</p>	<p>Economic Concepts</p> <p>Gross Domestic Product (GDP)</p> <ul style="list-style-type: none"> The value of all final goods and services, expressed in dollars, produced within a countries borders in a given year Used as an indicator of the state of the economy <p>Inflation: sustained increase in the average price level of the entire economy</p> <ul style="list-style-type: none"> Reduces the value of currency Peoples purchasing power declines if their incomes increase more slowly than the inflation rate <p>Economic Institutions</p> <p>Specialized Economic Institutions</p> <ul style="list-style-type: none"> Sole Proprietorships Corporations 	<p>NHA Grade Six Economics Unit</p>



		<ul style="list-style-type: none"> • Partnerships • Cooperatives <ul style="list-style-type: none"> • NPO's • Labor Unions <ul style="list-style-type: none"> • Banks <p>Market Economy (Free Enterprise) Relationship between supply, demand, and price in a competitive market</p> <p>Competition among producers & sellers</p> <ul style="list-style-type: none"> • Lower costs and prices • Higher product quality • Better customer service <p>Competition among consumers & buyers results in higher prices</p> <p>Competition is not solely based on price</p> <ul style="list-style-type: none"> • Style and quality • Advertising • Customer Service • Credit Policies <p>Prices</p> <ul style="list-style-type: none"> • The price of any one product is influenced by, and also influences, the prices of other products <p>Categories of earned income</p>	
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		<ul style="list-style-type: none"> • Wages • Salaries • Rent • Interest • Profit 	
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E3 International Economy

Analyze reasons for individuals and businesses to specialize and trade, why individuals and businesses trade across international borders, and the comparisons of the benefits and costs of specialization and the resulting trade for consumers, producers, and governments.

E3.1 Economic Interdependence			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe patterns and networks of economic interdependence, including trade.</i></p> <p>6 – E3.1.1 Use charts and graphs to compare imports and exports of different countries in the Western Hemisphere and propose generalizations about patterns of economic interdependence.</p> <p>6 – E3.1.2 Diagram or map the movement of a consumer product from where it is manufactured to where it is sold to demonstrate the flow of materials, labor, and capital (e.g., global supply chain for</p>	<p><u>NHA Unit Objectives</u></p> <p>Distinguish the strengths and weaknesses of each economic system(MT: Economies of the World)</p> <p>Make generalizations about countries and their economies using basic economic concepts(GDP, inflation) (MT: Economic Concepts)</p> <p>Explain the concept of globalization (MT: Economies of the World)</p>	<p>Globalization</p> <p>The act, process, or policy of making something worldwide in scope or application</p> <p>Trade</p> <ul style="list-style-type: none"> • International trade promotes specialization • Role of trade barriers such as tariffs, quotas, embargos • Free trade <p>Exports: goods or services produced in one nation but sold to buyers in another nation</p> <p>Imports: goods or services bought from sellers in another nation</p> <ul style="list-style-type: none"> • Increasing interdependence & integration between people, companies, and nations across the world in relation to economics, technology, culture, etc... <p>Exchange rate: price of one</p>	<p>NHA Grade Six Economics Unit</p> <p>GLCE not specifically addressed</p>



computers, athletic shoes, and clothing).		nations currency in terms of another nations currency	
6 – E3.1.3 Explain how communications innovations have affected economic interactions and where and how people work (e.g., internet-based home offices, international work teams, international companies).			

E3.3 Economic Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how societies organize to allocate resources to produce and distribute goods and services.</i></p> <p>6 – E3.3.1 Explain and compare how economic systems (traditional, command, and market) answer four basic questions: What should be produced? How will it be produced? How</p>	<p><u>NHA Unit Objectives</u></p> <p>Distinguish the strengths and weaknesses of each economic system(MT: Economies of the World)</p> <p>Make generalizations about countries and their economies using basic economic concepts(GDP, inflation) (MT: Economic Concepts)</p> <p>Explain the concept of</p>	<p>Economic Systems</p> <p>Market System</p> <ul style="list-style-type: none"> Individual households/firms make decisions about production and distribution in a decentralized manner <p>Command System</p> <ul style="list-style-type: none"> A central authority makes the major decisions about production and 	<p>NHA Grade Six Economics Unit</p>



<p>will it be distributed? Who will receive the benefits of production? (e.g., compare United States and Cuba, or Venezuela and Jamaica.)</p>	<p>globalization (MT: Economies of the World)</p>	<p>distribution Traditional (tribal system)</p> <ul style="list-style-type: none"> • Found in rural / non- developed countries where decisions are based on customs and traditions 	
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P3-4 Public Discourse, Decision Making, and Citizen Involvement

The expectations continue to stress the importance of citizen action in a democratic republic as students expand their ability to address public policy issues. Students address contemporary public issues related to the Constitution and identify the related factual, definitional, and ethical questions. They use graphic data and other sources to analyze information about the issue, evaluate alternative resolutions, and use core democratic values to explain why people may differ on the resolution to a constitutional issue. Students are required to demonstrate increasing sophistication in their abilities to communicate a position on more complex national public policy issue and support it with a reasoned argument.

P3.1 Identifying and Analyzing Issues, Decision Making, Persuasive Communication About a Public Issue, and Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
6 – P3.1.1 Clearly state an issue as a question or public policy, trace the origins of an issue, analyze various perspectives, and generate and evaluate alternative resolutions. Deeply examine policy issues in group discussions and debates to make reasoned and informed decisions. Write persuasive/ argumentative essays expressing and justifying decisions on public policy issues. Plan and conduct activities intended to advance views on matters of public policy, report the	New Unit		



<p>results, and evaluate effectiveness.</p> <ul style="list-style-type: none"> • Identify public policy issues related to global topics and issues studied. • Clearly state the issue as a question of public policy orally or in written form. • Use inquiry methods to acquire content knowledge and appropriate data about the issue. • Identify the causes and consequences and analyze the impact, both positive and negative. <ul style="list-style-type: none"> • Share and discuss findings of research and issue analysis in group discussions and debates. • Compose a persuasive essay justifying the position with a reasoned argument. • Develop an action plan to address or inform others about the issue at the local to global scales. 			
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P4.2 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good.</i></p> <p>6 – P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness.</p> <p>6 – P4.2.2 Engage in activities intended to contribute to solving a national or international problem studied.</p> <p>6 – P4.2.3 Participate in projects to help or inform others (e.g., service learning projects).</p>	New Unit		



Additional NHA Content

The following content and/or units are not required by the 6th grade Michigan GLCE's and should no longer be taught in 6th grade.

NHA Social Studies Unit: Europe Studies
Content is covered by 7 th and 9 th grade Michigan GLCE's

GRADE SEVEN – Eastern Hemisphere Studies

Seventh grade students will review the tools and mental constructs used by historians and geographers. They will develop an understanding of Ancient World History, Eras 1 – 3, of the Eastern Hemisphere and will study contemporary geography of the Eastern Hemisphere. Contemporary civics/government and economics content is integrated throughout the year. As a capstone, the students will conduct investigations about past and present global issues. Using significant content knowledge, research, and inquiry, they will analyze the issue and propose a plan for the future. As part of the inquiry, they compose civic, persuasive essays using reasoned argument.

Seventh Grade includes Europe, Africa, Asia, and Australia. Europe and Russia are listed in the document for 7th grade, but may be included with either Western or Eastern Hemisphere Studies. World History Eras 1, 2, and 3 and The World in Temporal Terms and The World in Spatial Terms are included in Grades 6 and 7 as a foundation for World History and Geography in the high school. Capstone projects of historical and contemporary global issues that have significance for the student and clearly linked to the world outside the classroom are included.

- Note: All standards met by NHA come from 6th and 7th grade Units: Middle East Studies, Europe Studies, Asia Studies, Africa Studies, and Australia/South Pacific Studies.
- Note: High school World History begins with the Middle Ages, Middle school teachers can introduce these concepts but are not required to go further than this.

HISTORY

H1 The World in Temporal Terms: Historical Habits of Mind (foundational expectations addressed in grade 6)

Evaluate evidence, compare and contrast information, interpret the historical record, and develop sound historical arguments and perspectives on which informed decisions in contemporary life can be based.

Historians use conceptual devices (eras, periods, calendars, and time lines) to organize their study of the world. Chronology is based on time and reflects cultural and historical interpretations, including major starting points, and calendars based on different criteria (religious, seasonal, Earth-sun-and-moon relationships). Historians use eras and periods to organize the study of broad developments that have involved large segments of world's population and have lasting significance for future generations and to explain change and continuity. History is a process of reasoning based on evidence from the past. Historians use and interpret a variety of historical documents (including narratives), recognize the difference between fact and opinion, appreciate multiple historical perspectives while avoiding present mindedness (judging the past solely in term of norms and values of today), and explain that historical events often are the result of multiple causation. Students will conduct their own inquiry and analysis in their studies about the ancient history of the Eastern Hemisphere. Historians apply temporal perspective, historical inquiry, and analysis to spheres of human society to construct knowledge as historical understandings. These understandings are drawn from the record of human history and include human aspirations, strivings, accomplishments, and failures in spheres of human activity.



H1.1 Temporal Thinking			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical conceptual devices to organize and study the past.</i></p> <p>New 7 – H1.1.1 Explain why and how historians use eras and periods as constructs to organize and explain human activities over time.</p> <p>New 7 – H1.1.2 Compare and contrast several different calendar systems used in the past and present and their cultural significance (e.g., Sun Dial, Gregorian calendar – B.C. /A.D.; contemporary secular – B.C.E. /C.E.; Chinese, Hebrew, and Islamic/Hijri calendars).</p>			



H1.2 Historical Inquiry and Analysis			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical inquiry and analysis to study the past.</i></p> <p>New 7 – H1.2.1 Explain how historians use a variety of sources to explore the past (e.g., artifacts, primary and secondary sources including narratives, technology, historical maps, visual/mathematical quantitative data, radiocarbon dating, DNA analysis).</p> <p>New – H1.2.2 Read and comprehend a historical passage to identify basic factual knowledge and the literal meaning by indicating who was involved, what happened, where it happened, what events led to the development, and what consequences or outcomes followed.</p> <p>New 7 – H1.2.3 Identify the</p>			



<p>point of view (perspective of the author) and context when reading and discussing primary and secondary sources.</p> <p>New 7 – H1.2.4 Compare and evaluate competing historical perspectives about the past based on proof.</p> <p>New 7 – H1.2.5 Describe how historians use methods of inquiry to identify cause effect relationships in history noting that many have multiple causes.</p> <p>New 7 – H1.2.6 Identify the role of the individual in history and the significance of one person's ideas.</p>			
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H1.4 Historical Understanding			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use historical concepts, patterns, and themes to study the past.</i></p> <p>New 7 – H1.4.1 Describe and use cultural institutions to study an era and a region (political, economic, religion/ belief, science/technology, written language, education, family).</p> <p>New 7 – H1.4.2 Describe and use themes of history to study patterns of change and continuity.</p> <p>New 7 – H1.4.3 Use historical perspectives to analyze global issues faced by humans long ago and today.</p>			



W1 WHG Era 1 – The Beginnings of Human Society: Beginnings to 4000 B.C.E./B.C.

Explain the basic features and differences between hunter-gatherer societies and pastoral nomads. Analyze and explain the geographic, environmental, biological, and cultural processes that influenced the rise of the earliest human communities, the migration and spread of people throughout the world, and the causes and consequences of the growth of agriculture.

In the first era of human history, people spread throughout the world. As communities of hunters, foragers, or fishers, they adapted creatively and continually to a variety of contrasting, changing environments in Africa, Eurasia, and Australia. The Agricultural Revolution was a major turning point in history that resulted in people and civilizations viewing and using the land in a systematic manner to grow food crops, raise animals, produce food surpluses, and the development of sedentary settlement.

W1.1 Peopling of the Earth			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the spread of people in the Eastern Hemisphere in Era 1.</i></p> <p>New 7 – W1.1.1 Explain how and when human communities populated major regions of the Eastern Hemisphere (Africa, Australia, Europe, and Asia) and adapted to a variety of environments.</p> <p>New 7 – W1.1.2 Explain what archaeologists have learned about Paleolithic and Neolithic patterns of living in Africa,</p>			



Western Europe, and Asia.			
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W1.2 Agricultural Revolution			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the Agricultural Revolution and explain why it was a turning point in history.</i></p> <p>7 – W1.2.1 Explain the importance of the natural environment in the development of agricultural settlements in different locations (e.g., available water for irrigation, adequate precipitation, and suitable growth season).</p> <p>7 – W1.2.2 Explain the impact of the Agricultural Revolution (stable food supply, surplus, population growth, trade, division of labor, development of settlements).</p> <p>7 – W1.2.3 Compare and</p>		<p>Middle East</p> <ul style="list-style-type: none"> • Earliest people and their interaction with the environment • Earliest civilization 	



<p>contrast the environmental, economic, and social institutions of two early civilizations from different world regions (e.g., Yangtze, Indus River Valley, Tigris/Euphrates, and Nile).</p>			
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W2 WHG Era 2 – Early Civilizations and Cultures and the Emergence of Pastoral Peoples, 4000 to 1000 B.C.E. /B.C.

Describe and differentiate defining characteristics of early civilization and pastoral societies, where they emerged, and how they spread.

During this era early civilizations and pastoral societies emerged. Many of the world's most fundamental institutions, discoveries, inventions, and techniques appeared. Pastoral societies developed the herding of animals as a primary food source that enabled them to inhabit the semi-arid steppes of Eurasia and Africa. This era introduces students to one of the most enduring themes in history: the dynamic interplay, between herding and agrarian societies involving both conflict and mutual dependence

W2.1 Early Civilizations and Early Pastoral Societies			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze early Eastern Hemisphere civilizations and pastoral societies.</i></p> <p>7 – W2.1.1 Describe the importance of the development of human language, oral and written, and its relationship to the development of culture:</p> <ul style="list-style-type: none"> • verbal vocalizations • standardization of physical (rock, bird) and abstract (love, fear) words • pictographs to abstract writing (governmental administration, laws, codes, history and artistic expressions) 		<p>Middle East</p> <ul style="list-style-type: none"> • Ancient Mesopotamia <ul style="list-style-type: none"> • Sumerians • The Fertile Crescent 	



<p>7 – W2.1.2 Use historical and modern maps and other sources to locate, describe, and analyze major river systems and discuss the ways these physical settings supported permanent settlements, and development of early civilizations (Tigris and Euphrates Rivers, Yangtze River, Nile River, Indus River).</p> <p>7 – W2.1.3 Examine early civilizations to describe their common features (ways of governing, stable food supply, economic and social structures, use of resources and technology, division of labor and forms of communication).</p> <p>7 – W2.1.4 Define the concept of cultural diffusion and how it resulted in the spread of ideas and technology from one region to another (e.g.,</p>			
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<p>plants, crops, plow, wheel, bronze metallurgy).</p> <p>7 – W2.1.5 Describe pastoralism and explain how the climate and geography of Central Asia were linked to the rise of pastoral societies on the steppes.</p>			
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W3 WHG Era 3 – Classical Traditions, World Religions, and Major Empires, 1000 B.C.E. /B.C. to 300 C.E. /A.D.

Analyze classical civilizations and empires and the emergence of major world religions and large-scale empires.

During this era, innovations and social, political, and economic changes occurred through emergence of classical civilizations in Africa and Eurasia. Africa and Eurasia moved in the direction of forming a single world of human interchange as a result of trade, empire building, and the diffusion of skills and ideas. Six of the world's major faiths and ethical systems emerged and classical civilizations established institutions, systems of thought, and cultural styles that would influence neighboring peoples and endure for centuries.

W3.1 Classical Traditions in Regions of the Eastern Hemisphere			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze classical civilizations and empires and their lasting impact on institutions, political thought, structures, technology and art forms that grew in India, China, the Mediterranean basin, Africa, and Southwest and Central Asia during this era.</i></p> <p>7 – W3.1.1 Describe the characteristics that classical civilizations share (institutions, cultural styles, systems of thought that influenced neighboring peoples and have endured for several centuries).</p> <p>7 – W3.1.2 Using historic and</p>	<p>Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement)(MT: Historical Societies & Lifestyles)</p> <p>Explain the importance of specific people and places within society (MT: Historical Societies & Lifestyles)</p> <p>Analyze the causes and consequences of ancient Greek and Roman conflicts (MT: Historical Conflict(World History Exemplar))</p> <p>Evaluate how the social</p>	<p>Europe</p> <ul style="list-style-type: none"> • Ancient Greece • Ancient Rome <p>Middle East</p> <ul style="list-style-type: none"> • Israel • Gender roles <p>Asia</p> <ul style="list-style-type: none"> • Ancient Indus Valley civilization • Caste system • Ancient Huang Ho River Valley Civilization • Daoism • Confucianism <p>Africa</p> <ul style="list-style-type: none"> • Ancient Egypt • Medieval African Kingdoms: Ghana & 	



<p>modern maps, locate three major empires of this era, describe their geographic characteristics including physical features and climates, and propose a generalization about the relationship between geographic characteristics and the development of early empires.</p> <p>New 7– W3.1.3 Compare and contrast the defining characteristics of a city-state, civilization, and empire.</p> <p>7 – W3.1.4 Assess the importance of Greek ideas about democracy and citizenship in the development of Western political thought and institutions.</p> <p>7 – W3.1.5 Describe major achievements from Indian, Chinese, Mediterranean, African, and Southwest and</p>	<p>structure in ancient civilizations contributed to their success (or lack of) (MT: Historical Societies & Lifestyles)</p> <p>Explain contributions of ancient civilizations on modern society(MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Evaluate the legacy of artistic and civil rights movements and important individuals within these movements on modern society(MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Evaluate the lasting impact of gender roles and class structure in different world regions (MT: Human Characteristics)</p>	<p>Mali</p> <p>Australia (not colonized by Europeans until after the American Revolution)</p>	
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<p>Central Asian civilizations in the areas of art, architecture and culture; science, technology and mathematics; political life and ideas; philosophy and ethical beliefs; and military strategy.</p> <p>7 – W3.1.6 Use historic and modern maps to locate and describe trade networks among empires in the classical era.</p> <p>7 – W3.1.7 Use a case study to describe how trade integrated cultures and influenced the economy within empires (e.g., Assyrian and Persian trade networks or networks of Egypt and Nubia/Kush; or Phoenician and Greek networks).</p> <p>7 – W3.1.8 Describe the role of state authority, military power, taxation</p>			
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<p>systems, and institutions of coerced labor, including slavery, in building and maintaining empires (e.g., Han Empire, Maryann Empire, Egypt, Greek city-states and the Roman Empire).</p> <p>7 – W3.1.9 Describe the significance of legal codes, belief systems, written languages and communications in the development of large regional empires.</p> <p>New 7 – W3.1.10 Create a time line that illustrates the rise and fall of classical empires during the classical period.</p>			
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W3.2 Growth and Development of World Religions			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain how world religions or belief systems of Hinduism, Judaism, Buddhism, Christianity, Confucianism and Islam grew and their significance. (Islam is included here even though it came after 300 C.E. /A.D.)</i></p> <p>7 – W3.2.1 Identify and describe the beliefs of the five major world religions.</p> <p>7 – W3.2.2 Locate the geographical center of major religions and map the spread through the 3rd century C.E. /A.D.</p> <p>7 – W3.2.3 Identify and describe the ways that religions unified people's perceptions of the world and contributed to cultural integration of large regions of Afro-Eurasia. (<i>National Geography Standard 6, p. 73</i>)</p>	<p>Explain the impact of major world religions on history and current events(MT: Significant Events, Individuals, & Contributions (World History Exemplar))</p> <p>Explain the impact of religious conflict on the people of a specific region (MT: Historical Conflict (World History Exemplar))</p>	<p>Europe</p> <ul style="list-style-type: none"> • Greek and Roman Polytheism <p>Middle East</p> <ul style="list-style-type: none"> • Birthplace of 3 religions (Christianity, Islam, Judaism) • Zionist Movement (late 19th century) <p>Asia</p> <ul style="list-style-type: none"> • Birthplace of 2 religions (Hinduism, Buddhism) <p>Africa</p> <p>Ancient Egyptian Polytheism</p>	



GEOGRAPHY

G1 The World in Spatial Terms: Geographical Habits of Mind (foundational expectations addressed in grade 6)

Study the relationships between people, places, and environments by using information that is in a geographic (spatial) context.

Engage in mapping and analyzing the information to explain the patterns and relationships they reveal both between and among people, their cultures, and the natural environment. Identify and access information, evaluate it using criteria based on concepts and themes, and use geography in problem solving and decision making. Explain and use key conceptual devices (places and regions, spatial patterns and processes) that geographers use to organize information and inform their study of the world.

Geographers use published maps, sketch (mental) maps, and other geographic representations, tools, and technologies to acquire, organize, process, and report information from a spatial perspective. World maps made for specific purposes (population distribution, climate patterns, vegetation patterns) are used to explain the importance of maps in presenting information that can be compared, contrasted, and examined to answer the questions “Where is something located?” and “Why is it located there?” Students will begin with global scale and then refocus the scale to study the region of the Eastern Hemisphere, and, finally, focus on a specific place. Geographers use information and skills to reach conclusions about significant questions regarding the relationships between people, their cultures, the environments in which they live, and the relationships within the larger world context. Students will reach their own conclusions using this information and make a reasoned judgment about the most justifiable conclusion based on the authenticity of the information, their skill at critically analyzing and synthesizing the information, and presenting the results of the inquiry. The nature and uses of geography as a discipline and the spatial perspective require that students observe, interpret, assess, and apply geographic information and skills. The uses of the subject and content of geography are essential in the development of geographical understanding. A spatial perspective enables students to observe, describe, and analyze the organizations of people, places, and environments at different scales and is central to geographic literacy.

G1.1 Spatial Thinking			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use maps and other geographic tools to acquire and process information from a spatial perspective.</i></p> <p>New 7 – G1.1.1 Explain and use a variety of maps, globes, and web based geography technology to study the world,</p>			



<p>including global, interregional, regional, and local scales.</p> <p>New 7 – G1.1.2 Draw an accurate sketch map from memory of the Eastern Hemisphere showing the major regions (Africa, Asia, Europe, Australia/Oceania, Antarctica).</p>			
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G1.2 Geographical Inquiry and Analysis			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic inquiry and analysis to answer important questions about relationships between people, cultures, their environment, and relations within the larger world context.</i></p> <p>New 7 – G1.2.1 Locate the major landforms, rivers and climate regions of the Eastern Hemisphere.</p> <p>New 7 – G1.2.2 Explain why maps of the same place may vary as a result of the cultural or historical background of the cartographer.</p> <p>New 7 – G1.2.3 Use observations from air photos, photographs (print and CD), films (VCR and DVD) as the basis for answering geographic questions about the human and physical characteristics of places and regions.</p>			



<p>New 7 – G1.2.4 Draw the general population distribution of the Eastern Hemisphere on a map, analyze the patterns, and propose two generalizations about the location and density of the population.</p> <p>New 7 – G1.2.5 Use information from modern technology such as Geographic Positioning System (GPS), Geographic Information System (GIS), and satellite remote sensing to locate information and process maps and data to analyze spatial patterns of the Eastern Hemisphere to answer geographic questions.</p> <p>7 – G1.2.6 Apply the skills of geographic inquiry (asking geographic questions, acquiring</p>			
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geographic information, organizing geographic information, analyzing geographic information, and answering geographic questions) to analyze a problem or issue of importance to a region of the Eastern Hemisphere.			
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G1.3 Geographical Understanding			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use geographic themes, knowledge about processes and concepts to study the Earth.</i></p> <p>New 7 – G1.3.1 Use the fundamental themes of geography (location, place, human environment interaction, movement, region) to describe regions or places on earth.</p> <p>New 7 – G1.3.2 Explain the locations and distributions of physical and human characteristics of Earth by using knowledge of</p>			



<p>spatial patterns.</p> <p>New 7 – G1.3.3 Explain the different ways in which places are connected and how those connections demonstrate interdependence and accessibility.</p>			
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G2.2 Human Characteristics of Place			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the human characteristics of places.</i></p> <p>7 – G2.2.1 Describe the human characteristics of the region under study (including languages, religion, economic system, governmental system, cultural traditions).</p>	<p>Locate geographical areas within regions of the world (countries, capital cities) (MT: Political features)</p>	<p>Geography (Political)</p> <p>Europe</p> <ul style="list-style-type: none"> • Division between east and west • Major Regions (UK, Scandinavia, Balkans, etc.) <ul style="list-style-type: none"> • Major Cities • Break up of the Soviet Union (New borders and Nations) 	



<p>7 – G2.2.2 Explain that communities are affected positively or negatively by changes in technology (e.g., increased manufacturing resulting in rural to urban migration in China, increased farming of fish, hydroelectric power generation at Three Gorges, pollution resulting from increased manufacturing and automobiles).</p> <p>7 – G2.2.3 Analyze how culture and experience influence people's perception of places and regions (e.g., that beaches are places where tourists travel, cities have historic buildings, northern places are cold,</p>		<p>Middle East</p> <ul style="list-style-type: none"> • Jerusalem: Holy city of 3 faiths <ul style="list-style-type: none"> • Major Countries • Major Cities • Asia <ul style="list-style-type: none"> • Major Countries • Major Cities • Africa <ul style="list-style-type: none"> • Major Countries • Australia <ul style="list-style-type: none"> • 3 regions of the Pacific • Other Island Nations of the Pacific (New Zealand) • Population centers of Australia • Major Cities of Australia 	
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equatorial places are very warm).			
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G2 Places and Regions

Describe the cultural groups and diversities among people that are rooted in particular places and in human constructs called regions. Analyze the physical and human characteristics of places and regions.

G2.1 Physical Characteristics of Place			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the physical characteristics of places.</i></p> <p>7 – G2.1.1 Describe the landform features and the climate of the region (within the Western or Eastern Hemispheres) under study.</p> <p>7 – G2.1.2 Use information from GIS, remote sensing and the World Wide Web to compare and contrast the surface features and vegetation of the continents of the Eastern Hemisphere.</p>	<p>Describe the physical features of different regions on Earth (MT: Physical Features)</p>	<p>Geography (Physical)</p> <p>Europe</p> <ul style="list-style-type: none"> • North, Baltic, Mediterranean, & Caspian Seas • Alps & Ural Mountains <ul style="list-style-type: none"> • Coastlines • Danube, Rhine, Seine, & Volga rivers <p>Middle East</p> <ul style="list-style-type: none"> • Tigris, Euphrates, & Jordan Rivers <ul style="list-style-type: none"> • Fertile Crescent <ul style="list-style-type: none"> • Dead Sea • Persian Gulf <p>Asia</p> <ul style="list-style-type: none"> • Indian & Pacific Oceans <ul style="list-style-type: none"> • Bay of Bengal • Indus, Ganges, & Huang He Rivers 	



		<ul style="list-style-type: none"> • Himalayas, Mt. Everest, Mt. Fuji <ul style="list-style-type: none"> • Gobi Desert • Ring of Fire • Africa • Red & Mediterranean Seas • Atlantic and Indian Oceans <ul style="list-style-type: none"> • Cape of Good Hope <ul style="list-style-type: none"> • Madagascar • Atlas Mountains, Mt. Kilimanjaro <ul style="list-style-type: none"> • Great Rift Valley • Contrasting climate in different regions (Desert, Rainforest, Savanna) • Australia • Indian and Pacific Oceans <ul style="list-style-type: none"> • Desert Interior • Uluru (Ayers Rock) 	
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G3 Physical Systems

Describe the physical processes that shape the Earth's surface which, along with plants and animals, are the basis for both sustaining and modifying ecosystems. Identify and analyze the patterns and characteristics of the major ecosystems on Earth.

The characteristics of major ecosystems on Earth's surface include forests, deserts, grasslands, mountains, high latitude/polar and the temperature and precipitation patterns that cause them.

G3.1 Physical Processes			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the physical processes that shape the patterns of the Earth's surface.</i></p> <p>New 7 – G3.1.1 Construct and analyze climate graphs for locations at different latitudes and elevations in the region to answer geographic questions and make predictions based on patterns (e.g., compare and contrast Norway and France; Nairobi and Kilimanjaro; Mumbai and New Delhi)</p>			



G3.2 Ecosystems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics and spatial distribution of ecosystems on the Earth's surface.</i></p> <p>New 7 – G3.2.1 Explain how and why ecosystems differ as a consequence of differences in latitude, elevation, and human activities (e.g., effects of latitude on types of vegetation in Africa, proximity to bodies of water in Europe, and effects of annual river flooding in Southeast Asia and China).</p> <p>New 7 – G3.2.2 Identify ecosystems of a continent and explain why some provide greater opportunities (fertile soil, precipitation) for humans to use than do other ecosystems and how that changes with technology(e.g., China's humid east and</p>			



arid west and the effects of irrigation technology).			
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G4 Human Systems

Explain that human activities may be seen on Earth's surface. Human systems include the way people divide the land, decide where to live, develop communities that are part of the larger cultural mosaic, and engage in the cultural diffusion of ideas and products within and among groups.

People are central to the study of geography. The characteristics, distribution, and complexity of human cultures create a cultural mosaic. Technology affects the patterns and networks that develop on Earth and that enable people, products, and ideas to be exchanged. Human settlements have a powerful influence in shaping the world's different cultural mosaics and political and economic systems. Patterns of settlement are shaped by trade, the movement of raw materials, finished products, people, and ideas (scientific, technological, and religious). Forces of cooperation and conflict divide Earth's space and involve the control of land, resources, strategic routes, and domination of other peoples.

G4.1 Cultural Mosaic			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics, distribution and complexity of Earth's cultural mosaic.</i></p> <p>New 7 – G4.1.1 Identify and explain examples of cultural diffusion within the Eastern Hemisphere (e.g., the spread of sports, music, architecture, television, Internet, Bantu languages in Africa, Islam in Western Europe).</p>			



<p>New 7 – G4.1.2 Compare roles of women in traditional African societies in the past with roles of women as modern micro-entrepreneurs in current economies.</p>			
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G4.2 Technology Patterns and Networks			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how technology creates patterns and networks that connect people, products and ideas.</i></p> <p>New 7 – G4.2.1 List and describe the advantages and disadvantages of different technologies used to move people, products, and ideas throughout the world (e.g., opportunities for employment, entrepreneurial and educational</p>			



<p>opportunities using the Internet; the effects of technology on reducing the time necessary for communications and travel; the uses and effects of wireless technology in developing countries; and the spread of group and individual's ideas as voice and image messages on electronic networks such as the Internet).</p>			
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G4.3 Patterns of Human Settlement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe patterns, processes and functions of human settlement.</i></p> <p>New 7 – G4.3.1 Identify places in the Eastern Hemisphere that have been modified to be suitable for settlement by describing the modifications that were necessary (e.g., Nile River irrigation, reclamation of land along the North Sea, planting trees in areas that have become desertified in Africa).</p> <p>New 7 – G4.3.2 Describe patterns of settlement by using historical and modern maps (e.g., the location of the world's mega cities, other cities located near coasts and navigable rivers, regions under environmental stress such as the Sahel).</p>			



G4.4 Forces of Cooperation and Conflict			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain how forces of conflict and cooperation among people influence the division and control of the Earth's surface.</i></p> <p>New 7 – G4.4.1 Identify and explain factors that contribute to conflict and cooperation between and among cultural groups (e.g., natural resources, power, culture, wealth).</p> <p>New 7 – G4.4.2 Describe examples of cooperation and conflict within the European Union (e.g., European Parliament, Euro as currency in some countries but not others, open migration within the European Union, free trade, and cultural impacts such as a multi-lingual population).</p>			



G5 Environment and Society

Explain that the physical environment is modified by human activities, which are influenced by the ways in which human society's value and use Earth's natural resources, and by Earth's physical features and processes. Explain how human action modifies the physical environment and how physical systems affect human systems.

G5.1 Humans and the Environment			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how human actions modify the environment.</i></p> <p>New 7 – G5.1.1 Describe the environmental effects of human action on the atmosphere (air), biosphere (people, animals, and plants), lithosphere (soil), and hydrosphere (water) (e.g., desertification in the Sahel Region of North Africa, deforestation in the Congo Basin, air pollution in urban center, and chemical spills in European Rivers).</p> <p>New 7 – G5.1.2 Describe how variations in technology affect human modifications of the landscape (e.g., clearing</p>			



<p>of agricultural land in Southeast Asia, fish factories in North Atlantic and Western Pacific Ocean, and damming rivers to meet needs for electricity).</p> <p>New 7 – G5.1.3 Identify the ways in which human-induced changes in the physical environment in one place can cause changes in other places (e.g., cutting forests in one region may result in river basin flooding elsewhere as has happened historically in China; building dams floods land upstream and permits irrigation downstream as in Southern Africa, the Aswan Dam flooded the upper Nile Valley and permitted irrigation downstream).</p>			
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G5.2 Physical and Human Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how physical and human systems shape patterns on the Earth's surface.</i></p> <p>New 7 – G5.2.1 Describe the effects that a change in the physical environment could have on human activities and the choices people would have to make in adjusting to the change (e.g., drought in Africa, pollution from volcanic eruptions in Indonesia, earthquakes in Turkey, and flooding in Bangladesh).</p>			

G6 Global Issues Past and Present (H1.4.3, G1.2.6)

Throughout the school year the students are introduced to topics that address global issues that integrate time and place. Included are capstone projects that entail the investigation of historical and contemporary global issues that have significance for the student and are clearly linked to the world outside the classroom. The topics and issues are developed as capstone projects within units and at the end of the course. Regular experiences with those topics and issues are necessary during each grade in order to build the background students will require to complete in-depth capstone projects.

Capstone projects require the student to use geography, history, economics, and government to inquire about major contemporary and historical issues and events linked to the world outside the classroom. The core disciplines are used to interpret the past and plan for the future. During the school year the students will complete at least three capstone projects. (*National Geography Standards 17 and 18, p. 179 and 181*)

G6.1 Public Discourse, Decision Making, and Citizen Involvement (P3, P4)			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
7 – G6.1.1 Conduct research on contemporary global topics and issues, compose persuasive essays, and develop a plan for action. (H1.4.3, G1.2.6, See P3 and P4) Contemporary Investigation Topics Conflict, Stability, and Change – Investigate the significance of conflict, stability, and change in governmental systems within the region. Diversity and Nationalism – Investigate the tensions	<p>Apply the 5 themes of Geography to current events happening throughout the world (MT: Current events in the context of History (World History Exemplar))</p> <p>Predict the possible impact of current events throughout the world on the US (MT: Current events in the context of History (World History Exemplar))</p>		

<p>that may develop between cultural diversity and nationalism within a country and their consequences.</p> <p>Urbanization – Investigate urbanization and its consequences for the world's population.</p> <p>Oil and Society – Investigate the significance of how oil has changed nations as both consumers and producers of this natural resource.</p> <p>Children in the World – Investigate issues affecting children such as health, labor, and war.</p> <p>Regional Cooperation – Explain the significance of and barriers to regional cooperation.</p> <p>7 – G6.1.2 Conduct research on global topics and issues, compose persuasive essays, and develop a plan for action. (H1.4.3, G1.2.6, See P3 and P4) Note: Additional global</p>			
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<p>investigation topics have been identified for connections to World History Eras 1, 2, and 3 studies. Students investigate contemporary topics and issues that they have studied in an ancient world history context. The investigations may be addressed at the conclusion of each Era or may be included at the conclusion of the course.</p> <p>Contemporary Investigation Topics – Related to Content in World History and Contemporary Geography</p> <p>WHG Era 1</p> <p>Population Growth and Resources – Investigate how population growth affects resource availability.</p> <p>Migration – Investigate the significance of migrations of peoples</p>			
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<p>and the resulting benefits and challenges.</p> <p>WHG Era 2 Sustainable Agriculture – Investigate the significance of sustainable agriculture and its role in helping societies produce enough food for people.</p> <p>WHG Era 3 Development – Investigate economic effects on development in a region and its ecosystems and societies.</p> <p>Religious Conflict – Investigate conflict that arises from varying religious beliefs.</p>			
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CIVICS AND GOVERNMENT

C1 Purposes of Government

Analyze how people identify, organize, and accomplish the purposes of government.

Political scientists analyze why people engage in the political process; the role citizens play in civic life; the concepts of power, authority, sovereignty, and legitimacy; and competing arguments about the purpose and necessity of government.

C1.1 Nature of Civic Life, Politics, and Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze how people identify, organize, and accomplish the purposes of government.</i></p> <p>7 – C1.1.1 Explain how the purposes served by government affect relationships between the individual, government, and society as a whole and the differences that occur in monarchies, theocracies, dictatorships, and representative governments.</p>	<p>Describe different government systems used in countries around the world (MT: Government Systems)</p>	<p>Europe</p> <ul style="list-style-type: none"> • Monarchies • British Parliament • European Union <p>Middle East</p> <ul style="list-style-type: none"> • Islamic Fundamentalist States • Monarchy <p>Asia</p> <ul style="list-style-type: none"> • Communism <p>Africa</p> <ul style="list-style-type: none"> • From European Colonies to independence <p>Australia</p> <ul style="list-style-type: none"> • Commonwealth 	



C3 Structure and Functions of Government

Explain that governments are structured to serve the people. Describe the major activities of government, including making and enforcing laws, providing services and benefits to individuals and groups, assigning individual and collective responsibilities, generating revenue, and providing national security.

The world is organized politically into nation-states; each nation-state claims sovereignty over a defined territory and jurisdiction and everyone in it; these nation-states interact with one another using formal agreements and sanctions, which may be peaceful or may involve the use of force.

C3.6 Characteristics of Nation-States			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe the characteristics of nation-states and how nation-states may interact.</i></p> <p>New 7 – C3.6.1 Define the characteristics of a nation-state (a specific territory, clearly defined boundaries, citizens, and jurisdiction over people who reside there, laws, and government) and how Eastern Hemisphere nations interact.</p>			



C4 Relationship of United States to Other Nations and World Affairs

Explain that nations interact with one another through trade, diplomacy, treaties and agreements, humanitarian aid, economic sanctions and incentives, and military force and threat of force.

Governmental and nongovernmental organizations provide avenues through which nation-states can interact and attempt to manage their affairs and conflicts peacefully.

C4.3 Conflict and Cooperation Between and Among Nations			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain the various ways that nations interact both positively and negatively.</i></p> <p>7 – C4.3.1 Explain how governments address national issues and form policies, and how the policies may not be consistent with those of other countries (e.g., population pressures in China compared to Sweden; international immigration quotas, international aid, energy needs for natural gas and oil and military aid).</p> <p>New 7 – C4.3.2 Explain the challenges to governments and the</p>	<p>Evaluate the pros and cons of large intergovernmental organizations(European Union, Commonwealth of Nations) (MT: Government Systems)</p> <p>Compare and Contrast rights and responsibilities of citizens in other countries to those in the US (MT: Citizenship – Awareness, Rights & Responsibilities)</p>	<p>Europe Middle East Asia Africa Australia</p>	



<p>cooperation needed to address international issues (e.g., migration and human rights).</p> <p>7 – C4.3.3 Explain why governments belong to different types of international and regional organizations (e.g., United Nations (UN), North Atlantic Treaty Organization (NATO), Organization of the Petroleum Exporting Countries (OPEC), European Union (EU), and African Union (AU), G-8 countries (leading economic/political)).</p>			
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ECONOMICS

E1 The Market Economy

Describe the market economy in terms of the relevance of limited resources, how individuals and institutions make and evaluate decisions, the role of incentives, how buyers and sellers interact to create markets, how markets allocate resources, and the economic role of government in a market economy.

Individuals, businesses, industries, and governments confront scarcity and choice when organizing, producing and using productive resources (land, labor, capital) to supply the market place.

E1.1 Individual, Business, and Government Choices			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how individuals, businesses, and governments make economic decisions when confronting scarcity in the market economy.</i></p> <p>New 7 – E1.1.1 Explain the role of incentives in different economic systems (acquiring money, profit, goods, wanting to avoid loss, position in society, job placement).</p> <p>New 7 – E1.1.2 Describe the circular flow model (that businesses get money from households in exchange for goods and services and return that money to</p>			



households by paying for the factors of production that households			
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E2 The National Economy

Use economic concepts, terminology, and data to identify and describe how a national economy functions. They study the role of government as a provider of goods and services within a national economy.

Governmental decisions on taxation, spending, protections, and regulation affect the national economy.

E2.3 Role of Government			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how national governments make decisions that affect the national economy.</i></p> <p>New 7 – E2.3.1 Explain how national governments make decisions that impact both that country and other countries that use its resources (e.g., sanctions and tariffs enacted by a national government to prevent imports, most favored trade agreements, the impact China is having</p>			



on the global economy and the U.S. economy in particular).			
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E3 International Economy

Analyze reasons for individuals and businesses to specialize and trade, why individuals and businesses trade across international borders, and the comparisons of the benefits and costs of specialization and the resulting trade for consumers, producers, and governments.

Economic interdependence (trade) and economic development result in challenges and benefits for individuals, producers, and governments.

An economic system is the institutional framework that a society uses to allocate its resources to produce and distribute goods and services. Every modern economy is a “mixed system,” having some features characteristic of traditional, command, and market economies. The “mix” varies from one economy to another.

E3.1 Economic Interdependence			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe patterns and networks of economic interdependence, including trade.</i></p> <p>7 – E3.1.1 Explain the importance of trade (imports and exports) on national economies in the Eastern Hemisphere (e.g., natural gas in North Africa, petroleum Africa, mineral</p>	<p>Explain the Impact of trade on a country's economy and relations with other counties (MT: Economies of the World)</p> <p>Compare the economies of different world regions to each other and to the US using basic economic concepts (MT: Economies of the World)</p>	<p>Major resources, products, services & industries</p> <ul style="list-style-type: none"> • Europe • Middle East (oil) <ul style="list-style-type: none"> • Asia • Africa • Australia <p>GDP of select nations compared to the US and other nations</p>	



<p>resources in Asia).</p> <p>New 7 – E3.1.2 Diagram or map the movement of a consumer product from where it is manufactured to where it is sold to demonstrate the flow of materials, labor, and capital (e.g., global supply chain for computers, athletic shoes, and clothing).</p> <p>7 – E3.1.3 Determine the impact of trade on a region of the Eastern Hemisphere by graphing and analyzing the gross Domestic Product of the region for the past decade and comparing the data with trend data on the total value of imports and exports over the same period.</p> <p>New 7 – E3.1.4 Explain how communications innovations have affected economic interactions and where</p>		<p>Value of currencies and exchange rates</p>	
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and how people work (e.g., internet home offices, international work teams, international companies).			
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E3.3 Economic Systems			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe how societies organize to allocate resources to produce and distribute goods and services.</i></p> <p>New 7 – E3.3.1 Explain and compare how economic systems (traditional, command, and market) answer four basic questions: What should be produced? How will it be produced? How will it be distributed? Who will receive the benefits of production? (e.g., market economies in Africa, Europe; command economy in North Korea; and the transition to market economies in Vietnam and China).</p>			



P3-4 PUBLIC DISCOURSE, DECISION MAKING, AND CITIZEN INVOLVEMENT

The expectations continue to stress the importance of citizen action in a democratic republic as students expand their ability to address public policy issues. Students address contemporary public issues related to the Constitution and identify the related factual, definitional, and ethical questions. They use graphic data and other sources to analyze information about the issue, evaluate alternative resolutions, and use core democratic values to explain why people may differ on the resolution to a constitutional issue. Students are required to demonstrate increasing sophistication in their abilities to communicate a position on more complex national public policy issue and support it with a reasoned argument.

P3.1 Identifying and Analyzing Issues, Decision Making, Persuasive Communication About a Public Issue, and Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p>New 7 – P3.1.1 Clearly state an issue as a question or public policy, trace the origins of an issue, analyze and synthesize various perspectives, and generate and evaluate alternative resolutions. Deeply examine policy issues in group discussions and debates to make reasoned and informed decisions. Write persuasive/argumentative essays expressing and justifying decisions on public policy issues. Plan and conduct activities intended to advance views on</p>			



<p>matters of public policy, report the results, and evaluate effectiveness.</p> <ul style="list-style-type: none"> • Identify public policy issues related to global topics and issues studied. • Clearly state the issue as a question of public policy orally or in written form. • Use inquiry methods to acquire content knowledge and appropriate data about the issue. • Identify the causes and consequences and analyze the impact, both positive and negative. • Share and discuss findings of research and issue analysis in group discussions and debates. • Compose a persuasive essay justifying the position with a 			
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<p>reasoned argument.</p> <ul style="list-style-type: none"> Develop an action plan to address or inform others about the issue at the local to global scales. 			
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P4.2 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good.</i></p> <p>New 7 – P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness.</p> <p>New 7 – P4.2.2 Engage in activities intended to contribute to solving a national or international problem studied.</p> <p>New 7 – P4.2.3 Participate in projects to help or inform</p>			



others (e.g., service learning projects).			
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Additional NHA Content

The following content and/or units are not required by the 7th grade Michigan GLCE's and should no longer be taught in 7th grade.

NHA Social Studies Unit: Canada Studies
Content
Content is included in 6th grade Michigan GLCE's

GRADE EIGHT – Integrated U.S. History

Eighth grade students continue their study of United States History from the writing of the Constitution through Reconstruction. Geographic, civics/government, and economics content is integrated within the historical context. Using significant content knowledge, research, and inquiry, the students analyze an issue and propose a plan for civic action. They develop reasoned arguments and write a persuasive civic essay addressing issues from the past within a historical context. Where appropriate, they make comparisons to relevant contemporary issues.

F1 - Foundational Issues in Eras 1-3 (Review of Grade 5 Social Studies)

These foundational expectations are included to help students draw upon their previous study of American history and connect 8th grade United States history with the history studied in 5th grade. To set the stage for the study of U.S. history that begins with the creation of the U.S. Constitution, students should be able to draw upon an understanding of these politics and intellectual understandings.

F1 Political and Intellectual Transformations			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
F1.1 Describe the ideas, experiences, and interactions that influenced the colonists' decisions to declare independence by analyzing <ul style="list-style-type: none"> <i>colonial ideas about government (e.g., limited government, republicanism, protecting individual rights and promoting the common good, representative government, natural</i> 	<p>Explain how political beliefs and government policies influenced society in the United States (MT : Historical Societies & Lifestyles)</p> <p>Evaluate how different attitudes, governmental policies, and individual opinions influenced the American Revolution (MT: Significant events, Individuals, & Contributions (US History Exemplar))</p>	<p>Early English Colonization</p> <ul style="list-style-type: none"> Jamestown / House of Burgesses The Mayflower Compact <p>Background Causes</p> <ul style="list-style-type: none"> Mercantilism Cost of Colonial Wars Against the French Impact of the French & Indian War: Albany Plan of Union Political Thought of the Enlightenment 	<p>NHA Units:</p> <p>Early America: Overview</p> <p>The American Revolutionary Era</p>

<p><i>rights</i>) (C2)</p> <ul style="list-style-type: none"> • <i>experiences with self-government (e.g., House of Burgesses and town meetings)</i> (C2) • <i>changing interactions with the royal government of Great Britain after the French and Indian War</i> (C2) <p>F1.2 Using the Declaration of Independence, including the grievances at the end of the document, describe the role this document played in expressing</p> <ul style="list-style-type: none"> • <i>colonists' views of government</i> • <i>Their reasons for separating from Great Britain.</i> (C2) <p>F1.3 Describe the consequences of the American Revolution by analyzing the</p> <ul style="list-style-type: none"> • <i>birth of an independent republican government</i> (C2) 		<p>influences prominent colonial leaders (Thomas Paine)</p> <p>Shift from Protest to separation</p> <ul style="list-style-type: none"> • New British attitude following victory over France • New Policies antagonize colonists • Public Opinion and view points • Political Bodies • Public display and demonstration <ul style="list-style-type: none"> • Print Media <p>The Revolution</p> <ul style="list-style-type: none"> • Important Leaders <p>First and Second Continental Congress</p> <ul style="list-style-type: none"> • Early Attempts to govern • Declaration of Independence <p>Military and Political Aspects of the Revolution</p> <ul style="list-style-type: none"> • The Treaty of Paris <p>Changes Brought about by the American Revolution</p> <ul style="list-style-type: none"> • Resettlement of 	
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<ul style="list-style-type: none"> • <i>creation of Articles of Confederation (C2)</i> • <i>changing views on freedom and equality (C2) and concerns over distribution of power within governments, between government and the governed, and among people (C2)</i> 		<p>Loyalists</p> <ul style="list-style-type: none"> • Republican Ideology • Influenced other world wide revolutions (France, Latin America) • Role of Women, Native Americans, and African Americans 	
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U3 - ERA 3 – Revolution and the New Nation (1754-1800s)

Explain the challenges faced by the new nation and analyze the development of the Constitution as a new plan for governing.
[Foundations for Civics HSCE Standard 2.2.]

Note: Expectations U3.3.1–U3.3.5 address content that was introduced in Grade 5, but ask for explanation and analysis at a higher level than expected in Grade 5. They are included here to support in-depth discussion of the historical and philosophical origins of constitutional government in the United States. (U3.3.6)

U3.3 Creating New Government(s) and a New Constitution			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Explain the challenges faced by the new nation and analyze the development of the Constitution as a new plan for governing</i> [Foundations for Civics HSCE Standard 2.2]</p> <p>8– U3.3.1 Explain the reasons for the adoption and subsequent failure of the Articles of Confederation (e.g., why its drafters created a weak central government, challenges the nation faced under the Articles, Shays' Rebellion, and disputes over western lands). (C2)</p>	<p>Explain causes and Effects of the American Revolution, and the impact of these events on US history(MT: Historical Conflict(US History))</p> <p>Defend each side of the major debates proposed at the Constitutional Convention and in the process of ratifying the Constitution (MT: Government Systems)</p> <p>Explain how the strengths and weaknesses of early forms of government and influential writings led to the formation of the US Constitution (MT: Government Systems)</p>	<p>Structure of Government under the Articles of Confederation</p> <ul style="list-style-type: none"> • Congress is the only branch of government • Each state has equal power • Powers of congress • Achievements and contributions <ul style="list-style-type: none"> • Weaknesses • Annapolis Convention <p>Constitutional Convention</p> <ul style="list-style-type: none"> • Historical and Philosophical influences on American government • Major Issues • Compromise 	<p>NHA Unit: The Constitutional Era</p>



<p>8 – U3.3.2 Identify economic and political questions facing the nation during the period of the Articles of Confederation and the opening of the Constitutional Convention. (E1.4)</p> <p>8 – U3.3.3 Describe the major issues debated at the Constitutional Convention including the distribution of political power, conduct of foreign affairs, rights of individuals, rights of states, election of the executive, and slavery as a regional and federal issue.</p> <p>8 – U3.3.4 Explain how the new constitution resolved (or compromised) the major issues including sharing, separating, and checking of power among federal government institutions,</p>		<ul style="list-style-type: none"> • Underlying legal and political principles • The constitution and the functioning government <p>The Constitution as a living Document</p> <ul style="list-style-type: none"> • The Amendment Process (Article V) • The Bill of Rights <p>The Ratification Process</p> <ul style="list-style-type: none"> • Debates in the States • The Federalist Papers • Poughkeepsie Convention <p>Formal ratification launches the new government</p>	
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<p>dual sovereignty(state-federal power), rights of individuals, the Electoral College, the Three-Fifths Compromise, and the Great Compromise.</p> <p>8 – U3.3.5 Analyze the debates over the ratification of the Constitution from the perspectives of Federalists and Anti-Federalists and describe how the states ratified the Constitution. (C2) <i>(National Geography Standard 3, p. 148)</i></p> <p>8 – U3.3.6 Explain how the Bill of Rights reflected the concept of limited government, protections of basic freedoms, and the fear of many Americans of a strong central government. (C3)</p> <p>8 – U3.3.7 Using important documents (e.g., Mayflower Compact, Iroquois Confederacy,</p>			
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<p>Common Sense, Declaration of Independence, Northwest Ordinance, Federalist Papers), describe the historical and philosophical origins of constitutional government in the United States using the ideas of social compact, limited government, natural rights, right of revolution, separation of powers, bicameralism, republicanism, and popular participation in government. (C2)</p>			
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U4 - ERA 4 – Expansion and Reform (1792-1861)

4.1 Challenges to an Emerging Nation

4.2 Regional and Economic Growth

4.3 Reform Movements

U4.1 Challenges to an Emerging Nation			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze the challenges the new government faced and the role of political and social leaders in meeting these challenges.</i></p> <p>8 – U4.1.1 Use Washington's Farewell Address to analyze the most significant challenges the new nation faced and the extent to which subsequent Presidents heeded Washington's advice. (C4)</p> <p>8 – U4.1.2 Explain the changes in America's relationships with other nations by analyzing treaties with American Indian nations, Jay's Treaty (1795), French</p>	<p>Explain how political beliefs and government policies influenced society in the US (MT: Historical Societies and Lifestyles)</p> <p>Compare and Contrast the political process (elections, political parties) from the 1700 and 1800s to today (MT: Significant events, Individuals, & Contributions (US History Exemplar))</p> <p>Evaluate the impact of important individuals' contributions to US History (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>	<p>Washington's Presidency</p> <ul style="list-style-type: none"> • Precedents • The Cabinet • Two term tradition • Farewell address <p>Establishing Stability</p> <ul style="list-style-type: none"> • Hamilton's Plan • The Whiskey Rebellion • Judicial review: <i>Marbury v. Madison</i> • Development of political parties (Federalists v. Democratic Republicans) <ul style="list-style-type: none"> • Election of 1800 <p>Expanding the Nations Boundaries</p> <ul style="list-style-type: none"> • Northwest Ordinance • Pinckney Treaty with Spain • Louisiana Purchase and Lewis and Clark • Purchase of Florida 	<p>NHA Unit: Life in the New Nation</p>



<p>Revolution, Pinckney's Treaty (1795), Louisiana Purchase, War of 1812, Transcontinental Treaty (1819), and the Monroe Doctrine. (C4) <i>(National Geography Standard 13, p. 169)</i></p> <p>8 – U4.1.3 Explain how political parties emerged out of the competing ideas, experiences, and fears of Thomas Jefferson and Alexander Hamilton (and their followers), despite the worries the Founders had concerning the dangers of political division, by analyzing disagreements over</p> <ul style="list-style-type: none"> relative power of the national government (e.g., Whiskey Rebellion, Alien and Sedition Acts) and of the executive branch (e.g., during the Jacksonian era) (C3) 		<ul style="list-style-type: none"> War of 1812 The Monroe Doctrine <p>Era of Good Feelings</p> <ul style="list-style-type: none"> Internal Expansion: roads, canals, and railroads Henry Clays system National Assertions: <i>Gibbons v. Ogden</i> <p>The Jackson Era</p> <ul style="list-style-type: none"> The age of the “common man” The Spoils system New Political Parties <p>The elections of 1824 and 1828</p>	
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<p>(<i>National Geography Standard 13, p. 169</i>)</p> <ul style="list-style-type: none"> foreign relations (e.g., French Revolution, relations with Great Britain) (C3) (<i>National Geography Standard 13, p. 169</i>) economic policy (e.g., the creation of a national bank, assumption of revolutionary debt) (C3, E2.2) <p>8 – U4.1.4 Explain the development of the power of the Supreme Court through the doctrine of judicial review as manifested in <i>Marbury v. Madison</i> (1803) and the role of Chief Justice John Marshall and the Supreme Court in interpreting the power of the national government (e.g., <i>McCullough v. Maryland</i>, <i>Dartmouth College v. Woodward</i>,</p>			
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<i>Gibbons v. Ogden</i> . (C3, E1.4, 2.2)			
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U4.2 Regional and Economic Growth			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Describe and analyze the nature and impact of the territorial, demographic, and economic growth in the first three decades of the new nation using maps, charts, and other evidence.</i></p> <p>8 – U4.2.1 Compare and contrast the social and economic systems of the Northeast and the South with respect to geography and climate and the development of:</p> <ul style="list-style-type: none"> agriculture, including changes in productivity, technology, supply and demand, and price (E1.3,1.4) (<i>National Geography Standard 14, p. 171</i>) <ul style="list-style-type: none"> industry, including entrepreneurial development of new industries, such as textiles (E1.1) the labor force including labor incentives and changes in labor forces (E1.2) transportation including changes in transportation (steamboats and canal barges) 	<p>Explain the governments reasons for land acquisition in the 1800s (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Describe how land acquisition lead to conflict in US History (MT: Historical Conflict (US History Exemplar))</p> <p>Describe how geographic and economic conditions led to changes in society (MT: Historical Societies & Lifestyles)</p> <p>Analyze how early exploration and governmental policies affected Native Americans in the US (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>	<p>Manifest Destiny</p> <ul style="list-style-type: none"> right, belief, and the divine mission <p>Birth of Texas</p> <ul style="list-style-type: none"> War of Texas <p>Independence: The Alamo</p> <ul style="list-style-type: none"> Annexation 1845 <p>Oregon Territory</p> <ul style="list-style-type: none"> Oregon Trail <ul style="list-style-type: none"> Settlement of Boundaries 1846 <p>Mexican War (1846 – 1848)</p> <ul style="list-style-type: none"> Early US Imperialism Mexican Cession (California and New Mexico) Gadsden Purchase <p>Movement West</p> <ul style="list-style-type: none"> 49ers and California Mormons and Utah <p>Portrait of the North and the South</p> <p>The North</p> <ul style="list-style-type: none"> Industrial Improvements in Infrastructure <ul style="list-style-type: none"> Urban Increasing Immigrant 	<p>NHA Unit: Westward Expansion</p>



<p>and impact on economic markets and prices (E1.2,1.3) (<i>National Geography Standard 3, p. 148</i>)</p> <ul style="list-style-type: none"> immigration and the growth of nativism (<i>National Geography Standard 9, p. 160</i>) <ul style="list-style-type: none"> race relations class relations <p>8 – U4.2.2 Explain the ideology of the institution of slavery</p> <p>, its policies, and consequences.</p> <p>8 – U4.2.3 Explain the expansion, conquest, and settlement of the West through the Louisiana Purchase, the removal of American Indians (Trail of Tears) from their native lands, the growth of a system of commercial agriculture, the Mexican-American War, and the idea of Manifest Destiny. (E2.1) (<i>National Geography Standard 6, p. 154</i>)</p> <p>8 – U4.2.4 Develop an argument based on evidence about the positive and negative consequences of territorial and</p>		<p>Population</p> <p>The South</p> <ul style="list-style-type: none"> Agriculture based Plantation System Social structure Increasing Slave Population <p>Native American Policy</p> <ul style="list-style-type: none"> Indian Removal Act 1830 Native American Indian Territory The Trail of Tears <p>Native American Resistance</p>	<p>Part of NHA Unit: Life in the new Nation</p>
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economic expansion on American Indians, the institution of slavery, and the relations between free and slaveholding states. (C2) <i>(National Geography Standard 13, p. 169)</i>			
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U4.3 Reform Movements			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze the growth of antebellum American reform movements.</i></p> <p>8 – U4.3.1 Explain the origins of the American education system and Horace Mann's campaign for free compulsory public education. (C2)</p> <p>8 – U4.3.2 Describe the formation and development of the abolitionist movement by considering the roles of key abolitionist leaders (e.g., John</p>	<p>Explain how political beliefs and government policies influenced society in the US (MT: Historical Societies and Lifestyles)</p> <p>Evaluate the success of reform movements in regards to their impact on modern society (MT: Historical Societies and Lifestyles)</p>	<p>Reform Movements</p> <p>The Second Great Awakening</p> <ul style="list-style-type: none"> Religious fervor inspires personal and social reform <p>Temperance (alcohol)</p> <p>Education</p> <ul style="list-style-type: none"> Horace Mann <p>Abolitionist movement</p> <ul style="list-style-type: none"> William Lloyd Garrison Frederick Douglas Sojourner Truth Harriet Tubman (Underground Railroad) 	<p>NHA Unit: 19th Century Culture & Reform</p>



<p>Brown and the armed resistance, Harriet Tubman and the Underground Railroad, Sojourner Truth, William Lloyd Garrison, and Frederick Douglass), and the response of southerners and northerners to the abolitionist movement. (C2)(National Geography Standard 6, p. 154)</p> <p>8 – U4.3.3 Analyze the antebellum women's rights (and suffrage) movement by discussing the goals of its leaders (e.g., Susan B. Anthony and Elizabeth Cady Stanton) and comparing the Seneca Falls Resolution with the Declaration of Independence. (C2)</p> <p>8 – U4.3.4 Analyze the goals and effects of the antebellum temperance movement. (C2)</p> <p>8 – U4.3.5 Evaluate the role of religion in shaping antebellum reform</p>		<p>Women's rights</p> <ul style="list-style-type: none"> • Equal pay and education • Entering the work world • Suffrage: the right to vote <ul style="list-style-type: none"> • Seneca Falls Convention 	
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movements. (C2)			
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U5 - ERA 5 – Civil War and Reconstruction (1850-1877)

5.1 The Coming of Civil War

5.2 Civil War

5.3 Reconstruction

U5.1 The Coming of the Civil War			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze and evaluate the early attempts to abolish or contain slavery and to realize the ideals of the Declaration of Independence.</i></p> <p>New 8 – U5.1.1 Explain the differences in the lives of free blacks (including those who escaped from slavery) with the lives of free whites and enslaved peoples. (C2)</p> <p>8 – U5.1.2 Describe the role of the Northwest Ordinance and its effect on the banning of slavery (e.g., the establishment of Michigan as a free state). (<i>National Geography Standard</i>)</p>		<p>Sectionalism</p> <ul style="list-style-type: none"> Protective Tariff 1828 Nullification Controversy 1832 <p>Reform Movements Abolitionists and the Underground Railroad</p>	<p>Part of NHA Unit: Life in the new Nation</p> <p>Part of NHA Unit: 19th Century American Culture and Reform</p>



<p><i>12, p. 167)</i></p> <p>8 – U5.1.3 Describe the competing views of Calhoun, Webster, and Clay on the nature of the union among the states (e.g., sectionalism, nationalism, federalism, state rights). (C3)</p> <p>8 – U5.1.4 Describe how the following increased sectional tensions</p> <ul style="list-style-type: none"> • the Missouri Compromise (1820) • the Wilmot Proviso (1846) • the Compromise of 1850 including the Fugitive Slave Act • the Kansas-Nebraska Act (1854) and subsequent conflict in Kansas • the Dred Scott v. Sandford decision (1857) • changes in the party system (e.g., the death 			
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<p>of the Whig party, rise of the Republican party and division of the Democratic party) (C2; C3) (<i>National Geography Standard 13, p. 169</i>)</p> <p>8 – U5.1.5 Describe the resistance of enslaved people (e.g., Nat Turner, Harriet Tubman and the Underground Railroad, John Brown, Michigan’s role in the Underground Railroad) and effects of their actions before and during the Civil War. (C2)</p> <p>8 – U5.1.6 Describe how major issues debated at the Constitutional Convention such as disagreements over the distribution of political power, rights of individuals (liberty and property), rights of states, election of the executive, and slavery</p>			
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help explain the Civil War. (C2) (<i>National Geography Standard 13, p. 169</i>)			
U5.2 Civil War			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Evaluate the multiple causes, key events, and complex consequences of the Civil War.</i></p> <p>8 – U5.2.1 Explain the reasons (political, economic, and social) why Southern states seceded and explain the differences in the timing of secession in the Upper and Lower South. (C3, E1.2)(<i>National Geography Standard 6, p. 154</i>)</p> <p>8 – U5.2.2 Make an argument to explain the reasons why the North won the Civil War by considering the:</p>	<p>Evaluate how different attitudes, government policies, and individual opinions influences the Civil War and African American society in the US (MT: Significant events, Individuals, & Contributions (US History Exemplar))</p> <p>Explain how strengths and weaknesses of participants in conflict in US History influence the outcome of the conflict (MT: Historical Conflict (US History Exemplar))</p>	<p>Underlying Causes of the Civil War</p> <p>Territorial Expansion and Slavery</p> <p>Emotional Impact of Slavery</p> <ul style="list-style-type: none"> • <i>Uncle Tom's Cabin</i> • "Bleeding Kansas" • John Browns raid on Harpers Ferry • Fugitive Slave Laws <p>States' Rights</p> <p>Failure of political compromise</p> <ul style="list-style-type: none"> • Compromise of 1850 • Kansas Nebraska Act • Founding the Republican Party • Dred Scott • Lincoln/ Douglas debate 	NHA Unit: The Civil War



<ul style="list-style-type: none"> critical events and battles in the war the political and military leadership of the North and South the respective advantages and disadvantages, including geographic, demographic, economic and technological (E1.4) (<i>National Geography Standard 15, p. 173</i>) <p>8 – U5.2.3 Examine Abraham Lincoln’s presidency with respect to:</p> <ul style="list-style-type: none"> his military and political leadership the evolution of his emancipation policy (including the Emancipation Proclamation) and the role of his significant writings and speeches, including the Gettysburg Address and its relationship to 		<ul style="list-style-type: none"> Election of 1860 <p>The Civil War Breaks Out</p> <p>Secession</p> <ul style="list-style-type: none"> The Confederate States of America Firing on Fort Sumter 1861 <p>The Presidency of Lincoln</p> <ul style="list-style-type: none"> Personal Leadership Opposition Emancipation Proclamation <p>Strengths and Weaknesses of North and South</p> <p>Strengths of the North</p> <ul style="list-style-type: none"> Effective navy Large Army Manufacturing Agriculture Infrastructure <p>Strengths of the South</p> <ul style="list-style-type: none"> Military Leaders Commitment of people to preserve their way of life <p>Weaknesses of the North</p> <ul style="list-style-type: none"> Not prepared for war Lacked experienced military leaders 	
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<p>the Declaration of Independence (C2)</p> <p>New 8 – U5.2.4 Describe the role of African Americans in the war, including black soldiers and regiments, and the increased resistance of enslaved peoples.</p> <p>New 8 – U5.2.5 Construct generalizations about how the war affected combatants, civilians (including the role of women), the physical environment, and the future of warfare, include technological developments. (<i>National Geography Standard 14, p. 171</i>)</p>		<p>Weaknesses of the South</p> <ul style="list-style-type: none"> • No Navy • No Manufacturing • Not prepared for war <p>Major Battles Antietam Vicksburg Gettysburg</p> <ul style="list-style-type: none"> • The Gettysburg Address • NC Battles • Bentonville • Surrender at Bennett Place <p>Major Personalities of the War Abraham Lincoln Jefferson Davis Robert E. Lee Ulysses S. Grant William Tecumseh Sherman “Stonewall” Jackson Clara Barton</p>	
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U5.3 Reconstruction			
Michigan GLCE’s	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Using evidence, develop an argument regarding the character and consequences of Reconstruction.</i></p> <p>8 – U5.3.1 Describe the different</p>	<p>Evaluate how different attitudes, government policies, and individual opinions influences the Civil War and African American society in the US</p>	<p>Results of the War Preservation of the Union Abolition of Slavery</p> <ul style="list-style-type: none"> • Civil Rights Act 1866 • Freemans Bureau 	<p>New Unit Formerly included in NHA Unit: the Civil War</p>



<p>positions concerning the reconstruction of Southern society and the nation, including the positions of President Abraham Lincoln, President Andrew Johnson, Republicans, and African Americans.</p> <p>8 – U5.3.2 Describe the early responses to the end of the Civil War by describing the:</p> <ul style="list-style-type: none"> • policies of the Freedmen’s Bureau (E2.2) • restrictions placed on the rights and opportunities of freedmen, including racial segregation and Black Codes (C2, C5) <p>8 – U5.3.3 Describe the new role of African Americans in local, state and federal government in the years after the Civil War and the resistance of Southern whites to this change, including the Ku Klux Klan. (C2, C5) (<i>National Geography Standard 10, p. 162</i>)</p>	<p>(MT: Significant events, Individuals, & Contributions (US History Exemplar))</p> <p>Explain how strengths and weaknesses of participants in conflict in US History influence the outcome of the conflict (MT: Historical Conflict (US History Exemplar))</p> <p>Explain how political beliefs and government policies influenced society in the US (MT: Historical Societies & Lifestyles)</p>	<p>Political Power and Decision making</p> <ul style="list-style-type: none"> • Secession • States’ Rights <p>Reconstruction</p> <ul style="list-style-type: none"> • Lincolns plan and assassination • Johnsons plan and congressional opposition results in impeachment • Constitutional Amendments 13, 14, & 15 guaranteeing abolishment of slavery, and equal rights for all races except Native Americans • Problems of economic and social reconstruction led to sharecropping as a substitute for slavery • KKK & Black codes • Jim Crow Laws – <i>Plessey v. Ferguson</i> <ul style="list-style-type: none"> • The official end of Reconstruction in 1877 	
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<p>8 – U5.3.4 Analyze the intent and the effect of the Thirteenth, Fourteenth, and Fifteenth Amendments to the Constitution.</p> <p>8 – U5.3.5 Explain the decision to remove Union troops in 1877 and describe its impact on Americans.</p>			
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U6 - ERA 6 – The Development of an Industrial, Urban, and Global United States (1870-1930)

Grade 8 begins to address trends and patterns in the last half of the 19th century, through 1898.

The purpose of this section is to introduce some of the major changes in American society and the economy in the last part of the 19th Century. This era will be addressed in-depth and with greater intellectual sophistication in the high school United History and Geography content expectations

U6.1 America in the Last Half of the 19th Century			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Analyze the major changes in communication, transportation, demography, and urban centers, including the location and growth of cities linked by industry and trade, in last half of the 19th century.</i></p> <p>8 – U6.1.1 Compare and contrast the United States in 1800 with the United States in 1898 focusing on similarities and differences in:</p> <ul style="list-style-type: none"> territory, including the size of the United States and land use (<i>National Geography Standards 1 and 16, pp. 144 and 196</i>) population, including immigration, reactions 	<p>Describe how geographic and economic conditions led to changes in society (MT: Historical Societies & Lifestyles)</p> <p>Describe how the growth of technology changes life in the US in the 19th century (MT: Historical Societies & Lifestyles)</p> <p>Describe how land acquisition lead to conflict in US History (MT: Historical Conflict (US History Exemplar))</p> <p>Evaluate the importance of knowing one's civil and legal responsibilities when entering a new country (MT: Citizenship-Awareness, Rights, &</p>	<p>Immigration</p> <p>Two distinct waves</p> <ul style="list-style-type: none"> 1840s to 1890s 1890s to 1920s <p>Differences based on National origin, cultural patterns, and religion</p> <p>Similarities included motivation for coming and patterns of community settlement</p> <ul style="list-style-type: none"> Immigrants as settlers in the mid-west The Chinese in the Far West <ul style="list-style-type: none"> Mexicans in the Southwest Irish Immigration: mass starvation in Ireland (the Potato Famine) <p>Citizenship for Immigrants</p>	<p>NHA Unit: Late 19th Century to Early 20th Century</p>



<p>to immigrants, and the changing demographic structure of rural and urban America (E3.2) (<i>National Geography Standards 9 and 12, pp. 160 and 167</i>)</p> <ul style="list-style-type: none"> • systems of transportation (canals and railroads, including the Transcontinental Railroad), and their impact on the economy and society (E1.4, 3.2) (<i>National Geography Standard 11, p. 164</i>) • governmental policies promoting economic development (e.g., tariffs, banking, land grants and mineral rights, the Homestead Act) (E.2.2) (<i>National Geography Standard 16, p. 176</i>) • economic change, including industrialization, increased global 	<p>Responsibilities)</p>	<p>Legal basis for citizenship</p> <ul style="list-style-type: none"> • The “law of the soil” • Naturalization • Born to citizen parents <p>Responsibilities of the citizen</p> <ul style="list-style-type: none"> • Civic responsibilities • Knowledge of the process of government • Informed about major issues • Participant in the political process • Legal responsibilities • Knowledge of the law • Obey the law • Respect the rights of others <p>Understand the importance of law in democratic society</p> <p>Industrialization</p> <p>Developments in transportation</p> <ul style="list-style-type: none"> • Expansion of Railroads <p>Developments in communication</p> <ul style="list-style-type: none"> • Telegraph • Telephone <p>Response of labor to</p>	
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<p>competition, and their impact on conditions of farmers and industrial workers (E1.4, 2.1, 3.2) (<i>National Geography Standard 11, p. 164</i>)</p> <ul style="list-style-type: none"> the treatment of African Americans, including the rise of segregation in the South as endorsed by the Supreme Court's decision in <i>Plessey v. Ferguson</i>, and the response of African Americans the policies toward American Indians, including removal, reservations, the Dawes Act of 1887, and the response of American Indians (<i>National Geography Standard 13, p. 169</i>) 		<p>industrialization</p> <ul style="list-style-type: none"> Created a larger, more complex workforce Urbanization & growth of cities Working conditions underwent changes which often placed hardships on the workers (women and children) <p>The "New" South Textile Industry Furniture Industry</p> <p>The US develops as an Industrial Power Unprecedented growth in agriculture</p> <ul style="list-style-type: none"> Homestead Act 1862 & westward settlement Changes in method of production and distribution of farm goods <p>Native American Struggles Bureau of Indian Affairs Forced Removal to reservations Conflicts</p> <ul style="list-style-type: none"> Sand Creek Massacre Little Big Horn 	
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U6.2 Investigation Topics and Issue Analysis (P2)			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Use the historical perspective to investigate a significant historical topic from United States History Eras 3-6 that also has significance as an issue or topic in the United States today.</i></p> <p>8 – U6.2.1 Use historical perspectives to analyze issues in the United States from the past and the present; conduct research on a historical issue or topic, identify a connection to a contemporary issue, and present findings (e.g., oral, visual, video, or electronic presentation, persuasive essay, or research paper); include causes and consequences of the historical action and predict possible consequences of the contemporary action. (<i>National Geography Standards 9 and 10, pp.</i></p>	<p>Compare and Contrast industrial development in the late 1800s to modern technological advancement(MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Explain the impact of the outcome of conflict in US History on modern society (MT: Historical Conflict (US History Exemplar))</p> <p>Determine current examples of obtaining citizenship(real life applications of the citizenship process) (MT: Citizenship – Awareness, Rights, & Responsibilities)</p> <p>Explain the impact of early governmental policies on modern society (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p> <p>Compare and Contrast the</p>		<p>New Unit / Project: can include information from any preceding Unit</p>



<p><i>160 and 162)</i></p> <p>Examples of Investigation Topics and Questions (and examples from United States History)</p> <p>Balance of Power – How has the nation addressed tensions between state and federal governmental power? (e.g., Articles of Confederation, U.S. Constitution, states' rights issues, secession, others)</p> <p>Liberty vs. Security – How has the nation balanced liberty interests with security interests? (e.g., Alien and Sedition Acts, suspension of habeas corpus during the Civil War)</p> <p>The Government and Social Change – How have governmental policies, the actions of reformers, and economic and demographic changes affected social change? (e.g., abolitionist movement, women's movement,</p>	<p>political process from the 1700 and 1800s to today (MT: Significant Events, Individuals, & Contributions (US History Exemplar))</p>		
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Reconstruction policies) Movement of People – How has the nation addressed the movement of people into and within the United States? (e.g., American Indians, immigrants)			
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P3 / P4 - Public Discourse, Decision Making, and Citizen Involvement

The expectations continue to stress the importance of citizen action in a democratic republic as students expand their ability to address public policy issues. Students address contemporary public issues related to the Constitution and identify the related factual, definitional, and ethical questions. They use graphic data and other sources to analyze information about the issue, evaluate alternative resolutions, and use core democratic values to explain why people may differ on the resolution to a constitutional issue. Students are required to demonstrate increasing sophistication in their abilities to communicate a position on more complex national public policy issue and support it with a reasoned argument.

P3.1 Identifying and Analyzing Issues, Decision Making, Persuasive Communication About a Public Issue, and Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
New 8 – P3.1.1 Identify, research, analyze, discuss, and defend a position on a national public policy issue. <ul style="list-style-type: none"> Identify a national public policy issue. Clearly state the issue as a question of public policy orally or in written form. 			



<ul style="list-style-type: none"> • Use inquiry methods to trace the origins of the issue and to acquire data about the issue. • Generate and evaluate alternative resolutions to the public issue and analyze various perspectives (causes, consequences, positive and negative impact) on the issue. • Identify and apply core democratic values or constitutional principles. • Share and discuss findings of research and issue analysis in group discussions and debates. • Compose a persuasive essay justifying the position with a reasoned argument. • Develop an action plan to address or inform others about the issue 			
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P4.2 Citizen Involvement			
Michigan GLCE's	NHA Unit Objectives	NHA Unit Content	Notes
<p><i>Act constructively to further the public good.</i></p> <p>New 8 – P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness.</p> <p>New 8 – P4.2.2 Engage in activities intended to contribute to solving a national or international problem studied.</p> <p>New 8 – P4.2.3 Participate in projects to help or inform others (e.g., service learning projects).</p>			

GEOGRAPHY

Measurement Topic: Maps & Globes

Kindergarten

Evidence shows student has met or exceeded the

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how maps and globes are used (UNIT: Introduction to Maps) Describing how major landforms, bodies of water, and other features of the Earth are represented on maps and globes (UNIT: Introduction to Maps)

Evidence shows misunderstanding,

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Map Globe Performing basic processes such as: <ul style="list-style-type: none"> Providing general examples of bodies of water and landforms (mountain, river, lake, ocean)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and locating specific major landforms, bodies of water, and other features of the Earth (UNIT: Introduction to Maps)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Landform Ocean Performing basic processes such as: <ul style="list-style-type: none"> Providing general examples of bodies of water and landforms (mountain, river, lake, ocean)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Naming and locating their geographical area using a map (school, city, state, and country) (UNIT: Me and My World) Identifying and describing the immediate surroundings (neighborhood, address) (UNIT: Me and My World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Neighborhood Address Performing basic processes such as: <ul style="list-style-type: none"> Naming their school and city, state, and country
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Economic Concepts

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Defining basic economic concepts (UNIT: Introduction to Market Resources) Giving examples of basic economic concepts found in the community (UNIT: Me and My World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Wants Needs Goods Services Producers Consumers Performing basic processes such as: <ul style="list-style-type: none"> Identifying basic economic concepts
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how money is used in our economy (UNIT: Introduction to Market Resources) Giving an example of an economic exchange from personal experience (UNIT: Introduction to Market Resources)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Money Trade Purchase Performing basic processes such as: <ul style="list-style-type: none"> Describing the process of purchasing or trading to receive goods and services
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing important people, things, and events in the story of Columbus's voyage to the Americas (UNIT: Christopher Columbus) Explaining how and why Columbus named the land and people of the Americas (UNIT: Christopher Columbus) Giving examples of Moral Focus concepts demonstrated by Columbus (UNIT: Christopher Columbus)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Queen Isabella/King Ferdinand Nina, Pinta, Santa Maria "New World" Performing basic processes such as: <ul style="list-style-type: none"> Identifying important people, things, and events in the story of Columbus Identifying the name Columbus gave to the people of the Americas Identifying basic Moral Focus concepts related to the content
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals & Contributions Kindergarten

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the story of the Pilgrims led to the modern celebration of Thanksgiving Day (UNIT: The Pilgrims) Explaining the terms “independence” and “democracy” and their significance to the July 4th holiday (UNIT: July 4th- Independence Day) Identifying the names of the four presidents on Mt. Rushmore and an important contribution of each (UNIT: The Presidents) Describing how past presidents showed examples of Moral Focus concepts (UNIT: The Presidents)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Pilgrim Independence Democracy President Performing basic processes such as: <ul style="list-style-type: none"> Identifying the participants in the first Thanksgiving Identifying July 4th as “Independence Day” Identifying the presidents on Mt. Rushmore Identifying Moral Focus concepts related to the content
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Current Events in the Context of History Kindergarten

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding, misconceptions,
or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the current president shows examples of Moral Focus concepts (UNIT: The Presidents)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> President Performing basic processes such as: <ul style="list-style-type: none"> Identifying the current president Identifying Moral Focus concepts
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship- Awareness, Rights, & Responsibilities Kindergarten

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding, misconceptions,
or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying important symbols and landmarks of the United States (UNIT: Me and My World) Explaining why rules and laws are important to have in a community (UNIT: Me and My World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Laws Rules Symbols Landmarks Performing basic processes such as: <ul style="list-style-type: none"> Recalling that the United States has important symbols and landmarks Identifying rules and laws within the community
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing characteristics of themselves and their family (UNIT: Me and My World) Recalling school rules and consequences (UNIT: Me and My World) Defining respect as it relates to classroom rules and expected behaviors (UNIT: Me and My World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Rules Consequences Respect Performing basic processes such as: <ul style="list-style-type: none"> Identifying gender Identifying family members Describing that there are rules and consequences in the school
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the history, customs, and beliefs shared by their personal family (UNIT: Me and My World) Describing the way of life of one Native American tribe (e.g., location, homes, traditional dress, foods, transportation, crafts, and tools) (UNIT: Native Americans)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations, such as: <ul style="list-style-type: none"> Custom Celebration Performing basic processes such as: <ul style="list-style-type: none"> Recalling that families share histories, customs, and beliefs Naming a Native American tribe Identifying that the way of life of a Native American is different from their own way of life
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Maps & Globes

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Interpreting a map using its features (cardinal directions, key) (UNIT: Earth's Continents)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Key Cardinal directions Performing basic processes such as: <ul style="list-style-type: none"> Explaining how maps and globes are used
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and locating specific major landforms and bodies of water (UNIT: Earth's Continents) Describing the physical features of various places on Earth, including the local community (UNITS: My School & Community, Early People & Civilizations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Physical features Performing basic processes such as: <ul style="list-style-type: none"> Providing general examples of bodies of water and landforms (mountain, river, lake, ocean) Identifying physical features of various places on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Locating their wider geographical area (UNITS: Earth's Continents, My School & Community) Locating the geographic area of the world where specific ancient civilizations existed (UNIT: Early People & Civilizations)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Equator Hemisphere Performing basic processes such as: <ul style="list-style-type: none"> Naming the United States as the country they live in and listing other countries in North America Identifying ancient civilizations and the corresponding area of the world in which they existed
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Concepts

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Distinguishing between basic economic concepts (goods & services, benefits & costs) (UNIT: Economic Choices) Explaining how choices influence economic decisions (UNIT: Economic Choices)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Goods Services Benefits Costs Scarcity Performing basic processes such as: <ul style="list-style-type: none"> Identifying basic economics concepts Describing economic choices
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Grade One

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the concept of “price” (UNIT: Economic Choices)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Money Price Performing basic processes such as: <ul style="list-style-type: none"> Explaining how money is used in our economy
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade One

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing important people and places and their impact on Ancient Mesopotamian civilization (UNIT: Early People & Civilizations) Explaining how written language and laws are important in developing a civilization (UNIT: Early People & Civilizations) Identifying conquistadors and locating the civilizations they conquered (UNIT: The New World) Describing the reasons for conquering new land (UNIT: The New World) Describing the explorers' influence on the conquered land (UNIT: The New World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Civilization Conquistador New World Performing basic processes such as: <ul style="list-style-type: none"> Identifying important people and places in Ancient Mesopotamian civilization Recognizing that written language and laws are important to a civilization Identifying the people living on the conquered land Recognizing that explorers have motivations for conquering land Recalling that explorers influence the land they conquer
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals & Contributions Grade One

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing how the Roanoke and Virginia colonies were established (UNIT: The New World) Identifying important individuals and their contributions to the development of the United States (UNITS: The New World, The American Revolution, The American West) Explaining how early explorers of the American west showed Moral Focus concepts (UNIT: The American West)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Colony Explorers Performing basic processes such as: <ul style="list-style-type: none"> Identifying the Virginia colonies Naming important individuals in American history Identifying Moral Focus concepts Naming specific explorers of the American West
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



US HISTORY

Measurement Topic: Historical Conflict

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the causes of the Revolutionary War (UNIT: The American Revolution) Comparing and contrasting “Minutemen” and “Redcoats” (American and British armies) in the battle of Lexington & Concord (UNIT: The American Revolution)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> French & Indian War “Minutemen” “Redcoats” Performing basic processes such as: <ul style="list-style-type: none"> Describing participants in the Revolutionary War Recognizing that there are events that contribute to the start of Revolutionary War
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship- Awareness, Rights, & Responsibilities Grade One

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing ways people can be good citizens (UNIT: My School & Community) Explaining what important national symbols represent (UNIT: Symbols & Figures of America)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Citizen/Citizenship Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying national symbols
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the ways a local government serves the community (UNIT: My School & Community)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Community Government Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying people or processes involved in local government
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing human characteristics of various place on Earth, including the local community (UNITS: Earth's Continents, My School and Community) Describing the roles of various people in the school (UNIT: My School & Community) Defining "community" (UNIT: My School and Community)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Human characteristics School Community Performing basic processes such as: <ul style="list-style-type: none"> Providing examples of human characteristics Identifying roles of people in the school
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the importance of available resources to ancient civilizations (UNITS: Early People & Civilizations, The New World) Describing the way of life of various ancient civilizations (important people in society, migration, and customs) (UNITS: Early People & Civilizations, The New World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Migration Customs Civilizations Performing basic processes such as: <ul style="list-style-type: none"> Listing or locating resources available in ancient civilizations Identifying that the way of life of an ancient civilization is different from their own way of life
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Locating major landforms, bodies of water, and other features of North America (UNIT: North American Geography) Describing the physical features of various places on Earth (UNITS: India & China, Ancient Greece)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Physical feature Himalayas Performing basic processes such as: <ul style="list-style-type: none"> Naming major landforms, bodies of water, and other features of North America Naming physical features of various places on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the difference between a continent and a country (UNIT: North American Geography) Comparing and contrasting urban, suburban, and rural communities (UNIT: Communities Around the World) Locating the geographic area of the world where ancient civilizations existed (UNITS: India & China, Ancient Greece)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Continent Country Urban community Rural community Suburban community Performing basic processes such as: <ul style="list-style-type: none"> Describing characteristics of a continent and a country Describing characteristics of urban, suburban, and rural communities Identifying ancient civilizations and the corresponding area of the world in which they existed
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: 5 Themes of Geography

Grade Two

Evidence shows student has met or exceeded
the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Evaluating the advantages and disadvantages of different modes of transportation (UNIT: Communities Around the World)

Evidence shows misunderstanding,
misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Transportation Performing basic processes such as: <ul style="list-style-type: none"> Describing different modes of transportation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Concepts

Grade Two

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the concept of “market” (UNIT: Market Resources) Describing how people make choices regarding resources (e.g., opportunity cost & scarcity) (UNIT: Market Resources)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Opportunity cost Scarcity Bartering Market Performing basic processes such as: <ul style="list-style-type: none"> Describing the basic economic concepts of wants, needs, goods, and services Describing economic choices
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Giving examples of categories of resources (UNIT: Market Resources)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Labor Production Natural resource Performing basic processes such as: <ul style="list-style-type: none"> Listing different categories of resources
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Two

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the purpose for building the Great Wall of China (UNIT: India & China) Explaining the impact of inventions and contributions on ancient and modern society (UNITS: Ancient Greece, India & China) Explain the significance of the accomplishments of Alexander the Great (UNIT: Ancient Greece)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Great Wall of China Democracy Performing basic processes such as: <ul style="list-style-type: none"> Locating the Great Wall of China Identifying ancient Chinese inventions Identify the accomplishments of Alexander the Great
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



WORLD HISTORY

Measurement Topic: Historical Conflict

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing major battles in the Persian Wars (UNIT: Ancient Greece)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Persia Battle Performing basic processes such as: <ul style="list-style-type: none"> Identifying battles in the Persian Wars
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Two

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing important individuals in American wars and the impact their contributions had on modern society (UNITS: War of 1812, The Civil War) Comparing and contrasting transportation in the 1800s with transportation today (UNIT: Westward Expansion)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Star-Spangled Banner Underground Railroad Pony Express Canal Performing basic processes such as: <ul style="list-style-type: none"> Identifying important individuals in American wars Identifying modes of transportation from the 1800s
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



US HISTORY

Measurement Topic: Historical Conflict

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the causes of American wars (UNITS: War of 1812, The Civil War) Describing participants in conflicts in United States history (UNITS: War of 1812, The Civil War)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Impressment Yankee/Rebel Slavery Performing basic processes such as: <ul style="list-style-type: none"> Identifying the countries involved in American wars Recognizing that there are events that contribute to the start of American wars
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship- Awareness, Rights, & Responsibilities Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing ways that people show citizenship in the United States and in other countries of the world (UNIT: Immigration & Citizenship) Identifying the ways one can become an American citizen (UNIT: Immigration & Citizenship) Explaining “e pluribus unum” (UNIT: Immigration & Citizenship) Explaining what important specific national symbols represent (UNIT: Symbols & Figures of America)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Citizen/Citizenship “E pluribus unum” Performing basic processes such as: <ul style="list-style-type: none"> Recognizing that there are different ways to show citizenship Recognizing that there is a process to becoming an American citizen Translating “e pluribus unum” Identifying specific national symbols
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying leaders in the local community (UNIT: Communities Around the World) Explaining James Madison’s contribution to the Constitution of the United States (UNIT: American Government)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Community Government Performing basic processes such as: <ul style="list-style-type: none"> Identifying the purpose of the Constitution Identifying James Madison as the “Father of the Constitution”
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing common characteristics of people within a culture group (UNIT: Communities Around the World)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Culture Language Performing basic processes such as: <ul style="list-style-type: none"> Recognizing that people within a culture group have common characteristics
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how the local community has changed over time (UNIT: Communities Around the World) Explaining the importance of available resources to ancient civilizations (UNITS: India & China) Comparing and contrasting the ways of life, customs, beliefs, and contributions to modern society of different ancient civilizations in the same geographical area (Asia, Ancient Greece) (UNITS: India & China, Ancient Greece) Describe the way of life of Native Americans in the 1800s (UNIT: Westward Expansion) Describe the relationship between Native Americans and the United States government (UNIT: Westward Expansion) Explaining reasons why people migrated to the United States (UNIT: Immigration & Citizenship) Describing the journey of immigrants to the United States (how they traveled to the country, where they settled) (UNIT: Immigration & Citizenship)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Migrate/migration Immigrant/immigration Performing basic processes such as: <ul style="list-style-type: none"> Describing their local community Identifying important resources in ancient civilizations Describing the way of life in ancient civilizations of Ancient Greece and Asia Identifying important individuals and events within Native American tribes in the 1800s Identifying areas of the world where many American immigrants came from
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Maps & Globes

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Interpreting a map using its features (title, scale, grid) (UNIT: Map Features) Determining location and distance (cardinal directions, scale, grid) (UNIT: Map Features) Comparing and contrasting types of maps (political & physical) (UNIT: Map Features)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Political map Physical map Scale Grid Performing basic processes such as: <ul style="list-style-type: none"> Locating features on a map (title, scale, grid, cardinal directions) Identifying types of maps
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features Grade Three

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the physical features of various places on Earth (UNIT: Ancient Rome)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Physical feature Performing basic processes such as: <ul style="list-style-type: none"> Identifying physical features of various places on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Locating the geographic area of the world where ancient civilizations existed (UNITS: Ancient Rome, The Vikings)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Civilization Peninsula Scandinavia Performing basic processes such as: <ul style="list-style-type: none"> Identifying ancient civilizations and the corresponding area of the world in which they existed
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: 5 Themes of Geography

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Defining and describing “Human-Environment Interaction”, one of the 5 Themes of Geography (UNIT: Map Features)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Environment Adaptation Performing basic processes such as: <ul style="list-style-type: none"> Identifying examples of ways humans interact with their environment
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Economic Concepts

Grade Three

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Describing basic economic concepts (UNIT: Entrepreneurs) • Analyzing choices based on positive and negative incentives (UNIT: Entrepreneurs) • Proposing a way needs can be met considering choices available (opportunity cost) (UNIT: Entrepreneurs)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> ○ Specialization ○ Supply and demand ○ Opportunity cost ○ Incentive • Performing basic processes such as: <ul style="list-style-type: none"> ○ Identifying basic economic concepts ○ Describing how people make choices regarding resources
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting different categories of resources (natural, human, and capital) (UNIT: Entrepreneurs) Explaining the concept of “entrepreneurship” (UNIT: Entrepreneurs) Explaining the purpose of using money as opposed to bartering (UNIT: Entrepreneurs)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Bartering Natural resource Human resource Capital resource Performing basic processes such as: <ul style="list-style-type: none"> Providing an example of each of the different categories of resources (natural, human, and capital) Identifying examples of entrepreneurship Providing examples of an economic exchange (purchasing and bartering)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing significant individuals in ancient history and the impact their accomplishments had on ancient and modern society (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages) Summarizing the causes and effects of major events in ancient world history (UNITS: Ancient Rome, The Vikings, Europe in the Middle Ages) Explaining the impact of individual warriors on 15th century Europe (Joan of Arc, William the Conqueror) (UNITS: Europe in the Middle Ages)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Emperor Magna Carta Norsemen Joan of Arc Performing basic processes such as: <ul style="list-style-type: none"> Identifying important people in ancient civilizations Describing major events in ancient world history
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Historical Conflict Grade Three

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the major causes and outcome of the Hundred Years War (UNIT: Europe in the Middle Ages)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Feudalism Joan of Arc Performing basic processes such as: <ul style="list-style-type: none"> Identifying an outcome of the Hundred Years War Identifying participants in the Hundred Years War
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Three

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the impact of the explorers' discoveries on modern society (UNIT: Early Exploration of North America) Comparing and contrasting the colonies as a region and individually (UNIT: The 13 Colonies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Explorer Colony Performing basic processes such as: <ul style="list-style-type: none"> Describing early American explorers and their discoveries Describing each of the 13 colonies individually and as a region
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship- Awareness, Rights, & Responsibilities Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the origin of Core Democratic Values and how they help define what it means to be a citizen (UNIT: Our America) Using the definition of Core Democratic Values to explain why important American historical figures were good citizens (UNIT: Our America)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Core Democratic Values Citizenship Performing basic processes such as: <ul style="list-style-type: none"> Describing a definition of citizenship Describing each of the Core Democratic Values
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the basic principles of the American system of government (UNIT: Our America)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Representative democracy Performing basic processes such as: <ul style="list-style-type: none"> Identifying basic principles of the American system of government
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Sequencing the origins of civilizations and eras in time in chronological order (UNIT: Early Exploration of North America, Europe in the Middle Ages, The Vikings, Ancient Rome) Explaining how geographic locations of settlements and migration patterns influence ancient societies (UNIT: Early Exploration of North America, Europe in the Middle Ages, The Vikings, Ancient Rome) Describing the structure of society in Europe in ancient civilizations (UNIT: Europe in the Middle Ages, The Vikings, Ancient Rome)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Feudalism Migration Performing basic processes such as: <ul style="list-style-type: none"> Identifying the eras in time in which ancient civilizations existed Describing where ancient people migrated and eventually settled Identifying structure of society in Europe in ancient civilizations (feudalism)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Maps & Globes

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Determining location and distance using map features and scale (UNIT: Geography Skills & Themes) Interpreting different types of maps (UNIT: Geography Skills & Themes)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Latitude Longitude Equator Prime Meridian Performing basic processes such as: <ul style="list-style-type: none"> Locating features on a map (latitude & longitude lines, scale) Identifying types of maps and geographical representations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing physical features of their state to regions in the United States (UNITS: US Regions, State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Coastline Canal Performing basic processes such as: <ul style="list-style-type: none"> Describing physical features of different regions in the United States Describing physical features of their state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Grouping the United States into regions in a variety of ways (political, physical, economical) (UNIT: US Regions) Locating geographical areas within regions of the United States (states, capital cities, & major cities) (UNIT: US Regions) Locating geographical areas of their own state (boundaries, capital city, other major cities) (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Region Performing basic processes such as: <ul style="list-style-type: none"> Naming different regions of the United States Identifying geographic areas within regions of the United States Identifying geographical areas of their own state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



GEOGRAPHY

Measurement Topic: 5 Themes of Geography

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Defining and listing an example of each of the 5 Themes of Geography (UNIT: Geography Skills & Themes) Describe features of their own state using the 5 Themes of Geography (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> 5 Themes of Geography Region Human-Environment Interaction Performing basic processes such as: <ul style="list-style-type: none"> Naming each of the 5 Themes of Geography Identifying physical and political features of their own state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Economic Concepts

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the strengths and weaknesses of the concept of specialization (UNIT: Economic Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Specialization Performing basic processes such as: <ul style="list-style-type: none"> Identifying examples of specialization
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Categorizing real-life examples of productive resources (natural, human, capital resources) (UNIT: Economic Systems) • Explaining the concept of “income” (generating income and using income) (UNIT: Economic Systems)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> ○ Wages ○ Budget ○ Income • Performing basic processes such as: <ul style="list-style-type: none"> ○ Comparing and contrasting different categories of productive resources (natural, human, and capital) ○ Identifying examples of income
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Economies of the World

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Defining the purpose of an economic system (UNIT: Economic Systems) Explaining how the government is an example of an economic system (UNIT: Economic Systems) Describe the economy of their state (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Economic system Performing basic processes such as: <ul style="list-style-type: none"> Describing basic economic concepts
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the important individuals and events within each region of the United States (UNIT: US Regions) Explaining how the geographical location of these regions impact historical events in that region (UNIT: US Regions) Sequencing important historical events of their individual state (UNIT: State Studies) Explaining the impact of national historical events on their individual state (exploration, conflicts, and other important events that are applicable) (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Exploration Region Performing basic processes such as: <ul style="list-style-type: none"> Identifying important individuals and events within each region of the United States Locating each of the regions of the United States Describing important historical events of their individual state Identifying national historical events
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Current Events in the Context of History Grade Four

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Predicting the impact that the current events will have on the future of their state (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Current events Performing basic processes such as: <ul style="list-style-type: none"> Explain current events happening within their state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship- Awareness, Rights, & Responsibilities Grade Four

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) (UNIT: State Studies) Identifying the major officeholders within their individual state and federal government representatives (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Citizen/citizenship Representative democracy Performing basic processes such as: <ul style="list-style-type: none"> Describing citizenship Identifying the offices held in the state and federal government
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the 3 Branches of Government (UNIT: State Studies) Ordering the levels of government (local, state, and national) in a hierarchy (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Executive Legislative Judicial Senator Governor Performing basic processes such as: <ul style="list-style-type: none"> Identifying the 3 Branches of Government Describing the levels of government (local, state, national)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the cultural characteristics of people within their state (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Human characteristics Culture Performing basic processes such as: <ul style="list-style-type: none"> Identifying different cultures in their state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the way of life of Native American tribes within their state (e.g., homes, traditional dress, foods, transportation, crafts, tools and other accomplishments) (UNIT: State Studies) Explaining Native American influences on their state (UNIT: State Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Influence Culture Tribe Performing basic processes such as: <ul style="list-style-type: none"> Identifying the Native American tribes within their state Recognizing that there are Native American influences within their state
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Maps & Globes Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Determining location and distance (UNIT: US Geography) Interpreting different types of maps and geographical representations (UNIT: US Geography)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Contour map Tropic of Cancer/Capricorn Geographical representation Performing basic processes such as: <ul style="list-style-type: none"> Locating features on a map (latitude & longitude lines, scale) Comparing and contrasting two types of maps
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features Grade Five

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing specific landforms and rivers of the United States (UNIT: US Geography)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Rio Grande Appalachian mountains Performing basic processes such as: <ul style="list-style-type: none"> Locating specific landforms and rivers of the United States
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Concepts

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing consequences of competition on an economy (among producers & sellers, consumers & buyers) (UNIT: US Economics) Describing the relationships of economic concepts in a competitive market (UNIT: US Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Supply Demand Price Competition Performing basic processes such as: <ul style="list-style-type: none"> Identifying examples of competition Listing economic concepts present in a competitive market
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Resources

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining ways to improve human productivity and resources and the impact that would have on an economy (UNIT: US Economics) Evaluating personal choices made with money (e.g., budgets, spending vs. saving, and credit) (UNIT: US Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Labor Specialization Budget Credit Performing basic processes such as: <ul style="list-style-type: none"> Identifying ways to improve human productivity and resources Describing a personal choice made with money
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ECONOMICS

Measurement Topic: Economies of the World

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different economic systems and where they are practiced around the world (UNIT: US Economics) Describing the economy of the United States (UNIT: US Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Market system Command system Competition Performing basic processes such as: <ul style="list-style-type: none"> Identifying different economic systems Describing basic economic concepts
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Institutions

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the role of banks in the economic system (UNIT: US Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Bank Saving Borrowing Performing basic processes such as: <ul style="list-style-type: none"> Explaining the basic functions of a bank
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the explorers' influence on the conquered land (e.g. trade) (UNIT: Early Exploration) Determining the reasons that motivated the explorers toward discovery (UNIT: Early Exploration) Explaining the impact of new technology on the voyages of the explorers (UNIT: Early Exploration)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Columbian exchange Astrolabe Ponce de Leon Performing basic processes such as: <ul style="list-style-type: none"> Identifying early explorers of North America and their countries of origin Identifying the areas settled by early explorers Describing new technology used in exploration voyages
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing contributions of colonial regions on modern society (UNIT: Colonization) Explaining important events in the Revolutionary Era that led to the independence of the United States from Britain (UNIT: The Revolutionary War) Analyzing the impact of important individuals on the history of the United States (UNITS: The Revolutionary War, Westward Expansion, The Civil War) Explaining the concept “Manifest Destiny” (UNIT: Westward Expansion) Explaining the causes and eventual effects of events leading to the Civil War (UNIT: The Civil War)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Expansionism Manifest Destiny Performing basic processes such as: <ul style="list-style-type: none"> Naming contributions to modern society that originated in colonial regions Identifying important events leading to the Revolutionary War Identifying important individuals in United States history in specific periods of time Identifying causes of the Civil War
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



US HISTORY

Measurement Topic: Historical Conflict

Grade Five

Evidence shows student has met or
exceeded the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting the strengths and weaknesses of the American and British armies in the Revolutionary War (UNIT: The Revolutionary War) Describing participants (groups of people, allies) in conflicts in United States history (UNITS: The Revolutionary War, Westward Expansion) Describing the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) (UNIT: The Revolutionary War, Westward Expansion) Describing important battles in the Civil War (UNIT: The Civil War)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Allies Taxation Gettysburg Performing basic processes such as: <ul style="list-style-type: none"> Listing strengths and weaknesses of each army in the Revolutionary War Identifying participants in conflict in United States history Identifying events leading to and resulting from conflict in United States history Identifying important battles in the Civil War
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Current Events in the Context of History Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing and explaining current events facing the United States relating to government and civil rights (UNIT: The US Constitution) Predicting the impact that the current events will have on the future of the United States as well as the individual citizen (UNIT: The US Constitution)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Civil rights Performing basic processes such as: <ul style="list-style-type: none"> Identifying current events happening in the United States relating to government and civil rights
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the early forms of government in the United States (UNIT: The US Constitution) Explaining the impact of individual influence on the Constitutional Convention (UNIT: The US Constitution) Comparing and contrasting the 3 Branches of Government and their functions (UNIT: The US Constitution) Defining each of the amendments in the Bill of Rights (UNIT: The US Constitution)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Constitutional Convention Bill of Rights Amendment Performing basic processes such as: <ul style="list-style-type: none"> Identifying early forms of United States government before the Constitution Describing the contribution of James Madison to the Constitutional Convention Describing the 3 Branches of Government Describing the Bill of Rights and its purpose
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting the way of life of various Native American tribes within the United States (UNIT: Native Americans) Comparing and contrasting early English settlements in the United States with French and Spanish settlements (UNITS: Early Exploration, Colonization) Explaining how the way of life in the colonial regions (New England, Middle Atlantic, Southern Colonies) was influenced by social characteristics (families, class structure, religion, economies) (UNIT: Colonization)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Iroquois St. Augustine Jamestown Performing basic processes such as: <ul style="list-style-type: none"> Describing the way of life of various Native American tribes within the United States Describing contributions of English, French, and Spanish settlements Describing social characteristics in different colonial regions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Maps & Globes

Grade Six

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the appropriate use and purposes of different types of maps (UNIT: Global Geography)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Population map Historical map Time zone map Performing basic processes such as: <ul style="list-style-type: none"> Interpreting different types of maps and geographical representations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the physical features of different regions on Earth (UNITS: Latin America Studies, Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Danube River Ural Mountains Yucatan Peninsula Performing basic processes such as: <ul style="list-style-type: none"> Locating different physical features of different regions on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Locating geographical areas within regions of the world (countries, capital cities, & major cities) (UNITS: Latin America Studies, Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Central America United Kingdom Scandinavia Balkans Performing basic processes such as: <ul style="list-style-type: none"> Identifying geographical areas within specific regions of the world
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: 5 Themes of Geography

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing features of different world regions using the 5 Themes of Geography (UNIT: Global Geography) Predicting the impact of natural disasters on both the physical environment and human response to the disasters (UNIT: Global Geography) Predicting the consequences of movement on the physical environment (UNIT: Global Geography)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Urbanization Deforestation Desertification Performing basic processes such as: <ul style="list-style-type: none"> Defining and listing an example of each of the 5 Themes of Geography Describing the effect of natural disasters on the physical environment Providing examples of movement and its effect on the physical environment
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Concepts

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Making generalizations about countries and their economies using basic economic concepts (GDP, inflation) (UNIT: Global Economics) • Explaining how economies are influenced by competition and the impact of that on modern society (UNIT: Global Economics) • Describing how different categories of earned income are influenced by a variety of factors (UNIT: Global Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> ○ Gross Domestic Product (GDP) ○ Inflation ○ Competition • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identifying basic economic concepts ○ Identifying examples of competition ○ Describing different categories of earned income (wages, salaries, interest, profit)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economies of the World

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Distinguishing the strengths and weaknesses of each economic system (UNIT: Global Economics) Comparing the economies of different world regions to each other and to the United States using basic economic concepts (UNITS: Latin America Studies, Europe Studies) Explaining the concept of “globalization” (UNIT: Global Economics) Explaining the impact of trade on a country’s economy and relations with other countries (UNITS: Latin America Studies, Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Globalization Imports/exports Standard of living Exchange rate Performing basic processes such as: <ul style="list-style-type: none"> Provide examples of economic systems Provide an example of globalization Identify imports and exports involved in trade of various countries
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economic Institutions

Grade Six

Evidence shows student has met or
exceeded the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the importance of labor unions within economic institutions (UNIT: Global Economics) Describe the importance of banks within economic institutions (UNIT: Global Economics)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Labor union Performing basic processes such as: <ul style="list-style-type: none"> Describing different specialized economic institutions Explaining the role of banks in the economic system
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing important individuals and their accomplishments in various independence movements around the world (UNIT: Latin America Studies) Explaining the impact of individual explorers and conquistadors on the places they colonized (UNIT: Latin America Studies) Explaining contributions of ancient civilizations and their influence on modern society (UNIT: Europe Studies) Evaluating the legacy of artistic and civil rights movements and important individuals within these movements on modern society (UNIT: Europe Studies) Explaining the impact of major world religions on history and current events (UNIT: Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Pax Romana Christianity Renaissance Hildalgo Conquistador Performing basic processes such as: <ul style="list-style-type: none"> Identifying important individuals and the independence movements they were involved with Naming individual explorers and conquistadors and the places they colonized Naming contributions of ancient civilizations Describing artistic movements in early European history Describing major world religions (beliefs, birthplace, history, important individuals)
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Historical Conflict Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing the causes and consequences of ancient Greek and Roman conflicts (UNIT: Europe Studies) Explaining the impact of religious conflict on the people of a specific region (UNIT: Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Peloponnesian War Muslim The Crusades Performing basic processes such as: <ul style="list-style-type: none"> Describing conflicts in ancient Greece and Rome Describing religious conflict in early European history
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Current Events in the Context of History Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing conflict and cooperation that occurs in current events (where they arise) (UNIT: Global Geography) Applying the 5 Themes of Geography to current events happening throughout the world (UNITS: Latin America Studies, Europe Studies) Predicting the possible impact of current events throughout the world on the United States (UNITS: Latin America Studies, Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Location Place Region Movement Human-Environment Interaction Performing basic processes such as: <ul style="list-style-type: none"> Identifying current events happening in the world relating to conflict and cooperation
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship-Awareness, Rights, & Responsibilities Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting rights and responsibilities of citizens in other countries to those in the United States (UNIT: Latin America Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Dictatorship Performing basic processes such as: <ul style="list-style-type: none"> Describe the roles of citizens in the United States Describe the roles of citizens in various countries of the world
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT
Measurement Topic: Government Systems
Grade Six

Evidence shows student has met or
exceeded the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different government systems used in countries around the world (UNITS: Latin America Studies, Europe Studies) Evaluating the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) (UNIT: Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Intergovernmental organization European Union/Commonwealth of Nations Government system Performing basic processes such as: <ul style="list-style-type: none"> Identify systems of government and the corresponding countries that use these systems Name and describe the function of large intergovernmental organizations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how historical events influenced the language spoken in regions of the world (UNIT: Latin America Studies) Evaluating the lasting impact of gender roles and class structure on the culture in different world regions (UNIT: Latin America Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Social pyramid Gender roles Performing basic processes such as: <ul style="list-style-type: none"> Identifying the language(s) spoken in Latin American countries Describe gender roles and class structure in different world regions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) (UNITS: Latin America Studies, Europe Studies) Explaining the importance of specific people and places within society (UNITS: Latin America Studies, Europe Studies) Evaluating how the social structure in ancient civilizations contributed to their success (or lack of) (UNITS: Latin America Studies, Europe Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Social structure Performing basic processes such as: <ul style="list-style-type: none"> Describing the way of life in various ancient civilizations Identifying important people and places within ancient civilizations Describing the social structure in ancient civilizations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Physical Features Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the physical features of different regions on Earth (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Fertile Crescent Ring of Fire Sahara Desert Canadian Shield Performing basic processes such as: <ul style="list-style-type: none"> Locating different physical features of different regions on Earth
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

GEOGRAPHY

Measurement Topic: Political Features Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Locating geographical areas within regions of the world (countries, capital cities, & major cities) (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Polynesia Province Jerusalem Performing basic processes such as: <ul style="list-style-type: none"> Identifying geographical areas within regions of the world
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance



ECONOMICS

Measurement Topic: Economies of the World

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the impact of trade on a country's economy and relations with other countries (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies) Comparing the economies of different world regions to each other and to the United States using basic economic concepts (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Imports/exports Standard of living Exchange rate Performing basic processes such as: <ul style="list-style-type: none"> Provide examples of economic systems Identify imports and exports involved in trade of various countries
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance	2.5	Basic understanding secure, progressing toward mastery
3.5	Mastered grade level, some advanced grade level performance	Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Judaism Islam Mahatma Gandhi Vikings Penal colony Performing basic processes such as: <ul style="list-style-type: none"> Identifying important individuals and the independence movements they were involved with Naming individual explorers and conquistadors, the places they colonized, and their motivation for colonization Describing artistic movements in early Asian history Naming contributions of ancient civilizations Describing major world religions (beliefs, birthplace, history, important individuals) Describe reasons for European colonization of Africa
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing important individuals and their accomplishments in various independence movements around the world (UNIT: Asia Studies) Explaining the impact of individual explorers and conquistadors on the places they colonized (UNITS: Canada Studies, Australia Studies) Evaluating the legacy of artistic and civil rights movements and important individuals within these movements on modern society (UNIT: Asia Studies) Explaining contributions of ancient civilizations and their influence on modern society (UNITS: Middle East Studies, Africa Studies) Explaining the impact of major world religions on history and current events (UNITS: Middle East Studies, Asia Studies) Analyze the impact of trade on the development of African civilizations and the reasons for European colonization of Africa (UNIT: Africa Studies) 	1.5	Basic understanding, with some assistance
		1.0	Basic understanding, only with assistance
		0.5	Some basic understanding, only with assistance

WORLD HISTORY

Measurement Topic: Current Events in the Context of History Grade Seven

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Applying the 5 Themes of Geography to current events happening throughout the world (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies) Predicting the possible impact of current events throughout the world on the United States (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies , Australia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Location Place Region Movement Human-Environment Interaction Performing basic processes such as: <ul style="list-style-type: none"> Identifying current events happening in the world
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship-Awareness, Rights, & Responsibilities Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Comparing and contrasting rights and responsibilities of citizens in other countries to those in the United States (UNITS: Middle East Studies, Asia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Monarchy Islamic Fundamentalist One-child policy Performing basic processes such as: <ul style="list-style-type: none"> Describe the roles of citizens in the United States Describe the roles of citizens in various countries of the world
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different government systems used in countries around the world (UNITS: Canada Studies, Middle East Studies, Asia Studies, Australia Studies) Evaluating the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) (UNIT: Australia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Intergovernmental organization Commonwealth of Nations Government system Performing basic processes such as: <ul style="list-style-type: none"> Identify systems of government and the corresponding countries that use these systems Name and describe the function of large intergovernmental organizations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Human Characteristics

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how historical events influenced the language spoken in regions of the world (UNIT: Canada Studies) Evaluating the lasting impact of gender roles and class structure on the culture in different world regions (UNITS: Middle East Studies, Asia Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Caste system Gender roles Performing basic processes such as: <ul style="list-style-type: none"> Identifying the language(s) spoken in Latin American countries Describe gender roles and class structure in different world regions
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies) Explaining the importance of specific people and places within society (UNITS: Canada Studies, Middle East Studies, Asia Studies, Africa Studies) Evaluating how the social structure in ancient civilizations contributed to their success (or lack of) (UNITS: Middle East Studies, Asia Studies, Africa Studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Social structure Performing basic processes such as: <ul style="list-style-type: none"> Describing the way of life in various ancient civilizations Identifying important people and places within ancient civilizations Describing the social structure in ancient civilizations
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Significant Events, Individuals, & Contributions Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

Score 3.0	4.0	Advanced grade level performance	2.5	Basic understanding secure, progressing toward mastery
	3.5	Mastered grade level, some advanced grade level performance	Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Land bridge Electoral college Land acquisition Telegraph Performing basic processes such as: <ul style="list-style-type: none"> Describing governmental policies that affected Native Americans in the United States Identifying important individual contributions to United States history Describing the attitudes, governmental policies, and opinions that formed in the Revolutionary Era Describing the political process in the 1700-1800s (elections, political parties) Describing the political process today (elections, political parties) Identifying land acquired in the 1800s Naming important influences on the Civil War Era Describing technological advancement in the late 1800s-early 1900s
		Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing how early exploration and governmental policies affected Native Americans in the United States (UNITS: Early America, Westward Expansion) Evaluating the impact of important individuals' contributions to United States history (UNITS: The American Revolution, The Civil War) Evaluating how different attitudes, governmental policies, and individual opinions influenced the American Revolution (UNIT: The American Revolution) Explaining the impact of early governmental policies on modern society (UNITS: The American Revolution, Life in the New Nation, Westward Expansion, The Civil War) Comparing and contrasting the political process (elections, political parties) from the 1700 and 1800s to today (UNIT: Life in the New Nation) Explaining the government's reasons for land acquisition in the 1800s (UNIT: Westward Expansion) Evaluating how different attitudes, governmental policies, and individual opinions influenced the Civil War and African-American society in the United States (UNIT: The Civil War) Comparing and contrasting industrial development in the late-1800s/early-1900s to modern technological advancement (UNIT: Late 19th Century- Early 20th Century) 	1.5	Basic understanding, with some assistance
			1.0	Basic understanding, only with assistance
			0.5	Some basic understanding, only with assistance

US HISTORY

Measurement Topic: Historical Conflict

Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining causes and effects of the American Revolution and the impact of these events on United States history (UNIT: The American Revolution) Evaluating how strengths and weaknesses of participants in conflict in United States history influence the outcome of the conflict (UNITS: The American Revolution, The Civil War) Explaining the impact of the outcome of conflict in United States history on modern society (UNITS: The American Revolution, Life in the New Nation, Westward Expansion, The Civil War, Late 19th Century-Early 20th Century) Describing how land acquisition lead to conflict in United States history (UNITS: Westward Expansion, Late 19th Century-Early 20th Century)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Little Big Horn Reconstruction Battle of Bunker Hill Boston Massacre Performing basic processes such as: <ul style="list-style-type: none"> Identifying events leading to and resulting from the American Revolution Describing strengths and weaknesses of participants in conflict in United States history Describing the outcome of conflicts in United States history Identifying land acquired in 19th century United States history
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Citizenship-Awareness, Rights, & Responsibilities Grade Eight

Evidence shows student has met or exceeded
the learning target

Evidence shows misunderstanding,
misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Determining current examples of obtaining citizenship (real-life applications of the citizenship process) (UNIT: Late 19th Century-Early 20th Century) Evaluating the importance of knowing one's civil and legal responsibilities when entering a new country (UNIT: Late 19th Century-Early 20th Century)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology, events, people, and locations such as: <ul style="list-style-type: none"> Naturalization Performing basic processes such as: <ul style="list-style-type: none"> Identifying the civil and legal responsibilities of United States citizens Describing the process of obtaining citizenship
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

CIVICS & GOVERNMENT

Measurement Topic: Government Systems

Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how the strengths and weaknesses of early forms of government and influential writings led to the formation of the current US Constitution (UNIT: The US Constitution) Defending each side of the major debates proposed at the Constitutional Convention and in the process of ratifying the Constitution (UNIT: The US Constitution) Determining current examples of the function of the federal government as outlined in the Constitution (real-life applications of the 3 Branches of Government and the Bill of Rights) (UNIT: The US Constitution)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Ratify/ratification Checks & balances Performing basic processes such as: <ul style="list-style-type: none"> Explaining the early forms of government in the United States Describing major debates proposed at the Constitutional Convention and in the process of ratifying the Constitution Describing the relationship between the 3 Branches of Government Defining each of the amendments in the Bill of Rights
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

PEOPLE, CULTURE, & CIVILIZATIONS

Measurement Topic: Historical Societies & Lifestyles

Grade Eight

Evidence shows student has met or exceeded the

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Explaining how political beliefs and government policies influenced society in the United States (UNITS: Early America, Life in the New Nation, 19th Century Culture & Reform, The Civil War) Describing how geographic and economic conditions led to changes in society (colonization, immigration, slavery) (UNITS: Early America, Civil War, Late 19th Century-Early 20th Century) Evaluating the success of reform movements in regards to their impact on modern society (UNIT: 19th Century Culture & Reform) Describing how the growth of technology changed life in the United States in the 19th century (UNIT: Late 19th Century-Early 20th Century)

Evidence shows misunderstanding,

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Colonization Immigration Slavery Performing basic processes such as: <ul style="list-style-type: none"> Describing important political beliefs and policies in early United States history Identifying geographical and economic conditions that led to change Describing reform movements in 19th century United States history and their leaders Describing technological advancement in the late 1800s-early 1900s
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Kindergarten- SS Instructional Sequence Plan

UNIT: Introduction to Maps				
Objectives	Instructional Sequence			
Geography: Maps & Globes <ul style="list-style-type: none"> Explain how maps and globes are used Describe how major landforms, bodies of water, and other features of the Earth are represented on maps and globes 				
Geography: Physical Features <ul style="list-style-type: none"> Identify and locate specific major landforms, bodies of water, and other features of the Earth 				
UNIT: Introduction to Market Economics				
Objectives	Instructional Sequence			
Economics: Economic Concepts <ul style="list-style-type: none"> Define basic economic concepts 				
Economics: Resources <ul style="list-style-type: none"> Explain how money is used in our economy Give an example of an economic exchange from personal experience 				
UNIT: Me & My World				
Objectives	Instructional Sequence			
Geography: Political Features <ul style="list-style-type: none"> Name and locate their geographical area using a map (school, city, state, and country) Identify and describe the immediate surroundings (neighborhood, address, phone number) 				
Economics: Economic Concepts <ul style="list-style-type: none"> Give examples of basic economic concepts found in the community 				
Civics & Government: Citizenship: Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Identify important symbols and landmarks of the United States Explain why rules and laws are important to have in a community 				

People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Describe characteristics of themselves and their family Recall school rules and consequences Define respect as it relates to classroom rules and expected behaviors 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Describe the history, customs, and beliefs shared by their personal family 				
UNIT: Native Americans				
Objectives	Instructional Sequence			
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Describe the way of life of one Native American tribe (e.g., location, homes, traditional dress, foods, transportation, crafts, and tools) 				
UNIT: Christopher Columbus				
Objectives	Instructional Sequence			
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important people, things, and events in the story of Columbus's voyage to the Americas Explain how and why Columbus named the land and people of the Americas Give examples of Moral Focus concepts demonstrated by Columbus 				
UNIT: The Pilgrims				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe how the story of the Pilgrims led to the modern celebration of Thanksgiving Day 				

UNIT: July 4- Independence Day				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain the terms “independence” and “democracy” and their significance to the July 4th holiday 				
UNIT: The Presidents				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Identify the names of the four presidents on Mt. Rushmore and an important contribution of each Describe how past presidents showed examples of Moral Focus concepts 				
US History: Current Events in the Context of History <ul style="list-style-type: none"> Describe how the current president shows examples of Moral Focus concepts 				

1st Grade- SS Instructional Sequence Plan

UNIT: Earth's Continents				
Objectives	Instructional Sequence			
Geography: Maps & Globes <ul style="list-style-type: none"> Interpret a map using its features (cardinal directions, key) 				
Geography: Physical Features <ul style="list-style-type: none"> Identify and locate specific major landforms and bodies of water 				
Geography: Political Features <ul style="list-style-type: none"> Locate their wider geographical area 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Describe human characteristics (e.g., man-made structures, cultures, traditions) of various place on Earth, including the local community 				
UNIT: Economic Choices				
Objectives	Instructional Sequence			
Economics: Economic Concepts <ul style="list-style-type: none"> Distinguish between basic economic concepts (goods & services, benefits & costs) Explain how choices influence economic decisions 				
Economics: Resources <ul style="list-style-type: none"> Explain the concept of “price” 				
UNIT: My School & Community				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of various places on Earth, including the local community 				
Geography: Political Features <ul style="list-style-type: none"> Locate their wider geographical area 				

Civics & Government: Citizenship: Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Describe ways people can be good citizens 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Identify the ways a local government serves the community 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Describe the human characteristics of various place on Earth, including the local community Describe the roles of various people in the school Define “community” 				
UNIT: Early People & Civilizations				
Objectives	Instructional Sequence			
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important people and places and their impact on Ancient Mesopotamian civilization Explain how written language and laws are important in developing a civilization 				
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of various places on Earth, including the local community 				
Geography: Political Features <ul style="list-style-type: none"> Locate the geographic area of the world where specific ancient civilizations existed 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the importance of available resources to ancient civilizations Describe the way of life of various ancient civilizations (e.g., important people in society, migration, and customs. 				

UNIT: The New World				
Objectives	Instructional Sequence			
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Identify conquistadors and locate the civilizations they conquered Describe the reasons for conquering new land Describe the explorers' influence on the conquered land 				
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe how the Roanoke and Virginia colonies were established Identify important individuals and their contributions to the development of the United States 				
People, Culture, & Civilizations: Historical Lifestyles & Societies <ul style="list-style-type: none"> Explain the importance of available resources to ancient civilizations Describe the way of life of various ancient civilizations (e.g., important people in society, migration, and customs) 				
UNIT: The American Revolution				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Identify important individuals and their contributions to the development of the United States 				
US History: Historical Conflict <ul style="list-style-type: none"> Identify the causes of the Revolutionary War Compare and contrast "Minutemen" and "Redcoats" (American and British armies) in the battle of Lexington & Concord 				

UNIT: The American West				
Objectives		Instructional Sequence		
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Identify important individuals and their contributions to the development of the United States Explain how early explorers of the American west showed Moral Focus concepts 				
UNIT: Symbols and Figures of America				
Objectives		Instructional Sequence		
Civics & Government: Citizenship: Awareness, Rights & Responsibilities <ul style="list-style-type: none"> Explain what important national symbols represent 				

2nd Grade-SS Instructional Sequence Plan

UNIT: North American Geography				
Objectives		Instructional Sequence		
Geography: Physical Features				
<ul style="list-style-type: none"> Locate major landforms, bodies of water, and other features of North America 				
Geography: Political Features				
<ul style="list-style-type: none"> Explain the difference between a continent and a country 				
UNIT: Market Resources				
Objectives		Instructional Sequence		
Economics: Economic Concepts				
<ul style="list-style-type: none"> Explain the concept of “market” Describe how people make choices regarding resources (e.g., opportunity cost & scarcity) 				
Economics: Resources				
<ul style="list-style-type: none"> Give examples of categories of resources (natural, human, and capital) 				
UNIT: Communities Around the World				
Objectives		Instructional Sequence		
Geography: Political Features				
<ul style="list-style-type: none"> Compare and contrast urban, suburban, and rural communities 				
Geography: 5 Themes of Geography				
<ul style="list-style-type: none"> Evaluate the advantages and disadvantages of different modes of transportation 				
Civics & Government: Citizenship: Awareness, Rights, & Responsibilities				
<ul style="list-style-type: none"> Describe ways that people show citizenship in the United States and in other countries of the world 				
People, Culture, & Civilizations: Human Characteristics				
<ul style="list-style-type: none"> Describe common characteristics of people within a culture 				

group				
People, Culture, & Civilizations: Historical Societies & Lifestyles				
<ul style="list-style-type: none"> Explain how the local community has changed over time 				
UNIT: India & China				
Objectives	Instructional Sequence			
Geography: Physical Features				
<ul style="list-style-type: none"> Describe the physical features of various places on Earth 				
Geography: Political Features				
<ul style="list-style-type: none"> Locate the geographic area of the world where ancient civilizations existed 				
World History: Significant Events, Individuals, & Contributions				
<ul style="list-style-type: none"> Explain the purpose for building the Great Wall of China Explain the impact of inventions and contributions on ancient and modern society 				
People, Culture, & Civilizations: Historical Societies & Lifestyles				
<ul style="list-style-type: none"> Explain the importance of available resources to ancient civilizations Compare and contrast the ways of life, customs, beliefs, and contributions to modern society of different ancient civilizations in the same geographical area (Asia, Ancient Greece) 				
UNIT: Ancient Greece				
Objectives	Instructional Sequence			
Geography: Physical Features				
<ul style="list-style-type: none"> Describe the physical features of various places on Earth 				
Geography: Political Features				
<ul style="list-style-type: none"> Locate the geographic area of the world where ancient civilizations existed 				

World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain the significance of the accomplishments of Alexander the Great Explain the impact of inventions and contributions on ancient and modern society 				
World History: Historical Conflict <ul style="list-style-type: none"> Describe major battles in the Persian Wars 				
People, Culture, & Civilizations: Historical Lifestyles <ul style="list-style-type: none"> Compare and contrast the ways of life, customs, beliefs, and contributions to modern society of different ancient civilizations in the same geographical area (Asia, Ancient Greece) 				
UNIT: American Government				
Objectives	Instructional Sequence			
Civics & Government: Government Systems <ul style="list-style-type: none"> Explain James Madison's contribution to the Constitution of the United States 				
UNIT: War of 1812				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important individuals in American wars and the impact their contributions had on modern society 				
US History: Historical Conflict <ul style="list-style-type: none"> Identify the causes of American wars Describe participants in conflicts in United States history 				
UNIT: Westward Expansion				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Compare and contrast transportation in the 1800s with transportation today 				
People, Cultures, & Civilizations: Historical Societies &				

Lifestyles <ul style="list-style-type: none"> Describe the way of life of Native Americans in the 1800s Describe the relationship between Native Americans and the United States government 				
UNIT: The Civil War				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important individuals in American wars and the impact their contributions had on modern society 				
US History: Historical Conflict <ul style="list-style-type: none"> Identify the causes of American wars Describe participants in conflicts in United States history 				
UNIT: Immigration & Citizenship				
Objectives	Instructional Sequence			
Civics & Government: Citizenship: Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Explain “e pluribus unum” Describe ways that people show citizenship in the United States and in other countries of the world Identify the ways one can become an American citizen 				
People, Culture, & Civilizations Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain reasons why people migrated to the United States Describe the journey of immigrants to the United States (how they traveled to the country, where they settled) 				
UNIT: Symbols & Figures of America				
Objectives	Instructional Sequence			
Civics & Government: Citizenship: Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Explain what important specific national symbols represent 				

3rd Grade- SS Instructional Sequence Plan

UNIT: Map Features				
Objectives	Instructional Sequence			
Geography: Maps & Globes <ul style="list-style-type: none"> Interpret a map using its features (title, scale, grid) Determine location and distance (cardinal directions, scale, grid) Compare and contrast types of maps (political & physical) 				
Geography: 5 Themes of Geography <ul style="list-style-type: none"> Define and describe “Human-Environment Interaction”, one of the 5 Themes of Geography 				
UNIT: Entrepreneurs				
Objectives	Instructional Sequence			
Economics: Economic Concepts <ul style="list-style-type: none"> Describe basic economic concepts Analyze choices based on positive and negative incentives Propose a way needs can be met considering choices available (opportunity cost) 				
Economics: Resources <ul style="list-style-type: none"> Compare and contrast different categories of resources (natural, human, and capital) Explain the concept of “entrepreneurship” Explain the purpose of using money as opposed to bartering 				
UNIT: Ancient Rome				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of various places on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate the geographic area of the world where ancient civilizations existed 				
World History: Significant Events, Individuals, & Contributions				

<ul style="list-style-type: none"> Describe significant individuals in ancient history and the impact their accomplishments had on ancient and modern society Summarize the causes and effects of major events in ancient world history 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Sequence the origins of civilizations and eras in time in chronological order Describe the structure of society in ancient civilizations Explain how geographic locations of settlements and migration patterns influence ancient societies 				
UNIT: The Vikings				
Objectives	Instructional Sequence			
Geography: Political Features <ul style="list-style-type: none"> Locate the geographic area of the world where ancient civilizations existed 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe significant individuals in ancient history and the impact their accomplishments had on ancient and modern society Summarize the causes and effects of major events in ancient world history 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Sequence the origins of civilizations and eras in time in chronological order Describe the structure of society in ancient civilizations Explain how geographic locations of settlements and migration patterns influence ancient societies 				

UNIT: Europe in the Middle Ages				
Objectives	Instructional Sequence			
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe significant individuals in ancient history and the impact their accomplishments had on ancient and modern society Summarize the causes and effects of major events in ancient world history Explain the impact of individual warriors on 15th century Europe (Joan of Arc, William the Conqueror) 				
World History: Historical Conflicts <ul style="list-style-type: none"> Describe the major causes and outcome of the Hundred Years War 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Sequence the origins of civilizations and eras in time in chronological order Describe the structure of society in ancient civilizations Explain how geographic locations of settlements and migration patterns influence ancient societies 				
UNIT: Early Exploration of North America				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain the impact of the explorers' discoveries on modern society 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Sequence the origins of civilizations and eras in time in chronological order Explain how geographic locations of settlements and migration patterns influence ancient societies 				

UNIT: The 13 Colonies				
Objectives		Instructional Sequence		
US History: Significant Events, Individuals, & Contributions				
<ul style="list-style-type: none"> Compare and contrast the colonies as a region and individually 				
UNIT: Our America				
Objectives		Instructional Sequence		
Civics & Government: Citizenship-Awareness, Rights, & Responsibilities				
<ul style="list-style-type: none"> Explain the origin of Core Democratic Values and how they help define what it means to be a citizen Use the definition of Core Democratic Values to explain why important American historical figures were good citizens 				
Civics & Government: Government Systems				
<ul style="list-style-type: none"> Explain the basic principles of the American system of government 				

4th Grade- SS Instructional Sequence Plan

UNIT: Geography Skills & Themes				
Objectives	Instructional Sequence			
Geography: Maps & Globes <ul style="list-style-type: none"> Determine location and distance using map features and scale Interpret different types of maps 				
Geography: 5 Themes of Geography <ul style="list-style-type: none"> Define and list an example of each of the 5 Themes of Geography 				
UNIT: Economic Systems				
Objectives	Instructional Sequence			
Economics: Economic Concepts <ul style="list-style-type: none"> Analyze the strengths and weaknesses of the concept of specialization 				
Economics: Resources <ul style="list-style-type: none"> Categorize real-life examples of productive resources (natural, human, capital) Explain the concept of “income” (generating income and using income) 				
Economics: Economies of the World <ul style="list-style-type: none"> Define the purpose of an economic system Explain how the government is an example of an economic system 				
UNIT: US Regions				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Compare physical features of their state to regions in the United States 				
Geography: Political Features <ul style="list-style-type: none"> Group the United States into regions in a variety of ways 				

(political, physical, economical)				
<ul style="list-style-type: none"> Locate geographical areas within regions of the United States (states, capital cities, & major cities) 				
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe the important individuals and events within each region of the United States Explain how the geographical location of these regions impact historical events in that region 				
UNIT: State Studies				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Compare physical features of their state to regions in the United States 				
Geography: Political Features <ul style="list-style-type: none"> Locate and identify geographical areas of their own state (boundaries, capital city, other major cities) 				
Geography: 5 Themes of Geography <ul style="list-style-type: none"> Describe features of their own state using the 5 Themes of Geography 				
Economics: Economies of the World <ul style="list-style-type: none"> Describe the economy of their state 				
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Sequence important historical events of their individual state Explain the impact of national historical events on their individual state (exploration, conflicts, and other important events that are applicable) 				
US History: Current Events in the Context of History <ul style="list-style-type: none"> Predict the impact that the current events will have on the future of their state 				
Civics & Government: Citizenship-Awareness, Rights, &				

Responsibilities <ul style="list-style-type: none"> Describe the rights and responsibilities involved with American citizenship (freedom of speech, voting, knowing representatives) Identify the major officeholders within their individual state and federal government representatives 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Describe the 3 Branches of Government Order the levels of government (local, state, and national) in a hierarchy 				
People, Cultures, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Describe the cultural characteristics of people within their state 				
People, Cultures, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Describe the way of life of Native American tribes within their state (e.g., homes, traditional dress, foods, transportation, crafts, tools and other accomplishments) Explain Native American influences on their state 				

5th Grade- SS Instructional Sequence Plan

UNIT: US Geography				
Objectives		Instructional Sequence		
Geography: Maps & Globes <ul style="list-style-type: none"> Determine location and distance Interpret different types of maps and geographical representations 				
Geography: Physical Features <ul style="list-style-type: none"> Describe specific landforms and rivers of the United States 				
UNIT: US Economics				
Objectives		Instructional Sequence		
Economics: Economic Concepts <ul style="list-style-type: none"> Describe consequences of competition on an economy (among producers & sellers, consumers & buyers) Describe the relationships of economic concepts in a competitive market 				
Economics: Resources <ul style="list-style-type: none"> Explain ways to improve human productivity and resources and the impact that would have on an economy Evaluate personal choices made with money (e.g., budgets, spending vs. saving, and credit) 				
Economics: Economies of the World <ul style="list-style-type: none"> Describe different economic systems and where they are practiced around the world Describe the economy of the United States 				
Economics: Economic Institutions <ul style="list-style-type: none"> Explain the role of banks in the economic system 				
UNIT: Native Americans				
Objectives		Instructional Sequence		
People, Cultures, and Civilizations: Historical Lifestyles & Societies <ul style="list-style-type: none"> Compare and contrast the way of life of various Native 				

American tribes within the United States				
UNIT: Early Exploration				
Objectives	Instructional Sequence			
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe the explorers' influence on the conquered land (e.g. trade) Determine the reasons that motivated the explorers toward discovery Explain the impact of new technology on the voyages of the explorers 				
People, Cultures, and Civilizations: Historical Lifestyles & Societies <ul style="list-style-type: none"> Compare and contrast early English settlements in the United States with French and Spanish settlement 				
UNIT: Colonization				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Analyze contributions of colonial regions on modern society 				
People, Cultures, and Civilizations: Historical Lifestyles & Societies <ul style="list-style-type: none"> Explain how the way of life in the colonial regions (New England, Middle Atlantic, Southern Colonies) was influenced by social characteristics (families, class structure, religion, economies) Compare and contrast early English settlements in the United States with French and Spanish settlements 				
UNIT: The Revolutionary War				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain important events in the Revolutionary Era that led to the independence of the United States from Britain Analyze the impact of important individuals on the history of the United States 				

US History: Historical Conflict <ul style="list-style-type: none"> • Compare and contrast the strengths and weaknesses of the American and British armies in the Revolutionary War • Describe participants (groups of people, allies) in conflicts in United States history • Describe the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) • Describe important battles in the Revolutionary War 				
UNIT: The US Constitution				
Objectives	Instructional Sequence			
US History: Current Events in the Context of History <ul style="list-style-type: none"> • Describe and explain current events facing the United States relating to government and civil rights • Predict the impact that the current events will have on the future of the United States as well as the individual citizen 				
Civics & Government: Government Systems <ul style="list-style-type: none"> • Explain the early forms of government in the United States • Explain the impact of individual influence on the Constitutional Convention • Compare and contrast the 3 Branches of Government and their functions • Define each of the amendments in the Bill of Rights 				
UNIT: Westward Expansion				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> • Analyze the impact of important individuals on the history of the United States • Explain the concept “Manifest Destiny” 				
US History: Historical Conflict <ul style="list-style-type: none"> • Describe participants (groups of people, allies) in conflicts in United States history • Describe the causes and effects of conflicts in United States history (reasons for wars, lasting impact of treaties) 				



UNIT: The Civil War				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Analyze the impact of important individuals on the history of the United States Explain the causes and eventual effects of events leading to the Civil War 				
US History: Historical Conflict <ul style="list-style-type: none"> Describe important battles in the Civil War 				

6th Grade- SS Instructional Sequence Plan

UNIT: Global Geography				
Objectives	Instructional Sequence			
Geography: Maps & Globes <ul style="list-style-type: none"> Analyze the appropriate use and purposes of different types of maps 				
Geography: 5 Themes of Geography <ul style="list-style-type: none"> Describe features of different world regions using the 5 Themes of Geography Predict the impact of natural disasters on both the physical environment and human response to the disasters Predict the consequences of movement on the physical environment 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Describe conflict and cooperation that occurs in current events (where they arise) 				
UNIT: Global Economics				
Objectives	Instructional Sequence			
Economics: Economic Concepts <ul style="list-style-type: none"> Make generalizations about countries and their economies using basic economic concepts (GDP, inflation) Explain how economies are influenced by competition and the impact of that on modern society Describe how different categories of earned income are influenced by a variety of factors 				
<u>Economics: Economies of the World</u> <ul style="list-style-type: none"> Distinguish the strengths and weaknesses of each economic system Explain the concept of “globalization” 				
<u>Economics: Economic Institutions</u> <ul style="list-style-type: none"> Describe the importance of banks within economic institutions Describe the importance of labor unions within economic institutions 				

UNIT: Europe Studies				
Objectives		Instructional Sequence		
<u>Geography: Physical Features</u>				
<ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
<u>Geography: Political Features</u>				
<ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
<u>Economics: Economies of the World</u>				
<ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				
<u>World History: Significant Events, Individuals, & Contributions</u>				
<ul style="list-style-type: none"> Explain contributions of ancient civilizations and their influence on modern (today's) society Evaluate the legacy of artistic and civil rights movements and important individuals within these movements on modern society Explain the impact of major world religions on history and current events 				
<u>World History: Current Events in the Context of History</u>				
<ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				
<u>World History: Historical Conflicts</u>				
<ul style="list-style-type: none"> Analyze the causes and consequences of ancient Greek and Roman conflicts Explain the impact of religious conflict on the people of a specific region 				

Civics & Government: Government Systems <ul style="list-style-type: none"> Describe different government systems used in countries around the world Evaluate the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) Explain the importance of specific people and places within society Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) 				
UNIT: Latin America Studies				
Objectives		Instructional Sequence		
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
Economics: Economies of the World <ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important individuals and their accomplishments in various independence movements around the world Explain the impact of individual explorers and conquistadors on the places they colonized 				

World History: Current Events in the Context of History <ul style="list-style-type: none"> • Apply the 5 Themes of Geography to current events happening throughout the world • Predict the possible impact of current events throughout the world on the United States 				
Civics & Government: Citizenship-Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> • Compare and contrast rights and responsibilities of citizens in other countries to those in the United States 				
Civics & Government: Government Systems <ul style="list-style-type: none"> • Describe different government systems used in countries around the world 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> • Explain how historical events influenced the language spoken in regions of the world • Evaluate the lasting impact of gender roles and class structure on the culture in different world regions 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> • Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) • Explain the importance of specific people and places within society • Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) 				

7th Grade- SS Instructional Sequence Plan

UNIT: Canada Studies				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
Economics: Economies of the World <ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain the impact of individual explorers and conquistadors on the places they colonized 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Describe different government systems used in countries around the world 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Explain how historical events influenced the language spoken in regions of the world 				

People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) 				
UNIT: Middle East Studies				
Objectives		Instructional Sequence		
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
Economics: Economies of the World <ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain contributions of ancient civilizations and their influence on modern society Explain the impact of major world religions on history and current events 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				

Civics & Government: Citizenship-Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Compare and contrast rights and responsibilities of citizens in other countries to those in the United States 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Describe different government systems used in countries around the world 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Evaluate the lasting impact of gender roles and class structure on the culture in different world regions 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) Explain the importance of specific people and places within society Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) 				
UNIT: Asia Studies				
Objectives	Instructional Sequence			
<u>Geography: Physical Features</u> <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
<u>Geography: Political Features</u> <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
<u>Economics: Economies of the World</u> <ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				

World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Describe important individuals and their accomplishments in various independence movements around the world Evaluate the legacy of artistic and civil rights movements and important individuals within these movements on modern society Explain the impact of major world religions on history and current events 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				
Civics & Government: Citizenship-Awareness, Rights, & Responsibilities <ul style="list-style-type: none"> Compare and contrast rights and responsibilities of citizens in other countries to those in the United States 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Describe different government systems used in countries around the world 				
People, Culture, & Civilizations: Human Characteristics <ul style="list-style-type: none"> Evaluate the lasting impact of gender roles and class structure on the culture in different world regions 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) Explain the importance of specific people and places within society Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) 				

UNIT: Africa Studies				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
Economics: Economies of the World <ul style="list-style-type: none"> Explain the impact of trade on a country's economy and relations with other countries Compare the economies of different world regions to each other and to the United States using basic economic concepts 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain contributions of ancient civilizations and their influence on modern society Analyze the impact of trade on the development of African civilizations and the reasons for European colonization of Africa 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain the influence that ancient civilizations had on modern society (government, contributions, religion/philosophies, trade, tools/weapons, agriculture, migration/settlement) Explain the importance of specific people and places within society Evaluate how the social structure in ancient civilizations contributed to their success (or lack of) 				



UNIT: Australia Studies				
Objectives	Instructional Sequence			
Geography: Physical Features <ul style="list-style-type: none"> Describe the physical features of different regions on Earth 				
Geography: Political Features <ul style="list-style-type: none"> Locate geographical areas within regions of the world (countries, capital cities, & major cities) 				
World History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Explain the impact of individual explorers and conquistadors on the places they colonized 				
World History: Current Events in the Context of History <ul style="list-style-type: none"> Apply the 5 Themes of Geography to current events happening throughout the world Predict the possible impact of current events throughout the world on the United States 				
Civics & Government: Government Systems <ul style="list-style-type: none"> Describe different government systems used in countries around the world Evaluate the pros and cons of large intergovernmental organizations (European Union, Commonwealth of Nations) 				

8th grade- SS Instructional Sequence Plan

UNIT: Early America				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Analyze how early exploration and governmental policies affected Native Americans in the United States 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain how political beliefs and government policies influenced society in the United States Describe how geographic and economic conditions led to changes in society (colonization, immigration, slavery) 				
UNIT: The American Revolution				
Objectives	Instructional Sequence			
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Evaluate the impact of important individuals' contributions to United States history Evaluate how different attitudes, governmental policies, and individual opinions influenced the American Revolution Explain the impact of early governmental policies on modern society 				
US History: Historical Conflict <ul style="list-style-type: none"> Explain causes and effects of the American Revolution and the impact of these events on United States history Evaluate how strengths and weaknesses of participants in conflict in United States history influence the outcome of the conflict Explain the impact of the outcome of conflict in United States history on modern society 				
UNIT: The US Constitution				
Objectives	Instructional Sequence			
Civics & Government: Government Systems <ul style="list-style-type: none"> Explain how the strengths and weaknesses of early forms of government and influential writings led to the formation of the current US Constitution Defend each side of the major debates proposed at the 				

<p>Constitutional Convention and in the process of ratifying the Constitution</p> <ul style="list-style-type: none"> Determine current examples of the function of the federal government as outlined in the Constitution (real-life applications of the 3 Branches of Government and the Bill of Rights) 				
UNIT: Life in the New Nation				
Objectives	Instructional Sequence			
<p>US History: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> Explain the impact of early governmental policies on modern society Compare and contrast the political process (elections, political parties) from the 1700 and 1800s to today 				
<p>US History: Historical Conflict</p> <ul style="list-style-type: none"> Explain the impact of the outcome of conflict in United States history on modern society 				
<p>People, Culture, & Civilizations: Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> Explain how political beliefs and government policies influenced society in the United States 				
UNIT: Westward Expansion				
Objectives	Instructional Sequence			
<p>US History: Significant Events, Individuals, & Contributions</p> <ul style="list-style-type: none"> Explain the government's reasons for land acquisition in the 1800s Analyze how early exploration and governmental policies affected Native Americans in the United States Explain the impact of early governmental policies on modern society 				
<p>US History: Historical Conflict</p> <ul style="list-style-type: none"> Explain the impact of the outcome of conflict in United States history on modern society Describe how land acquisition lead to conflict in United States history 				

UNIT: 19 th Century Culture & Reform				
Objectives		Instructional Sequence		
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain how political beliefs and government policies influenced society in the United States Evaluate the success of reform movements in regards to their impact on modern society 				
UNIT: The Civil War				
Objectives		Instructional Sequence		
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Evaluate the impact of important individuals' contributions to United States history Explain the impact of early governmental policies on modern society Evaluate how different attitudes, governmental policies, and individual opinions influenced the Civil War and African-American society in the United States 				
US History: Historical Conflict <ul style="list-style-type: none"> Evaluate how strengths and weaknesses of participants in conflict in United States history influence the outcome of the conflict Explain the impact of the outcome of conflict in United States history on modern society 				
People, Culture, & Civilizations: Historical Societies & Lifestyles <ul style="list-style-type: none"> Explain how political beliefs and government policies influenced society in the United States Describe how geographic and economic conditions led to changes in society (colonization, immigration, slavery) 				
UNIT: Late 19 th Century to Early 20 th Century				
Objectives		Instructional Sequence		
US History: Significant Events, Individuals, & Contributions <ul style="list-style-type: none"> Compare and contrast industrial development in the late-1800s/early-1900s to modern technological advancement 				

<p>US History: Historical Conflict</p> <ul style="list-style-type: none"> • Explain the impact of the outcome of conflict in United States history on modern society • Describe how land acquisition lead to conflict in United States history 				
<p>Civics & Government: Citizenship-Awareness, Rights, & Responsibilities</p> <ul style="list-style-type: none"> • Determining current examples of obtaining citizenship (real-life applications of the citizenship process) • Evaluate the importance of knowing one's civil and legal responsibilities when entering a new country 				
<p>People, Culture, & Civilizations: Historical Societies & Lifestyles</p> <ul style="list-style-type: none"> • Describe how the growth of technology changed life in the United States in the 19th century • Describe how geographic and economic conditions led to changes in society (colonization, immigration, slavery) 				

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Kindergarten

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Performing basic locomotor skills • Performing basic non-locomotor skills • Performing basic skills to manipulate objects (hand-eye coordination) • Moving in different directions using a variety of locomotor movements

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Locomotor example: Run (See Appendix) ◦ Non-locomotor example: Balance (See Appendix) ◦ Manipulative example: Bounce (See Appendix) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Performing limited basic locomotor skills ◦ Performing some basic non-locomotor skills ◦ Performing manipulative skills with limited proficiency or consistency ◦ Moving in different directions using limited locomotor movements
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating awareness of personal space by moving safely and purposefully • Demonstrating basic movement vocabulary (directional vocabulary such as forward, backward, sideways, left, right; spatial vocabulary such as high, low, under, over; temporal vocabulary such as fast and slow) • Following simple directions for basic games and activities

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Spatial awareness example: Personal space (See Appendix) ◦ Directional example: Forward (See Appendix) ◦ Temporal example: Fast (See Appendix) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating a limited awareness of personal space ◦ Demonstrating basic movement vocabulary with partial accuracy ◦ Following directions for basic games and activities some of the time
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describing how increased activity affects the body (heart beating faster, breathing faster, tired muscles) Building endurance through increased activity (e.g., moving continuously for one minute, holding own body weight for 5 seconds)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Heart-beat Breath / Breathe / Breathing Muscles Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describing physical feelings after exercise Building or displaying limited endurance during activity
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Recognizing healthy and unhealthy foods Describing the necessity of drinking water daily Identifying household products that are harmful to the body if ingested, or inhaled Identifying the feelings that result from participation in physical activity (e.g., happy, tired, excited)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Healthy Unhealthy Ingest (i.e., eat) Inhale (i.e., breathe in) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognizing healthy and unhealthy foods with limited accuracy Recognizing some harmful household products
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Taking turns and working with partners or teams during activities • Sharing equipment with others

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Sharing • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Taking turns and working with partners or teams most of the time ◦ Sharing equipment with others on a limited basis
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

Appendix
Recommended Skills and Concepts
Grades K-2

Motor Skills

- Locomotor: Run, walk, jog, jump, hop, gallop, slide, skip
- Non-locomotor: Balance, bend, push, pull, stretch, rock, twist, turn
- Manipulative: Toss, throw, catch, bounce, roll, strike, trap, dribble, kick, punt, swing

Movement Concepts

- Space Awareness: Personal space, general space, high, low, under, over
- Directional: Forward, backward, sideways, left, right, zigzag
- Temporal: Fast, medium, slow

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Performing locomotor skills in basic combinations • Performing non-locomotor skills with increasing coordination • Performing skills to manipulate objects demonstrating increased control • Moving in different directions using a variety of locomotor movements

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Locomotor example: Hop (See Appendix) ◦ Non-locomotor example: Stretch (See Appendix) ◦ Manipulative example: Toss (See Appendix) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Performing combinations of locomotor skills with limited accuracy or consistency ◦ Performing non-locomotor skills with some coordination ◦ Performing manipulative skills demonstrating minimal control ◦ Moving in different directions using limited locomotor movements
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identifying techniques for efficient and safe movement during physical activities Demonstrating variations in movement by changing directions (left, right, back, forward); speeds (slow, medium, fast); and patterns (straight, zig-zag, curved) Recognizing and describing the basic rules of games played as a part of physical activity

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Spatial awareness example: General space (See Appendix) Directional example: Backward (See Appendix) Temporal example: Medium (See Appendix) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognizing basic techniques for efficient and safe movement during physical activities Demonstrating variations in movement by changing directions, speeds, and patterns with partial accuracy Describing some of the basic rules of games played as a part of physical activity
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describing the basic effect of physical activity on muscles, including the heart (e.g., as your activity increases, the heart rate increases) Demonstrating activities that increase flexibility and strength (e.g., squats, lunges, sprints, touching toes, hanging on bars) Demonstrating endurance by engaging in physically challenging activities for increasingly longer periods of time

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Heart Rate Exercise (i.e., physical activity) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describing differences in physical feelings before, during, and after exercise Demonstrating some basic activities that increase flexibility and strength Demonstrating limited endurance when engaging in physically challenging activities for increasingly longer periods of time
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Explaining the connection between healthy food and a healthy body • Describing indicators of thirst • Identifying products that can be harmful to the body if ingested, or inhaled, including OTC/prescription drugs, alcohol and tobacco • Describing the feelings that result from participation in physical activity (i.e., emotional, physical)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Hydration ◦ Dehydration ◦ Alcohol ◦ Tobacco • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identifying healthy and unhealthy foods ◦ Recognizing when thirsty ◦ Recognizing some products that can be harmful to the body if ingested or inhaled ◦ Describing some of the feelings that result from participation in physical activity
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Participating with partners or teams during activities • Showing a willingness to play along-side others • Explaining the importance of following game rules (e.g., safety, fairness, organization)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Team ◦ Partner ◦ Rules • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Participating with partners or teams during activities some of the time ◦ Demonstrating limited willingness to play along-side others ◦ Recognizing basic game rules
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

Appendix
Recommended Skills and Concepts
Grades K-2

Motor Skills

- Locomotor: Run, walk, jog, jump, hop, gallop, slide, skip
- Non-locomotor: Balance, bend, push, pull, stretch, rock, twist, turn
- Manipulative: Toss, throw, catch, bounce, roll, strike, trap, dribble, kick, punt, swing

Movement Concepts

- Space Awareness: Personal space, general space, high, low, under, over
- Directional: Forward, backward, sideways, left, right, zigzag
- Temporal: Fast, medium, slow

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Two

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Performing locomotor and manipulative skills in combinations (e.g., run and kick a ball; swing and jump over a jump rope) Performing stability skills in combinations (e.g., walking on a balance beam, standing on one leg while balanced on an object; bear walk; crab walk; forward roll) Performing fundamental movements to rhythmic beats (e.g., jumping rope to a consistent beat, using locomotor skills to move to music; simple dance steps)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Locomotor example: Skip (See Appendix) Non-locomotor example: Twist (See Appendix) Manipulative example: Kick (See Appendix) Rhythm Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Performing locomotor and manipulative skills in combinations with limited proficiency Performing basic stability skills in combinations Performing fundamental movements to rhythmic beats with partial success
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating knowledge of efficient and safe movement techniques when working with a partner or group • Demonstrating efficient movement with objects that provide balance, change of direction, and spatial awareness challenges • Understanding and demonstrating basic game-playing strategies

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Spatial awareness example: High and low (See Appendix) ◦ Directional example: Sideways (See Appendix) ◦ Temporal Example: Slow (See Appendix) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating basic knowledge of efficient and safe movement techniques ◦ Demonstrating limited efficient movement with objects that provide balance, change of direction, and spatial awareness challenges ◦ Identifying basic game-playing strategies with partial accuracy
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describing the components of health-related physical fitness (e.g., flexibility, strong muscles, endurance) Demonstrating increasing levels of flexibility and strength through a variety of activities Understanding and performing various high, medium, and low intensity activities to develop cardio-respiratory endurance

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Flexibility Strength Endurance Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describing basic components of health-related physical fitness Demonstrating limited levels of flexibility and strength despite involvement in a variety of activities Identifying various high, medium, and low intensity activities with accuracy; performing activities with limited proficiency
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Describing a balanced diet • Explaining how much water intake is essential for a healthy body • Distinguishing between “use” and “abuse” of products such as alcohol, caffeine, prescription drugs • Identifying the benefits of physical activity and healthy behaviors to well-being (i.e., health benefits, emotional benefits)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Diet ◦ Caffeine • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identifying healthy and unhealthy foods and explaining how each affects the body ◦ Identifying the health benefits of drinking water ◦ Explaining the positive and/or negative effects of products such as alcohol, caffeine, prescription drugs ◦ Identifying some of the benefits of physical activity and healthy behaviors
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Working with others towards a common goal Demonstrating a willingness to participate with others of various abilities Identifying and demonstrating “fair play”

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Fair play Team work Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Working with others on an inconsistent basis Demonstrating limited willingness to participate with others of various abilities Identifying game rules and describing how they support “fair play”
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

Appendix
Recommended Skills and Concepts
Grades K-2

Motor Skills

- Locomotor: Run, walk, jog, jump, hop, gallop, slide, skip
- Non-locomotor: Balance, bend, push, pull, stretch, rock, twist, turn
- Manipulative: Toss, throw, catch, bounce, roll, strike, trap, dribble, kick, punt, swing

Movement Concepts

- Space Awareness: Personal space, general space, high, low, under, over
- Directional: Forward, backward, sideways, left, right, zigzag
- Temporal: Fast, medium, slow

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Performing locomotor and manipulative skills with variations (e.g., vertical and horizontal jumping, throwing a ball with two hands, underhand, side arm) • Demonstrating use of manipulative equipment combined with movement skills to perform specific sport skills • Performing movement skills and patterns following specific rhythms (e.g., pass and catch with a partner in rhythm to music)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Vertical ◦ Side arm • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Performing locomotor and manipulative skills with limited variations or proficiency ◦ Demonstrating use of some manipulative equipment combined with movement skills to perform specific sport skills ◦ Performing basic movement skills and patters following specific rhythms
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating safe and efficient movement techniques during physical activities and games • Demonstrating and describing various forms of balance • Demonstrating and describing basic game-playing strategies

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Balance ◦ Strategy • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating safe and efficient movement techniques during physical activities and games with partial accuracy ◦ Demonstrating and describing various forms of balance with limited consistency ◦ Demonstrating and describing some basic game-playing strategies
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identifying strength and areas for improvement of health-related physical fitness Defining and developing components of health-related physical fitness (cardiorespiratory, muscular strength, muscular endurance, flexibility)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Cardiorespiratory Endurance Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying strength and areas for improvement of health-related physical fitness with limited accuracy Defining and developing some components of health-related physical fitness
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identifying the categories of the food pyramid Comparing the health benefits of drinking water to other beverages Describing the negative effects of using alcohol, caffeine, and tobacco Explaining the relationship between enjoyable activities and reduced stress

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Food pyramid Stress Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying some categories of the food pyramid Recognizing the health effects of drinking water and other beverages Recognizing the negative effects of alcohol, caffeine, and tobacco use Identifying enjoyable activities and describing some of their physical and emotional benefits
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Exhibiting positive attitudes about participation in physical activity including in groups or teams • Demonstrating patience with self and others when applying new skills while participating in groups or teams • Following rules of a game when participating in groups or teams

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Exhibiting positive attitudes about participation in physical activity including in groups or teams some of the time ◦ Demonstrating limited patience with self and others when applying new skills while participating in groups or teams ◦ Following rules of a game when participating in groups or teams with partial consistency
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Performing locomotor, non-locomotor and manipulative skills combinations in movement patterns • Performing combinations of movement skills, with and without manipulative equipment, to perform specific sport skills • Demonstrating complex patterns of movement with and without specific rhythms

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher; specific to sport skills) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Performing some locomotor, non-locomotor and manipulative skills combinations in movement patterns ◦ Performing combinations of movement skills, with and without manipulative equipment, to perform specific sport skills with limited consistency ◦ Demonstrating some complex patterns of movement with and without specific rhythms
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating and describing safety with manipulative equipment during physical activities and games • Demonstrating and describing critical elements of basic movement patterns for movement skills (e.g., when dribbling a ball) • Integrating appropriate game-playing strategies in a variety of contexts

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher; specific to activities or games) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating and describing safety with manipulative equipment during some physical activities and games ◦ Demonstrating and describing critical elements of some basic movement patterns for movement skills ◦ Integrating appropriate game-playing strategies in a variety of contexts with limited consistency
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating strategies to determine specific levels of fitness (e.g., heart rate, muscle strength) • Establishing personal goals for physical fitness levels in specific fitness components • Describing exercises or activities that improve specific fitness components

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Heart rate • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating some strategies to determine specific levels of fitness ◦ Establishing limited or unreasonable personal goals for physical fitness levels in specific fitness components ◦ Recognizing exercises or activities that improve specific fitness components
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Describing the food groups and recommended portions from each • Describing indicators of dehydration • Describing the long-term effects of using tobacco • Explaining health risks associated with stress

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Dehydration ◦ Tobacco • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identifying the food groups ◦ Describing some of the indicators of dehydration ◦ Describing the long-term effects of using tobacco with limited proficiency ◦ Explaining health risks associated with stress with partial accuracy
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating interdependence to achieve a goal in a group or team context • Demonstrating positive qualities of a competent and enthusiastic player when participating in groups or teams (e.g., accept partners and teammates regardless of personal differences) • Describing how the rules of a game ensure “fair play”

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Fair play • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating limited interdependence to achieve a goal in a group or team context ◦ Demonstrating some positive qualities of a competent and enthusiastic player when participating in groups or teams ◦ Describing how the rules of a game ensure “fair play” with partial accuracy
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Five

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating integration of locomotor and non-locomotor movements in complex patterns • Demonstrating ability to manipulate objects to participate in games and activities • Performing complex rhythmic skills alone and with a partner

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher; specific to sport skills) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating integration of locomotor and non-locomotor movements in basic patters ◦ Demonstrating ability to manipulate objects to participate in games and activities with limited proficiency ◦ Performing basic rhythmic skills alone and with a partner
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Explaining the importance of safe movement techniques when performing individually or with others • Recognizing and describing critical elements of complex movement patterns that combine multiple skills • Observing the performance of others and providing appropriate feedback to help others improve skills • Performing varying strategies for offense and defense in basic games

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Offense ◦ Defense • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Explaining the importance of some safe movement techniques when performing individually or with others ◦ Recognizing and describing critical elements of basic movement patterns that combine multiple skills ◦ Observing the performance of others and providing appropriate feedback to help others improve skills with limited consistency ◦ Performing limited strategies for offense and defense in basic games
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Establishing personal goals to achieve physical fitness levels in all fitness components Demonstrating appropriate levels of muscular strength and endurance for major muscle groups Performing exercise or activities that improve specific fitness components

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Major muscle groups (e.g., abdominal; biceps; triceps; deltoids; gluteus; hamstrings; quadriceps) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Establishing personal goals to achieve physical fitness levels in some fitness components Demonstrating limited levels of muscular strength and endurance for major muscle groups Performing exercise or activities that improve specific fitness components with limited consistency
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Explaining how healthy food provides energy for physical activity • Demonstrating adequate daily water intake • Describing health benefits from abstaining from or stopping tobacco use • Distinguishing between signs of healthy stress and unhealthy stress

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Healthy stress ◦ Unhealthy stress ◦ Water intake • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Identifying the nutritional benefits of healthy food ◦ Demonstrating adequate daily water intake with limited consistency ◦ Describing health benefits from abstaining from or stopping tobacco use with partial accuracy ◦ Distinguishing between basic signs of healthy stress and unhealthy stress
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating appreciation of the accomplishments of all members in a group or team context • Exhibiting a positive attitude when learning a new skill in individual and group contexts • Demonstrating willingness to resolve conflict when participating in groups or teams

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating appreciation of the accomplishments of all members in a group or team context with limited frequency ◦ Exhibiting a positive attitude when learning a new skill in individual and group concepts some of the time ◦ Demonstrating limited willingness to resolve conflict when participating in groups or teams
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Performing advanced forms in locomotor, non-locomotor, and manipulative skills (e.g., dribble a basketball around objects using either hand with control) Demonstrating competency in more specialized movement skills related to specific physical activities

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher; specific to sport skills) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Performing basic forms in locomotor, non-locomotor, and manipulative skills Demonstrating limited competency in more specialized skills related to specific physical activities
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Analyzing movement and safety techniques to improve performance Identifying movement concepts utilized to refine movement skills (e.g., timing and power improves performance) Demonstrating and describing critical elements of complex movement patterns that combine multiple skills and integrate manipulative equipment Demonstrating and describing strategies for offense and defense in games

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Timing Power Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Analyzing movement and safety techniques to improve performance with limited success Identifying some movement concepts utilized to refine movement skills Demonstrating and describing critical elements of complex movement patterns that combine multiple skills and integrate manipulative equipment with partial proficiency Demonstrating and describing some strategies for offense and defense in games
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Personal Fitness
Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Measuring and developing personal goals for physical fitness components Demonstrating increasing intensity and duration of an activity while performing locomotor skills

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Intensity Duration Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Measuring and developing personal goals for some physical fitness components Demonstrating limited increasing intensity and duration of an activity while performing locomotor skills
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Explaining how exercise and intake relate to balanced weight • Investigating and describing how physical performance is affected by water intake • Demonstrating effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs • Distinguishing between healthy and unhealthy stress management techniques

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ Alcohol ◦ Stress management • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Explaining how exercise and intake relate to balanced weight with partial accuracy ◦ Identifying the effects of water intake on physical performance ◦ Demonstrating some effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs ◦ Identifying some healthy and unhealthy stress management techniques
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating willingness to participate in cooperative games that require a contribution from all team members • Applying rules of a game to ensure personal and group enjoyment when participating in group or team activities

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating limited willingness to participate in cooperative games that require contribution from all team members ◦ Applying rules of a game to ensure personal and group enjoyment when participating in group or team activities with partial consistency
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating a movement sequence for a variety of physical activities and games • Performing complex combinations of movement forms in various sports and rhythmic activities

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher; specific to sport skills) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating a movement sequence for some physical activities and games ◦ Performing complex combinations of movement forms in various sports and rhythmic activities with partial accuracy
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Analyzing movement and safety techniques that improve performance in specific sports Explaining and applying the idea that practice of movement skills improves performance Analyzing strategies for offense and defense in specific sports

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher; specific to sports skills) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Analyzing movement and safety techniques that improve performance in specific sports with limited success Explaining and applying the idea that practice of movement skills improves performance with partial accuracy Identifying strategies for offense and defense in specific sports
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Utilizing self-assessment of physical fitness to identify strengths and weaknesses to develop a personal fitness plan Demonstrating importance all of components of physical fitness to achieve a healthy level of physical fitness

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Fitness plan Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Utilizing self-assessment of physical fitness to identify some strengths and weaknesses to develop a personal fitness plan Recognizing the importance of all components of physical fitness to achieve a healthy level of physical fitness
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Analyzing essential nutrients for the body (i.e., sources of nutrients, uses of each in the body, symptoms of deficiencies) Describing the physiological effects of inadequate and adequate water intake Explaining the short- and long-term effects of caffeine, alcohol, tobacco, marijuana, pain killers, and performance-enhancing drugs Evaluating personal stress and stress management abilities

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Nutrients Physiological effects Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying essential nutrients for the body Recognizing the physiological effects of inadequate and adequate water intake Explaining some of the short- and long-term effects of caffeine, alcohol, tobacco, marijuana, pain killers, and performance-enhancing drugs Evaluating some personal stress and stress management abilities
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrating responsibility for being part of a team and striving to make contributions to team success • Contributing to the development of and adherence to rules that provide safe and enjoyable participation in group and team experiences in physical activity context

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ◦ (To be determined by PE Teacher) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ◦ Demonstrating responsibility for being part of a team and striving to make contributions to team success with limited frequency ◦ Identifying rules that provide safe and enjoyable participation in group and team experiences in physical activity context
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT
Measurement Topic: Movement and Movement Patterns
 Grade Eight

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Combining and refining fundamental techniques in complex physical activities and games Creating and performing rhythmic movement patterns that demonstrate steady beat, tempo, and phrasing of music

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher; specific to sport skills) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Combining and refining fundamental techniques in some physical activities and games Creating and performing rhythmic movement patterns that demonstrate steady beat, tempo, and phrasing of music with partial accuracy
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MOVEMENT AND CONCEPT DEVELOPMENT

Measurement Topic: Movement Concepts

Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Correcting unsafe situations related to participation in physical activities Demonstrating and describing variations of movement skills that occur in specific sports (locomotor, non-locomotor, manipulative) Describing basic physics principles that are utilized in specific sports (e.g., action-reaction, trajectory, linear velocity)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Trajectory Velocity Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Correcting unsafe situations related to participation in physical activities some of the time Demonstrating and describing some variations of movement skills that occur in specific sports Identifying basic physics principles that are utilized in specific sports
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS

Measurement Topic: Personal Fitness

Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Assessing personal fitness levels and developing a plan to maintain or improve all fitness components Evaluating progress on fitness components based on personal plan

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Assessing personal fitness levels and developing a plan to maintain or improve some fitness components Evaluating progress on some fitness components based on personal plan
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Health Concepts for Life
Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Evaluating personal diet choices and predicting future health based on current practices (i.e., in relation to the food pyramid, recommended portions, and intake of essential nutrients) Evaluating personal water intake (i.e., in relation to symptoms of thirst, dehydration, and physical performance) Analyzing the negative impact that alcohol, tobacco, and other drugs have on the user, friends, family members, and community members Evaluating a variety of stress management techniques for effectiveness

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Evaluating some personal diet choices and predicting future health based on current practices Identifying and describing symptoms of thirst and dehydration Analyzing some of the negative impact that alcohol, tobacco, and other drugs have on the user, friends, family members, and community members Evaluating some stress management techniques for effectiveness
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

PHYSICAL FITNESS AND WELLNESS
Measurement Topic: Teamwork and Sportsmanship
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Exhibiting winning and losing gracefully in physical activity context Demonstrating respect for and encouragement of others while participating in physical activity context Analyzing how “fair play” contributes to successful group and team experiences in physical activity context (regardless of winning or losing)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To be determined by PE Teacher) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Exhibiting winning and losing gracefully in physical activity context with limited frequency Demonstrating respect for and encouragement of others while participating in physical activity context some of the time Identifying the rules of the game and recognizing how those rules affect “fair play”
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

Vertical Alignment for the Measurement Topic: <i>Movement and Movement Patterns</i>	
Grade Eight	<ul style="list-style-type: none"> Combine and refine fundamental techniques in complex physical activities and games Create and perform rhythmic movement patterns that demonstrate steady beat, tempo and phrasing of music
Grade Seven	<ul style="list-style-type: none"> Demonstrate a movement sequence for a variety of physical activities and games Perform complex combinations of movement forms in various sports and rhythmic activities
Grade Six	<ul style="list-style-type: none"> Perform advanced forms in locomotor, non-locomotor, and manipulative skills (e.g., dribble a basketball around objects using either hand with control) Demonstrate competency in more specialized movement skills related to specific physical activities
Grade Five	<ul style="list-style-type: none"> Demonstrate integration of locomotor, non-locomotor movements in complex patterns Demonstrate ability to manipulate objects to participate in games and activities Perform complex rhythmic skills alone and with a partner
Grade Four	<ul style="list-style-type: none"> Perform locomotor, non-locomotor and manipulative skills combinations in movement patterns Perform combinations of movement skills, with and with manipulative equipment, to perform specific sport skills Demonstrate complex patterns of movement with and without specific rhythms
Grade Three	<ul style="list-style-type: none"> Perform locomotor and manipulative skills with variations (e.g., vertical and horizontal jumping, throwing a ball with two hands, underhand, side arm) Demonstrate use of manipulative equipment combined with movement skills to perform specific sport skills Perform movement skills and patterns following specific rhythms (e.g., pass and catch with a partner in rhythm to music)
Grade Two	<ul style="list-style-type: none"> Perform locomotor and manipulative skills in combinations (e.g., run and kick a ball; swing and jump over a jump rope) Perform stability skills in combinations (e.g., walk on a balance beam, stand on one leg while balanced on an object; bear walk; crab walk; forward roll) Perform fundamental movements to rhythmic beats (e.g., jumping rope to a consistent beat, using locomotor skills to move to music; simple dance steps)
Grade One	<ul style="list-style-type: none"> Perform locomotor skills in basic combinations Perform non-locomotor skills with increasing coordination Perform skills to manipulate objects demonstrating increased control Move in different directions using a variety of locomotor movements
Kindergarten	<ul style="list-style-type: none"> Perform basic locomotor skills (see Appendix) Perform basic non-locomotor skills(see Appendix) Perform basic skills to manipulate objects (hand-eye coordination) Move in different directions using a variety of locomotor movements

Vertical Alignment for the Measurement Topic: <i>Movement Concepts</i>	
Grade Eight	<ul style="list-style-type: none"> • Correct unsafe situations related to participation in physical activities • Demonstrate and describe variations of movement skills that occur in specific sports (locomotor, non-locomotor, manipulative) • Describe basic physics principles that are utilized in specific sports (e.g., action-reaction, trajectory, linear velocity)
Grade Seven	<ul style="list-style-type: none"> • Analyze movement and safety techniques that improve performance in specific sports • Explain and apply the idea that practice of movement skills improves performance • Analyze strategies for offense and defense in specific sports
Grade Six	<ul style="list-style-type: none"> • Analyze movement and safety techniques to improve performance • Identify movement concepts utilized to refine movement skills (e.g., timing and power improves performance) • Demonstrate and describe critical elements of complex movement patterns that combine multiple skills and integrate manipulative equipment • Demonstrate and describe strategies for offense and defense in games
Grade Five	<ul style="list-style-type: none"> • Explain the importance of safe movement techniques when performing individually or with others • Recognize and describe critical elements of complex movement patterns that combine multiple skills • Observe the performance of others and provide appropriate feedback to help others improve skills • Perform varying strategies for offense and defense in basic games
Grade Four	<ul style="list-style-type: none"> • Demonstrate and describe safety with manipulative equipment during physical activities and games • Demonstrate and describe critical elements of basic movement patterns for movement skills (e.g., when dribbling a ball) • Integrate appropriate game-playing strategies in a variety of contexts
Grade Three	<ul style="list-style-type: none"> • Demonstrate safe and efficient movement techniques during physical activities and games • Demonstrate and describe various forms of balance • Demonstrate and describe basic game-playing strategies
Grade Two	<ul style="list-style-type: none"> • Demonstrate knowledge of efficient and safe movement techniques when working with a partner or group • Demonstrate efficient movement with objects that provide balance, change of direction, and spatial awareness challenges • Understand and demonstrate basic game-playing strategies
Grade One	<ul style="list-style-type: none"> • Identify techniques for efficient and safe movement during physical activities • Demonstrate variations in movement by changing directions (left, right, back, forward); speeds (slow, medium, fast); and patterns (straight, zig-zag, curved) • Recognize and describe the basic rules of games played as a part of physical activity
Kindergarten	<ul style="list-style-type: none"> • Demonstrate awareness of personal space by moving safely and purposefully • Demonstrate basic movement vocabulary (directional vocabulary such as forward, backward, sideways, left, right; spatial vocabulary such as high, low, under, over; temporal vocabulary such as fast and slow) • Follows simple directions for basic games and activities

Vertical Alignment for the Measurement Topic: <i>Personal Fitness</i>	
Grade Eight	<ul style="list-style-type: none"> Assess personal fitness levels and develop a plan to maintain or improve all fitness components Evaluate progress on fitness components based on personal plan
Grade Seven	<ul style="list-style-type: none"> Utilize self-assessment of physical fitness to identify strengths and weaknesses to develop a personal fitness plan Demonstrate importance all of components of physical fitness to achieve a healthy level of physical fitness
Grade Six	<ul style="list-style-type: none"> Measure and develop personal goals for physical fitness components Demonstrate increasing intensity and duration of an activity while performing locomotor skills
Grade Five	<ul style="list-style-type: none"> Establish personal goals to achieve physical fitness levels in all fitness components Demonstrate appropriate levels of muscular strength and endurance for major muscle groups Perform exercise or activities that improve specific fitness components
Grade Four	<ul style="list-style-type: none"> Demonstrate strategies to determine specific levels of fitness (e.g., heart rate, muscle strength) Establish person goals for physical fitness levels in specific fitness components Describe exercises or activities that improve specific fitness components
Grade Three	<ul style="list-style-type: none"> Identify strength and areas for improvement of health-related physical fitness Define and develop components of health-related physical fitness (cardiorespiratory, muscular strength, muscular endurance, flexibility)
Grade Two	<ul style="list-style-type: none"> Describe the components of health-related physical fitness (e.g., flexibility, strong muscles, endurance) Demonstrate increasing levels of flexibility and strength through a variety of activities Understand and perform various high, medium, and low intensity activities to develop cardio-respiratory endurance
Grade One	<ul style="list-style-type: none"> Describe the basic effect of physical activity on muscles, including the heart (e.g., as your activity increases, the heart rate increases) Demonstrate activities that increase flexibility and strength (e.g., squats, lunges, sprints, touching toes, hanging on bars) Demonstrate endurance by engaging in physically challenging activities for increasingly longer periods of time
Kindergarten	<ul style="list-style-type: none"> Describe how increased activity affects the body (heart beating faster, breathing faster, tired muscles) Build endurance through increased activity (e.g., move continuously for one minute, hold own body weight for 5 seconds)

Vertical Alignment for the Measurement Topic: <i>Health Concepts for Life</i>	
Grade Eight	<ul style="list-style-type: none"> • Evaluate personal diet choices and predict future health based on current practices (i.e. in relation to the food pyramid, recommended portions, and intake of essential nutrients) • Evaluate personal water intake (i.e. in relation to symptoms of thirst, dehydration, and physical performance) • Analyze the negative impact that alcohol, tobacco, and other drugs have on the user, friends, family members, and community members • Evaluate a variety of stress management techniques for effectiveness
Grade Seven	<ul style="list-style-type: none"> • Analyze essential nutrients for the body (i.e. sources of nutrients, uses of each in the body, symptoms of deficiencies) • Describe the physiological effects of inadequate and adequate water intake • Explain the short- and long- term effects of caffeine, alcohol, tobacco, marijuana, pain killers, and performance-enhancing drugs • Evaluate personal stress and stress management abilities
Grade Six	<ul style="list-style-type: none"> • Explain how exercise and intake relate to balanced weight • Investigate and describe how physical performance is affected by water intake • Demonstrate effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs • Distinguish between healthy and unhealthy stress management techniques
Grade Five	<ul style="list-style-type: none"> • Explain how healthy food provides energy for physical activity • Demonstrate adequate daily water intake • Describe health benefits from abstaining from or stopping tobacco use • Distinguish between signs of healthy stress and unhealthy stress
Grade Four	<ul style="list-style-type: none"> • Describe the food groups and recommended portions from each • Describe indicators of dehydration • Describe the long-term effects of using tobacco • Explain health risks associated with stress
Grade Three	<ul style="list-style-type: none"> • Identify the categories of the food pyramid • Compare the health benefits of drinking water to other beverages • Describe the negative effects of using alcohol, caffeine, and tobacco • Explain the relationship between enjoyable activities and reduced stress
Grade Two	<ul style="list-style-type: none"> • Describe a balanced diet • Explain how much water intake is essential for a healthy body • Distinguish between “use” and “abuse” of products such as alcohol, caffeine, prescription drugs • Identify the benefits of physical activity and healthy behaviors to well-being (i.e., health benefits, emotional benefits)
Grade One	<ul style="list-style-type: none"> • Explain the connection between healthy food and a healthy body • Describe indicators of thirst • Identify products that can be harmful to the body if ingested, or inhaled, including OTC/prescription drugs, alcohol and tobacco • Describe the feelings that result from participation in physical activity (i.e., emotional, physical)
Kindergarten	<ul style="list-style-type: none"> • Recognize healthy and unhealthy foods • Describe the necessity of drinking water daily • Identify household products that are harmful to the body if ingested, or inhaled • Identify the feelings that result from participation in physical activity (e.g., happy, tired, excited)

Vertical Alignment for the Measurement Topic: <i>Teamwork and Sportsmanship</i>	
Grade Eight	<ul style="list-style-type: none"> • Exhibit winning and losing gracefully in physical activity context • Demonstrate respect for and encouragement of others while participating in physical activity context • Analyze how “fair play” contributes to successful group and team experiences in physical activity context (regardless of winning or losing)
Grade Seven	<ul style="list-style-type: none"> • Demonstrate responsibility for being part of a team and strive to make contributions to team success • Contribute to the development of and adherence to rules that provide of safe and enjoyable participation in group and team experiences in physical activity context
Grade Six	<ul style="list-style-type: none"> • Demonstrate willingness to participate in cooperative games that require a contribution from all team members • Apply rules of a game to ensure personal and group enjoyment when participating in group or team activities
Grade Five	<ul style="list-style-type: none"> • Demonstrate appreciation of the accomplishments of all members in a group or team context • Exhibit a positive attitude when learning a new skill in individual and group contexts • Demonstrate willingness to resolve conflict when participating in groups or teams
Grade Four	<ul style="list-style-type: none"> • Demonstrate interdependence to achieve a goal in a group or team context • Demonstrate positive qualities of a competent and enthusiastic player when participating in groups or teams (e.g., accept partners and teammates regardless of personal differences) • Describe how the rules of a game ensures “fair play”
Grade Three	<ul style="list-style-type: none"> • Exhibit positive attitudes about participation in physical activity including in groups or teams • Demonstrate patience with self and others when applying new skills while participating in groups or teams • Follow rules of a game when participating in groups or teams
Grade Two	<ul style="list-style-type: none"> • Work with others towards a common goal • Demonstrate a willingness to participate with others of various abilities • Identify and demonstrate “fair play”
Grade One	<ul style="list-style-type: none"> • Participate with partners or teams during activities • Show a willingness to play along-side others • Explain the importance of following game rules (e.g., safety, fairness, organization)
Kindergarten	<ul style="list-style-type: none"> • Take turns and work with partners or teams during activities • Share equipment with others

Grade One Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade One

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Perform locomotor skills in basic combinations
- Perform non-locomotor skills with increasing coordination
- Perform skills to manipulate objects demonstrating increased control
- Move in different directions using a variety of locomotor movements

Measurement Topic: Movement Concepts

- Identify techniques for efficient and safe movement during physical activities
- Demonstrate variations in movement by changing directions (left, right, back, forward); speeds (slow, medium, fast); and patterns (straight, zig-zag, curved)
- Recognize and describe the basic rules of games played as a part of physical activity

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade One

NHA Objectives

Measurement Topic: Personal Fitness

- Describe the basic effect of physical activity on muscles, including the heart (e.g., as your activity increases, the heart rate increases)
- Demonstrate activities that increase flexibility and strength (e.g., squats, lunges, sprints, touching toes, hanging on bars)
- Demonstrate endurance by engaging in physically challenging activities for increasingly longer periods of time

Measurement Topic: Health Concepts for Life

- Explain the connection between healthy food and a healthy body
- Describe indicators of thirst
- Identify products that can be harmful to the body if ingested, or inhaled, including OTC/prescription drugs, alcohol and tobacco
- Describe the feelings that result from participation in physical activity (i.e., emotional, physical)

Measurement Topic: Teamwork and Sportsmanship

- Participate with partners or teams during activities
- Show a willingness to play along-side others
- Explain the importance of following game rules (e.g., safety, fairness, organization)

Grade Two Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Two

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Perform locomotor and manipulative skills in combinations (e.g., run and kick a ball; swing and jump over a jump rope)
- Perform stability skills in combinations (e.g., walk on a balance beam, stand on one leg while balanced on an object; bear walk; crab walk; forward roll)
- Perform fundamental movements to rhythmic beats (e.g., jumping rope to a consistent beat, using locomotor skills to move to music; simple dance steps)

Measurement Topic: Movement Concepts

- Demonstrate knowledge of efficient and safe movement techniques when working with a partner or group
- Demonstrate efficient movement with objects that provide balance, change of direction, and spatial awareness challenges
- Understand and demonstrate basic game-playing strategies

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Two

NHA Objectives

Measurement Topic: Personal Fitness

- Describe the components of health-related physical fitness (e.g., flexibility, strong muscles, endurance)
- Demonstrate increasing levels of flexibility and strength through a variety of activities
- Understand and perform various high, medium, and low intensity activities to develop cardio-respiratory endurance

Measurement Topic: Health Concepts for Life

- Describe a balanced diet
- Explain how much water intake is essential for a healthy body
- Distinguish between “use” and “abuse” of products such as alcohol, caffeine, prescription drugs
- Identify the benefits of physical activity and healthy behaviors to well-being (i.e., health benefits, emotional benefits)

Measurement Topic: Teamwork and Sportsmanship

- Work with others towards a common goal
- Demonstrate a willingness to participate with others of various abilities
- Identify and demonstrate “fair play”

Grade Three Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Three

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Perform locomotor and manipulative skills with variations (e.g., vertical and horizontal jumping, throwing a ball with two hands, underhand, side arm)
- Demonstrate use of manipulative equipment combined with movement skills to perform specific sport skills
- Perform movement skills and patterns following specific rhythms (e.g., pass and catch with a partner in rhythm to music)

Measurement Topic: Movement Concepts

- Demonstrate safe and efficient movement techniques during physical activities and games
- Demonstrate and describe various forms of balance
- Demonstrate and describe basic game-playing strategies

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Three

NHA Objectives

Measurement Topic: Personal Fitness

- Identify strength and areas for improvement of health-related physical fitness
- Define and develop components of health-related physical fitness (cardio-respiratory, muscular strength, muscular endurance, flexibility)

Measurement Topic: Health Concepts for Life

- Identify the categories of the food pyramid
- Compare the health benefits of drinking water to other beverages
- Describe the negative effects of using alcohol, caffeine, and tobacco
- Explain the relationship between enjoyable activities and reduced stress

Measurement Topic: Teamwork and Sportsmanship

- Exhibit positive attitudes about participation in physical activity including in groups or teams
- Demonstrate patience with self and others when applying new skills while participating in groups or teams
- Follow rules of a game when participating in groups or teams

Grade Four Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Four

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Perform locomotor, non-locomotor and manipulative skills combinations in movement patterns
- Perform combinations of movement skills, with and with manipulative equipment, to perform specific sport skills
- Demonstrate complex patterns of movement with and without specific rhythms

Measurement Topic: Movement Concepts

- Demonstrate and describe safety with manipulative equipment during physical activities and games
- Demonstrate and describe critical elements of basic movement patterns for movement skills (e.g., when dribbling a ball)
- Integrate appropriate game-playing strategies in a variety of contexts

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Four

NHA Objectives

Measurement Topic: Personal Fitness

- Demonstrate strategies to determine specific levels of fitness (e.g., heart rate, muscle strength)
- Establish person goals for physical fitness levels in specific fitness components
- Describe exercises or activities that improve specific fitness components

Measurement Topic: Health Concepts for Life

- Describe the food groups and recommended portions from each
- Describe indicators of dehydration
- Describe the long-term effects of using tobacco
- Explain health risks associated with stress

Measurement Topic: Teamwork and Sportsmanship

- Demonstrate interdependence to achieve a goal in a group or team context
- Demonstrate positive qualities of a competent and enthusiastic player when participating in groups or teams (e.g., accept partners and teammates regardless of personal differences)
- Describe how the rules of a game ensures “fair play”

Grade Five Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Five

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Demonstrate integration of locomotor, non-locomotor movements in complex patterns
- Demonstrate ability to manipulate objects to participate in games and activities
- Perform complex rhythmic skills alone and with a partner

Measurement Topic: Movement Concepts

- Explain the importance of safe movement techniques when performing individually or with others
- Recognize and describe critical elements of complex movement patterns that combine multiple skills
- Observe the performance of others and provide appropriate feedback to help others improve skills
- Perform varying strategies for offense and defense in basic games

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Five

NHA Objectives

Measurement Topic: Personal Fitness

- Establish personal goals to achieve physical fitness levels in all fitness components
- Demonstrate appropriate levels of muscular strength and endurance for major muscle groups
- Perform exercise or activities that improve specific fitness components

Measurement Topic: Health Concepts for Life

- Explain how healthy food provides energy for physical activity
- Demonstrate adequate daily water intake
- Describe health benefits from abstaining from or stopping tobacco use
- Distinguish between signs of healthy stress and unhealthy stress

Measurement Topic: Teamwork and Sportsmanship

- Demonstrate appreciation of the accomplishments of all members in a group or team context
- Exhibit a positive attitude when learning a new skill in individual and group contexts
- Demonstrate willingness to resolve conflict when participating in groups or teams

Grade Six Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Six

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Perform advanced forms in locomotor, non-locomotor, and manipulative skills (e.g., dribble a basketball around objects using either hand with control)
- Demonstrate competency in more specialized movement skills related to specific physical activities

Measurement Topic: Movement Concepts

- Analyze movement and safety techniques to improve performance
- Identify movement concepts utilized to refine movement skills (e.g., timing and power improves performance)
- Demonstrate and describe critical elements of complex movement patterns that combine multiple skills and integrate manipulative equipment
- Demonstrate and describe strategies for offense and defense in games

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Six

NHA Objectives

Measurement Topic: Personal Fitness

- Measure and develop personal goals for physical fitness components
- Demonstrate increasing intensity and duration of an activity while performing locomotor skills

Measurement Topic: Health Concepts for Life

- Explain how exercise and intake relate to balanced weight
- Investigate and describe how physical performance is affected by water intake
- Demonstrate effective refusal skills to counter pressure to use alcohol, tobacco, or other drugs
- Distinguish between healthy and unhealthy stress management techniques

Measurement Topic: Teamwork and Sportsmanship

- Demonstrate willingness to participate in cooperative games that require a contribution from all team members
- Apply rules of a game to ensure personal and group enjoyment when participating in group or team activities

Grade Seven Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Seven

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Demonstrate a movement sequence for a variety of physical activities and games
- Perform complex combinations of movement forms in various sports and rhythmic activities

Measurement Topic: Movement Concepts

- Analyze movement and safety techniques that improve performance in specific sports
- Explain and apply the idea that practice of movement skills improves performance
- Analyze strategies for offense and defense in specific sports

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Seven

NHA Objectives

Measurement Topic: Personal Fitness

- Utilize self-assessment of physical fitness to identify strengths and weaknesses to develop a personal fitness plan
- Demonstrate importance all of components of physical fitness to achieve a healthy level of physical fitness

Measurement Topic: Health Concepts for Life

- Analyze essential nutrients for the body (i.e. sources of nutrients, uses of each in the body, symptoms of deficiencies)
- Describe the physiological effects of inadequate and adequate water intake
- Explain the short- and long- term effects of caffeine, alcohol, tobacco, marijuana, pain killers, and performance-enhancing drugs
- Evaluate personal stress and stress management abilities

Measurement Topic: Teamwork and Sportsmanship

- Demonstrate responsibility for being part of a team and strive to make contributions to team success
- Contribute to the development of and adherence to rules that provide of safe and enjoyable participation in group and team experiences in physical activity context

Grade Eight Physical Education

NATIONAL HERITAGE ACADEMIES CURRICULUM Physical Education

NHA EXEMPLARS

Movement and Concept Development

Movement and Movement Patterns
Movement Concepts

Physical Fitness and Wellness

Personal Fitness
Health Concepts for Life
Teamwork and Sportsmanship

NHA Physical Education Exemplar: Movement and Concept Development

Grade Eight

NHA Objectives

Measurement Topic: Movement and Movement Patterns

- Combine and refine fundamental techniques in complex physical activities and games
- Create and perform rhythmic movement patterns that demonstrate steady beat, tempo and phrasing of music

Measurement Topic: Movement Concepts

- Correct unsafe situations related to participation in physical activities
- Demonstrate and describe variations of movement skills that occur in specific sports (locomotor, non-locomotor, manipulative)
- Describe basic physics principles that are utilized in specific sports (e.g., action-reaction, trajectory, linear velocity)

NHA Physical Education Exemplar: Physical Fitness and Wellness

Grade Eight

NHA Objectives

Measurement Topic: Personal Fitness

- Assess personal fitness levels and develop a plan to maintain or improve all fitness components
- Evaluate progress on fitness components based on personal plan

Measurement Topic: Health Concepts for Life

- Evaluate personal diet choices and predict future health based on current practices (i.e. in relation to the food pyramid, recommended portions, and intake of essential nutrients)
- Evaluate personal water intake (i.e. in relation to symptoms of thirst, dehydration, and physical performance)
- Analyze the negative impact that alcohol, tobacco, and other drugs have on the user, friends, family members, and community members
- Evaluate a variety of stress management techniques for effectiveness

Measurement Topic: Teamwork and Sportsmanship

- Exhibit winning and losing gracefully in physical activity context
- Demonstrate respect for and encouragement of others while participating in physical activity context
- Analyze how “fair play” contributes to successful group and team experiences in physical activity context (regardless of winning or losing)

VISUAL ARTS
<p align="center">Interaction of Disciplines</p> <p>Developing knowledge and skills in each discipline requires the application of strategies, and content from other disciplines.</p> <p>Art knowledge and skill is developed through the application of perceiving art, producing art, and, learning about art in the historical, cultural and social contexts of their everyday existence. It requires of students the tasks of communicating ideas, evaluating works and connecting the arts to other disciplines in life. This involves using a variety of skill and strategies inherent in ELA, Math, History & Technology.</p>
<p>NHA Exemplar: Art Expression</p> <p>The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.</p>
<p>NHA Exemplar: Art Connections</p> <p>The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life</p>

VISUAL ARTS CURRICULUM OVERVIEW		
NHA Exemplar: Art Expression		
Measurement Topics		
Art Creation	Elements and Principles of Art and Design	Critical Analysis
NHA Art Exemplar: Art Connections		
Measurement Topics		
History, Culture and Society	Real World Connections	Connections to Other Disciplines

General Scoring Scales	
Score 4.0:	The student demonstrates learning that <i>goes beyond</i> what was taught in class.
Score 3.5:	The student attempts to go beyond what was taught in class, but is <i>only partially successful</i> .
Score 3.0:	The student is meeting learning goals at their grade level. This is the expected level of learning.
Score 2.5:	The student understands basic information and is <i>partially successful</i> in meeting grade level learning goals.
Score 2.0:	The student understands basic details and processes but is not yet successful in meeting grade-level learning goals.
Score 1.5:	The student is beginning to perform basic skills but <i>needs some assistance</i> .
Score 1.0:	The student can perform basic skills but <i>only with teacher assistance</i> .
Score 0.5:	The student can perform <i>some basic skills</i> but only with teacher assistance.
Score 0:	The student cannot perform basic skills even with teacher assistance.

ART EXPRESSION
Measurement Topic: Art Creation
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and using basic art materials (see Appendix) Using basic skills and processes to produce works (see Appendix) Using appropriate vocabulary to name various art forms (painting, drawing, sculpture) Following step-by step directions to create works using ideas from environment, experience, and imagination (2D and 3D) Using art materials and tools in a safe and appropriate manner

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Media example: paint (see Appendix) Process example: stamping (See Appendix) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Using basic art materials to create artwork Using some basic art techniques, either in isolation or to create larger works Naming limited number of basic art forms Following directions to create different artworks or techniques Following procedures and using materials appropriately most of the time
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and using basic elements of art (line, shape/form, color, texture, and pattern) and describing characteristics of each (e.g., thick, thin, zigzag, circle, square, rectangle, smooth, bumpy, scratchy, etc.) Naming and identifying basic colors

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Pattern Circle 8 basic colors (red, blue, green, yellow, orange, black, brown, white) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Combining basic art elements to produce art (e.g., line and shape, or line and pattern) Identifying the color of specific objects (ex. "point to the red ball")
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Discussing favorite artworks using appropriate vocabulary; explaining why it is their favorite • Finding and describing images, objects, subjects, or symbols within artworks • Recognizing basic similarities and differences between artworks from different artists or of different styles • Expressing feelings about their own artwork and the artwork of others

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Symbol ○ Same (similarity) ○ Artwork ○ Artist • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Using limited vocabulary to talk about favorite artwork ○ Describing objects seen in an artwork ○ Listing similarities and differences between two artworks ○ Connecting words that describe feelings with artwork
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Looking at and discussing works of art from different artists, times, and places using words or pictures (see list of possible topics below)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To Be Determined by Art Instructor) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recalling basic information about artists and/or the time periods or places that an artwork was created
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Naming reasons people make art • Describing the job of an illustrator • Naming examples of art at home, at school, or in the community

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Art ○ Illustrator • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognizing reasons that people make art ○ Finding examples of work that was done by an illustrator ○ Recognizing objects in the environment that could be considered “art”
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art in other subject areas (illustrations in stories, shapes in math, paintings of famous people or events in social studies, symbols of our country)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (Integrate Content Area Academic Vocabulary whenever possible) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognizing connections between art and some subject areas
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades K-2

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

ART EXPRESSION
Measurement Topic: Art Creation
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using a variety of art techniques to produce works (see Appendix) • Following step-by-step directions to create works using ideas from the environment, experience, and imagination (2D and 3D) • Using art materials and tools in a safe and appropriate manner

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Naming and identifying primary, secondary, warm and cool colors • Making secondary colors from primary colors and explain the process; recognize black, gray, brown, and white • Identifying art elements in nature, in the environment, and in artworks such as line, shape, form, texture, and color • Describing and creating patterns and repetition in artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Discussing artworks using appropriate vocabulary; focus on art elements such as line, shape, texture, color and space and the types of media used to create the artwork (paint, pencil, clay, etc.) Describing subject matter and feelings produced by art, and how the artist used art elements to express emotions (e.g., color to express feelings) Explaining similarities and differences between two artworks based the same subject matter

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Looking at and discussing works of art from different artists, times, and places (see list of possible topics below)) Finding similarities and differences between artwork from a variety of cultures

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different purposes for art (to illustrate, express feelings, for useful purposes, symbols) Identifying objects at home, at school or in the community that were designed by artists (cars, buildings, furniture, posters, signs)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (finding and extending patterns in math; describing 2D and 3D figures; using positional words such as below, above, next to, left, right when describing an artwork; identifying triangles, rectangles, squares, parallelograms, rhomboids; relating familiar objects to 2D and 3D figures; paintings of famous people and events in social studies {Colonial America, ancient Latin America})

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades K-2

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

ART EXPRESSION
Measurement Topic: Art Creation
 Grade Two

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using a variety of art techniques to produce works (see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Creating works using ideas from the environment, experience, and imagination (2D and 3D)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying colors, shapes, lines, patterns, and textures and use appropriate vocabulary to describe subtle differences (e.g. blue-green, nubby, smooth, thick, fine, shaded, etc.) Using symmetry to create balance Creating artwork using warm, cool, and neutral colors, and describe how these colors are used to express mood or evoke feelings

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing artworks using appropriate vocabulary; focus on art elements such as line, shape, texture, color and space, types of media used to create the artwork, and type of work produced (painting, collage, sculpture, mobile, found art, prints) Analyzing their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques Describing subject matter and feelings produced by art, and how the artist used art elements to express emotions (e.g., color to express feelings) Explaining similarities and differences between two artworks based the same subject matter

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and describe works of art from different artists, times, and places (see list of possible topics below) Finding similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background Discussing the chronological order of art from different time periods

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different purposes for art (to commemorate an event, for celebration, to convey messages, and to communicate and evoke emotions) Identifying art elements in artwork and objects at home, at school, and in the environment

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (understanding the concept of balance from science; connection between the medium of clay and the properties of soil in science; the aesthetic structure of plants in science; combining or separating shapes to create new shapes in math; concept of symmetry in math;; paintings of famous people and events in social studies {China, ancient Greece, Westward expansion}; connections between of art in music, theatre and dance (tone, repetition, balance, rhythm)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades K-2

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

ART EXPRESSION
Measurement Topic: Art Creation
 Grade Three

Evidence shows student has met or exceeded the learning target

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using a variety of art techniques to produce works(see Appendix) • Using art materials safely and appropriately; following procedures to set up and clean up • Demonstrating quality craftsmanship • Creating works that replicate techniques or styles, express emotions, and communicate ideas or messages

Evidence shows misunderstanding, misconceptions, or omissions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Media example: watercolor (see Appendix) ○ Process example: crosshatching (See Appendix) • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognizing and using basic art materials ○ Using some basic art techniques to create works ○ Following procedures and using materials appropriately most of the time ○ Demonstrating care in creating artwork most of the time ○ Showing ability to replicate some techniques and styles and communicate feelings or ideas
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying, creating and using secondary and intermediate colors Describing and creating intensity and value of colors by using tints and shades Using symmetry and asymmetry for effect Applying art elements (line, shape, form, texture, space, and color) and art principles (repetition, proportion, balance) to create artwork Creating artwork based on visual observation Identifying and using geometric and organic shapes in artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Secondary Intermediate Value Tints, shades Asymmetry Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identifying secondary and intermediate colors Describing the value and intensity of colors Creating works that show understanding of symmetry and asymmetry, with minor errors Demonstrating basic understanding of art and design elements in artwork Showing basic ability to replicate objects observed Identifying geometric or organic shapes in artwork
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Describing artworks using appropriate vocabulary; focusing on art elements and principles such as color, balance, repetition, proportion, types of media used to create the artwork, and type of work produced • Analyzing artworks and describing how artists use color to convey emotion or draw attention and repetition for movement and balance • Comparing size and position of objects in space and identifying foreground, middle ground, background and details • Categorizing artwork as portrait, landscape, still life, or narrative (tells a story) • Analyzing their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Balance ○ Motion ○ Proportion • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Describing artwork and showing understanding of processes and products with using some art vocabulary ○ Identifying areas in artwork where the artist used elements of art and design principles ○ Identifying foreground, middle ground and background ○ Recognizing art elements, expression, and different techniques in their own art
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and describing works of art from different artists, times, and places Finding similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background Recognizing the purpose, significance, and relative chronological age of artworks from other places and times

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (To Be Determined by Art Instructor) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognizing and recalling accurate information about artists, art periods or movements, or art of specific areas of the world Recognizing art elements and design principles in the artwork of another culture Recognizing and recalling details about the historical and geographical background of specific works of art
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Describing different purposes for art (to express ideas or emotions, to persuade, to tell a story) • Identifying artwork found in the community (monuments, stained glass, murals, billboards, buildings, sculptures) • Describing occupations associated with art (advertiser, graphic designer, teacher, architect)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Sculpture ○ Mural ○ Architect • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognizing and recalling accurate information about artists, art periods or movements, or art of specific areas of the world ○ Recognizing types of art that can be found in a community ○ Recognizing and recalling different jobs that have art connections
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (properties of materials from science; combining or separating shapes to create new shapes in math; concept of symmetry in math; drawing lines, line segments, and rays in math; paintings of famous people and events in social studies { Ancient Rome, Middle Ages, Vikings, American Colonies }; properties of color and light in science; connections between art in music, theatre and dance (tone, repetition, balance, rhythm)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> (Integrate Content Area Academic Vocabulary whenever possible) Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognizing and recalling basic art concepts in other subject areas
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 3-5

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

ART EXPRESSION

Measurement Topic: Art Creation
Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using a variety of art techniques to produce works(see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Creating works that replicate techniques or styles, express emotions, and communicate ideas or messages • Creating artwork using imagery, symbols, and color to express ideas, experiences, or emotions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating and use color characteristics of shade, tint, and intensity • Identifying complementary colors • Using shading techniques to create dimensionality • Drawing human faces and forms with accurate proportions • Identifying and use positive and negative space in artwork • Applying art elements (texture, space, and color) and art principles (variety, repetition, proportion, balance) to create artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing artworks using appropriate vocabulary; focus on art elements and principles such as space, texture, repetition, proportion, types of media used to create the artwork, and type of work produced Analyzing artworks and describe how artists use techniques to create texture, positive and negative space, and repetition or variety in a composition Identifying common themes, subject matter, and ideas expressed across multiple works Categorizing artwork as abstract, representational (realistic) and non-representational (non-objective) Analyzing their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques Describing the effective use of one element in an artwork using descriptive and sensory words

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the types of functional, narrative, or ceremonial artwork produced by different artists, times, and places (see list of possible topics below) Analyzing the artwork of a famous artist from the state Categorizing works of art based on style, subject matter, and regions

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing different purposes for art (to express ideas or emotions, to persuade, narrative, functional) Identifying artwork found in the community (monuments, stained glass, murals, billboards, buildings, sculptures) Recognizing and describe occupations associated with art (museum curator, art historian, art critic, muralist)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (observation drawing in social studies and science; the purpose of color, pattern, and texture of animal adaptations in science; rhythm and pattern in math, music, movement, and language arts; symmetry, translations, reflections and rotations in math; landscape and seascape painting in science and social studies; and clay in science and social studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 3-5

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

ART EXPRESSION
Measurement Topic: Art Creation
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using a variety of art techniques to produce works(see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Creating artwork to express emotions, and communicate ideas or messages • Designing and produce artwork using styles and techniques of different artists, and/or cultures past and present

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Using color characteristics in artwork (value {lightness or darkness}, hues, shades, tints, complementary colors, intermediate colors {tertiary}, contrast) Identifying and use contrast, repetition, and variety in artwork Using perspective drawing (one point) and shading techniques to create dimensionality Applying art elements (line, shape, color, texture, form, and space) and art principles (variety, repetition, proportion, balance) to create artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing artworks using appropriate vocabulary; focus on art elements and principles such as space, texture, repetition, proportion, value, types of media used to create the artwork, and type of work produced Analyzing artworks and recognize the principle of unity in a composition Identifying common themes, subject matter, and ideas expressed across multiple works from different time periods Comparing size and position of objects in space and identify foreground, middle ground, background and details in 2D artwork Analyzing their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Describing the types of functional, narrative, or ceremonial artwork produced by different artists, times, and places (see list of possible topics below) Finding similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background Identifying the influence of historic events on artists and their artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying the purpose of a variety of artworks found in the community (artistic expression, persuasive, narrative, functional, ceremonial) Identifying artwork found in the community (architecture, posters, advertisements) Recognizing and describe occupations associated with art (photographer, interior designer, fashion designer, animators)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (observation drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; symmetry, congruence, and transformation in math; and engineering design in science, math, and music; landscape and seascape painting in science and social studies; and clay in science and social studies)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 3-5

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

ART EXPRESSION
Measurement Topic: Art Creation
Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artworks using a variety of materials (see Appendix) • Using various techniques to produce a desired effect (see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Creating artwork to communicate ideas, personal experiences, and expression • Using imagination, personal experience, and observation as sources for images and symbols

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Using color relationships from the color wheel in design • Identifying and use all the elements of art • Creating artwork that has visual and tactile texture • Using perspective drawing (two point) and shading techniques to create dimensionality • Understanding and the effects of light on 3-D objects and apply in artwork (shadows, chiaroscuro) • Applying art principles (variety, rhythm, proportion, texture) to create artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary Understanding the meaning of “aesthetics” as it pertains to art Describing sensory and emotional responses to artwork orally or in writing Interpreting meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork Evaluating their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying major art movements and artists in culture and history Identifying individual artist's style, including materials, design, methods, and subject matter Analyzing the relationship between an artwork and the history, geography, and technology of a culture

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and describe uses of imagery in the environment (advertising, magazines, the Internet, movies, television) Describing places in the community that have functional and/or decorative art Recognizing and describe occupations associated with art (videographer, art director for film and video, teacher)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (observation drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; translation, reflection, and rotation of shapes in math; engineering design in science, math, and music; and graphic display images of data in science and math; connections to literature in ELA)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

ART EXPRESSION
Measurement Topic: Art Creation
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artwork by selecting media, techniques, and processes to produce desired effects (see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Creating illustrations to communicate ideas, personal experiences, and expression • Using processes to create artwork, including sketches, drafts, and a connected series • Using subjects, themes, images, and symbols to demonstrate meaning in artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Using analogous, complementary, and monochromatic color schemes in artwork Creating contrast using line variations including width, directionality, and implied line Creating the illusion of movement in 2-D and 3-D artwork Use techniques to create depth, including: overlapping, perspective, diminishing size and detail, and object placement on the picture plane Producing effects of depth using value, color, and line Identifying and use all the elements of art and principles of design (focus on form, movement, value, color, and line)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary Generating questions about artwork; provide opinions, personal responses, and possible answers to questions about artwork Interpreting meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork Evaluating their own artwork and the artwork of others for elements of art, principles of design, expressive qualities, quality of techniques, and aesthetics

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying major art movements and artists in cultural context and history Identifying individual artist's style, including materials, design, methods, and subject matter Comparing and contrast the characteristics of two or more art forms that have similar subject matter, historical periods, or cultural context Describing how social and cultural beliefs influence responses to art

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying and explain how art is used to influence and persuade in print and electronic media Identifying characteristics of artwork in current culture and society, making personal connections (advertising, Internet, television, movies, video) Recognizing and describe occupations associated with art (animator, web designer, package designer)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (observation and contour drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; linear drawings, angles, diagonals, characteristics of geometric shapes, transformations, and scaling of objects in math; engineering design, light, and motion in science; and graphic display images of data in science and math; connections to literature in ELA)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

ART EXPRESSION
Measurement Topic: Art Creation
Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artwork by selecting media, techniques, and processes to produce desired effects (see Appendix) • Using art materials safely and appropriately; follow procedures to set up and clean up • Demonstrating quality craftsmanship • Using problem solving to produce desired visual effects in artwork • Using subjects, themes, images, symbols, and art elements and principles to express meaning in artwork

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Elements and Principles of Art and Design
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> • Creating artwork using multiple-point perspective to give the illusion of depth • Using organizational structures as a way to communicate ideas and express meaning • Creating multiple types of 3-D art using various media and processes • Demonstrating form, shape, line, and proportion when creating natural forms (human, animal, plant, etc.) • Using techniques such as distortion, exaggeration, and optical illusion • Identifying and use all the elements of art and principles of design (focus on unity, space, repetition, proportion, variety)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART EXPRESSION
Measurement Topic: Critical Analysis
Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Analyzing artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary Analyzing media, techniques, and processes to determine what makes them effective or ineffective Interpreting meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork Generating questions about artwork; provide opinions, personal responses, and possible answers to questions about artwork Evaluating their own artwork and the artwork of others for elements of art, principles of design, expressive qualities, quality of techniques, and aesthetics

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: History, Culture, and Society
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying individual artist's style, including materials, design, methods, and subject matter Explaining how political, social, geographical, and cultural factors influence how and what artists create Comparing characteristics of artwork within a particular historical period or style with ideas, issues, or themes of the times Demonstrating knowledge of art history by placing artists, famous artworks, and art movements in chronological order

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Real World Connections
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying examples of visual art as a part of own culture (advertising, political cartoons, product design, graphic novels, comic books, video games) Recognizing and describe occupations associated with art (art therapist, video game designer, computer art and design, illustrator, set designer) Describing the types of skills and education required for art-related careers

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

ART CONNECTIONS
Measurement Topic: Connections to Other Disciplines
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	Advanced grade level performance
3.5	Mastered grade level, some advanced grade level performance
Score 3.0	Mastered grade level expectations by: <ul style="list-style-type: none"> Identifying art concepts in other subject areas (observation and contour drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; multiple 2-D views of 3-D object, nets of 3-D objects, transformations, scale drawings, use of measurement tools math; engineering design, light, and motion in science; and graphic display images of data in science and math; use visual media to enhance communication in other content areas; connections to literature in ELA)

2.5	Basic understanding secure, progressing toward mastery
Score 2.0	Basic understanding achieved such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as:
1.5	Basic understanding, with some assistance
1.0	Basic understanding, only with assistance
0.5	Some basic understanding, only with assistance

Appendix
Recommended Media and Processes
Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

Kindergarten Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Kindergarten

NHA Objectives

Measurement Topic: Art Creation

- Identify and use basic art materials (see Appendix)
- Use basic skills and processes to produce works (see Appendix)
- Use appropriate vocabulary to name various art forms (painting, drawing, sculpture)
- Follow step-by step directions to create works using ideas from environment, experience, and imagination (2D and 3D)
- Use art materials and tools in a safe and appropriate manner

Measurement Topic: Elements and Principles of Art and Design

- Identify and use basic elements of art (line, shape/form, color, texture, pattern) and describe characteristics of each (e.g., thick, thin, zigzag, circle, square, rectangle, smooth, bumpy, scratchy, etc.)
- Name and identify basic colors

Measurement Topic: Critical Analysis

- Discuss favorite artworks using appropriate vocabulary; explain why it is their favorite
- Find and describe images, objects, subjects, or symbols within artworks
- Recognize basic similarities and differences between artworks from different artists or of different styles
- Express feelings about their own artwork and the artwork of others

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Kindergarten

NHA Objectives

Measurement Topic: History, Culture, and Society

- Look at and discuss works of art from different artists, times, and places using words or pictures (see list of possible topics below)

Measurement Topic: Real World Connections

- Name reasons people make art
- Describe the job of an illustrator
- Name examples of art at home, at school, or in the community

Measurement Topic: Connections to Other Disciplines

- Identify art in other subject areas (illustrations in stories, shapes in math, paintings of famous people or events in social studies, symbols of our country)

Kindergarten Social Studies Topics: Native Americans, American Symbols, Colonial times

Appendix Recommended Media and Processes *Grades K-2*

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

Grade One Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade One

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use a variety of art techniques to produce works (see Appendix)
- Follow step-by-step directions to create works using ideas from the environment, experience, and imagination (2D and 3D)
- Use art materials and tools in a safe and appropriate manner

Measurement Topic: Elements and Principles of Art and Design

- Name and identify primary, secondary, warm and cool colors
- Make secondary colors from primary colors and explain the process; recognize black, gray, brown, and white
- Identify art elements in nature, in the environment, and in artworks such as line, shape, form, texture, and color
- Describe and create patterns and repetition in artwork

Measurement Topic: Critical Analysis

- Discuss artworks using appropriate vocabulary; focus on art elements such as line, shape, texture, color and space and the types of media used to create the artwork (paint, pencil, clay, etc.)
- Describe subject matter and feelings produced by art, and how the artist used art elements to express emotions (e.g., color to express feelings)
- Explain similarities and differences between two artworks based the same subject matter

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade One

NHA Objectives

Measurement Topic: History, Culture, and Society

- Look at and discuss works of art from different artists, times, and places (see list of possible topics below))
- Find similarities and differences between artwork from a variety of cultures

Measurement Topic: Real World Connections

- Describe different purposes for art (to illustrate, express feelings, for useful purposes, symbols)
- Identify objects at home, at school or in the community that were designed by artists (cars, buildings, furniture, posters, signs)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (finding and extending patterns in math; describing 2D and 3D figures; using positional words such as below, above, next to, left, right when describing an artwork; identifying triangles, rectangles, squares, parallelograms, rhomboids; relating familiar objects to 2D and 3D figures; paintings of famous people and events in social studies {Colonial America, ancient Latin America})

Grade Two Social Studies Topics: Ancient Civilizations of Mesopotamia, Egypt, Mayan, Aztec, and Incas; Colonial America

Appendix Recommended Media and Processes *Grades K-2*

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

Grade Two Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Two

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use a variety of art techniques to produce works (see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create works using ideas from the environment, experience, and imagination (2D and 3D)

Measurement Topic: Elements and Principles of Art and Design

- Identify colors, shapes, lines, patterns, and textures and use appropriate vocabulary to describe subtle differences (e.g. blue-green, nubby, smooth, thick, fine, shaded, etc.)
- Use symmetry to create balance
- Create artwork using warm, cool, and neutral colors, and describe how these colors are used to express mood or evoke feelings

Measurement Topic: Critical Analysis

- Describe artworks using appropriate vocabulary; focus on art elements such as line, shape, texture, color and space, types of media used to create the artwork, and type of work produced (painting, collage, sculpture, mobile, found art, prints)
- Analyze their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques
- Describe subject matter and feelings produced by art, and how the artist used art elements to express emotions (e.g., color to express feelings)
- Explain similarities and differences between two artworks based the same subject matter

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Two

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify and describe works of art from different artists, times, and places (see list of possible topics below)
- Find similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background
- Discuss the chronological order of art from different time periods

Measurement Topic: Real World Connections

- Describe different purposes for art (to commemorate an event, for celebration, to convey messages, and to communicate and evoke emotions)
- Identify art elements in artwork and objects at home, at school, and in the environment

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (understanding the concept of balance from science; connection between the medium of clay and the properties of soil in science; the aesthetic structure of plants in science; combining or separating shapes to create new shapes in math; concept of symmetry in math;; paintings of famous people and events in social studies {China, ancient Greece, Westward expansion}; connections between of art in music, theatre and dance (tone, repetition, balance, rhythm)

Grade Two Social Studies Topics: Ancient China, Ancient Greece, Native Americans, Westward Expansion

Appendix

Recommended Media and Processes

Grades K-2

Drawing

Media: pencils, markers, chalks and chalk pastels, crayons

Processes: contour line, rendering, sketching

Painting

Media: tempera, finger paint, watercolor crayons, watercolor; variety of brushes and paint applicators

Processes: brush techniques, wet-on-wet, wet-on-dry, sponge, wash

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil

Processes: stamping, monoprint, rubbings, stenciling, relief

Ceramics

Media: modeling clay, clay substitutes, pottery clay, glazes, stains, paint

Processes: pinch and pulled forms, slab, imprinted decoration, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, clay, plaster, fiber cardboard, wood, paper, foil, found objects, beads, polystyrene foam

Processes: carving, additive, subtractive, modeling, constructing

Fibers

Media: cloth, yarn, ribbon, found objects

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as draw, paint, save, edit, and print

Grade Three Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Three

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use a variety of art techniques to produce works(see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create works that replicate techniques or styles, express emotions, and communicate ideas or messages

Measurement Topic: Elements and Principles of Art and Design

- Identify, create and use secondary and intermediate colors
- Describe and create intensity and value of colors by using tints and shades
- Use symmetry and asymmetry for effect
- Apply art elements (line, shape, form, texture, space, and color) and art principles (repetition, proportion, balance) to create artwork
- Create artwork based on visual observation
- Identify and use geometric and organic shapes in artwork

Measurement Topic: Critical Analysis

- Describe artworks using appropriate vocabulary; focus on art elements and principles such as color, balance, repetition, proportion, types of media used to create the artwork, and type of work produced
- Analyze artworks and describe how artists use color to convey emotion or draw attention and repetition for movement and balance
- Compare size and position of objects in space and identify foreground, middle ground, background and details
- Categorize artwork as portrait, landscape, still life, or narrative (tells a story)
- Analyze their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Three

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify and describe works of art from different artists, times, and places (see list of possible topics below)
- Find similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background
- Recognize the purpose, significance, and relative chronological age of artworks from other places and times

Measurement Topic: Real World Connections

- Describe different purposes for art (to express ideas or emotions, to persuade, to tell a story)
- Identify artwork found in the community (monuments, stained glass, murals, billboards, buildings, sculptures)
- Describe occupations associated with art (advertiser, graphic designer, teacher, architect)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (properties of materials from science; combining or separating shapes to create new shapes in math; concept of symmetry in math; drawing lines, line segments, and rays in math; paintings of famous people and events in social studies {Ancient Rome, Middle Ages, Vikings, American Colonies}); properties of color and light in science; connections between art in music, theatre and dance (tone, repetition, balance, rhythm)

Grade Three Social Studies Topics: Ancient Rome, the Middle Ages, Vikings, American Colonies)

Appendix Recommended Media and Processes *Grades 3-5*

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

Grade Four Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Four

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use a variety of art techniques to produce works(see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create works that replicate techniques or styles, express emotions, and communicate ideas or messages
- Create artwork using imagery, symbols, and color to express ideas, experiences, or emotions

Measurement Topic: Elements and Principles of Art and Design

- Create and use color characteristics of shade, tint, and intensity
- Identify complementary colors
- Use shading techniques to create dimensionality
- Draw human faces and forms with accurate proportions
- Identify and use positive and negative space in artwork
- Apply art elements (texture, space, and color) and art principles (variety, repetition, proportion, balance) to create artwork

Measurement Topic: Critical Analysis

- Describe artworks using appropriate vocabulary; focus on art elements and principles such as space, texture, repetition, proportion, types of media used to create the artwork, and type of work produced
- Analyze artworks and describe how artists use techniques to create texture, positive and negative space, and repetition or variety in a composition
- Identify common themes, subject matter, and ideas expressed across multiple works
- Categorize artwork as abstract, representational (realistic) and non-representational (non-objective)
- Analyze their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques
- Describe the effective use of one element in an artwork using descriptive and sensory words

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Four

NHA Objectives

Measurement Topic: History, Culture, and Society

- Describe the types of functional, narrative, or ceremonial artwork produced by different artists, times, and places (see list of possible topics below)
- Analyze the artwork of a famous artist from the state
- Categorize works of art based on style, subject matter, and regions

Measurement Topic: Real World Connections

- Describe different purposes for art (to express ideas or emotions, to persuade, narrative, functional)
- Identify artwork found in the community (monuments, stained glass, murals, billboards, buildings, sculptures)
- Recognize and describe occupations associated with art (museum curator, art historian, art critic, muralist)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (observation drawing in social studies and science; the purpose of color, pattern, and texture of animal adaptations in science; rhythm and pattern in math, music, movement, and language arts; symmetry, translations, reflections and rotations in math; landscape and seascape painting in science and social studies; and clay in science and social studies)

Grade Four Social Studies Topics: Native American cultures of the State; U.S. Regions; physical landforms (mountains) and bodies of water (oceans, lakes, rivers)

Recommended Media and Processes

Grades 3-5

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

Grade Five Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Five

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use a variety of art techniques to produce works(see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create artwork to express emotions, and communicate ideas or messages
- Design and produce artwork using styles and techniques of different artists, and/or cultures past and present

Measurement Topic: Elements and Principles of Art and Design

- Use color characteristics in artwork (value {lightness or darkness}, hues, shades, tints, complementary colors, intermediate colors {tertiary}, contrast)
- Identify and use contrast, repetition, and variety in artwork
- Use perspective drawing (one point) and shading techniques to create dimensionality
- Apply art elements (line, shape, color, texture, form, and space) and art principles (variety, repetition, proportion, balance) to create artwork

Measurement Topic: Critical Analysis

- Describe artworks using appropriate vocabulary; focus on art elements and principles such as space, texture, repetition, proportion, value, types of media used to create the artwork, and type of work produced
- Analyze artworks and recognize the principle of unity in a composition
- Identify common themes, subject matter, and ideas expressed across multiple works from different time periods
- Compare size and position of objects in space and identify foreground, middle ground, background and details in 2D artwork
- Analyze their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Five

NHA Objectives

Measurement Topic: History, Culture, and Society

- Describe the types of functional, narrative, or ceremonial artwork produced by different artists, times, and places (see list of possible topics below)
- Find similarities and differences between artwork from a variety of cultures, including cultures relevant to student's background
- Identify the influence of historic events on artists and their artwork

Measurement Topic: Real World Connections

- Identify the purpose of a variety of artworks found in the community (artistic expression, persuasive, narrative, functional, ceremonial)
- Identify artwork found in the community (architecture, posters, advertisements)
- Recognize and describe occupations associated with art (photographer, interior designer, fashion designer, animators)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (observation drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; symmetry, congruence, and transformation in math; and engineering design in science, math, and music; landscape and seascape painting in science and social studies; and clay in science and social studies)

Grade Five Social Studies Topics: Native American Cultures, American Colonies, Revolutionary Era, Westward Expansion, Civil War

Recommended Media and Processes

Grades 3-5

Drawing

Media: pencils, colored pencils, markers, crayons, oil pastels, chalk pastels

Processes: contour line, rendering, sketching, shading, crosshatching, stippling

Painting

Media: tempera, watercolor, watercolor crayons; a variety of surfaces, brushes, and paint applicators

Processes: wet-on-wet, wet-on-dry, sponge, wash, sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink, scratchboard

Processes: collograph, relief (linoleum cutting) frottage (rubbing), silkscreen, etching

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, wire, foam, sand, balsa

Processes: carving, additive, subtractive, modeling, constructing 2-D and 3-D objects, casting

Fibers

Media: cloth, yarn, ribbon, found objects, paper, reeds, rope, string

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Alternative Media

Media: computer, camera, video, photography, film

Processes: computer processes such as editing, creating color palettes, copy and paste, animation, and integration of other technology media

Grade Six Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Six

NHA Objectives

Measurement Topic: Art Creation

- Create artworks using a variety of materials (see Appendix)
- Use various techniques to produce a desired effect (see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create artwork to communicate ideas, personal experiences, and expression
- Use imagination, personal experience, and observation as sources for images and symbols

Measurement Topic: Elements and Principles of Art and Design

- Use color relationships from the color wheel in design
- Identify and use all the elements of art
- Create artwork that has visual and tactile texture
- Use perspective drawing (two point) and shading techniques to create dimensionality
- Understand and the effects of light on 3-D objects and apply in artwork (shadows, chiaroscuro)
- Apply art principles (variety, rhythm, proportion, texture) to create artwork

Measurement Topic: Critical Analysis

- Analyze artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary
- Understand the meaning of “aesthetics” as it pertains to art
- Describe sensory and emotional responses to artwork orally or in writing
- Interpret meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork
- Evaluate their own artwork and the artwork of others for elements of art, expressive qualities, and quality of techniques

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Six

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify major art movements and artists in culture and history
- Identify individual artist's style, including materials, design, methods, and subject matter
- Analyze the relationship between an artwork and the history, geography, and technology of a culture

Measurement Topic: Real World Connections

- Identify and describe uses of imagery in the environment (advertising, magazines, the Internet, movies, television)
- Describe places in the community that have functional and/or decorative art
- Recognize and describe occupations associated with art (videographer, art director for film and video, teacher)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (observation drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; translation, reflection, and rotation of shapes in math; engineering design in science, math, and music; and graphic display images of data in science and math; connections to literature in ELA)

Grade Six Social Studies Topics: Europe Studies, Latin American Studies (IN, MI, NC, NY, CO, LA, GA); or Middle East Studies, Asia Studies, Africa Studies, Canada Studies, Australian (South Pacific) Studies (OH)

Recommended Media and Processes

Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

Grade Seven Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Seven

NHA Objectives

Measurement Topic: Art Creation

- Create artwork by selecting media, techniques, and processes to produce desired effects (see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Create illustrations to communicate ideas, personal experiences, and expression
- Use processes to create artwork, including sketches, drafts, and a connected series
- Use subjects, themes, images, and symbols to demonstrate meaning in artwork

Measurement Topic: Elements and Principles of Art and Design

- Use analogous, complementary, and monochromatic color schemes in artwork
- Create contrast using line variations including width, directionality, and implied line
- Create the illusion of movement in 2-D and 3-D artwork
- Use techniques to create depth, including: overlapping, perspective, diminishing size and detail, and object placement on the picture plane
- Produce effects of depth using value, color, and line
- Identify and use all the elements of art and principles of design (focus on form, movement, value, color, and line)

Measurement Topic: Critical Analysis

- Analyze artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary
- Generate questions about artwork; provide opinions, personal responses, and possible answers to questions about artwork
- Interpret meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork
- Evaluate their own artwork and the artwork of others for elements of art, principles of design, expressive qualities, quality of techniques, and aesthetics

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Seven

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify major art movements and artists in cultural context and history
- Identify individual artist's style, including materials, design, methods, and subject matter
- Compare and contrast the characteristics of two or more art forms that have similar subject matter, historical periods, or cultural context
- Describe how social and cultural beliefs influence responses to art

Measurement Topic: Real World Connections

- Identify and explain how art is used to influence and persuade in print and electronic media
- Identify characteristics of artwork in current culture and society, making personal connections (advertising, Internet, television, movies, video)
- Recognize and describe occupations associated with art (animator, web designer, package designer)

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (observation and contour drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; linear drawings, angles, diagonals, characteristics of geometric shapes , transformations, and scaling of objects in math; engineering design, light, and motion in science; and graphic display images of data in science and math; connections to literature in ELA)

Grade Seven Social Studies Topics: Europe Studies, Latin American Studies (OH); or Middle East Studies, Asia Studies, Africa Studies, Canada Studies, Australian (South Pacific) Studies (IN, MI, NC, NY, CO, LA, GA)

Recommended Media and Processes

Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

Grade Eight Visual Arts

NATIONAL HERITAGE ACADEMIES CURRICULUM Visual Arts

NHA EXEMPLARS

Art Expression

Art Creation
Elements and Principles of Art and Design
Critical Analysis

Art Connections

History, Culture, and Society
Real World Connections
Connections to Other Disciplines

NHA Visual Arts Exemplar: Art Expression

The student will develop and expand their knowledge/skills in the visual arts through the use of media, techniques, and processes to express their own ideas creatively in artwork. The student will analyze, assess, judge merit and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.

Grade Eight

NHA Objectives

Measurement Topic: Art Creation

- Create artwork by selecting media, techniques, and processes to produce desired effects (see Appendix)
- Use art materials safely and appropriately; follow procedures to set up and clean up
- Demonstrate quality craftsmanship
- Use problem solving to produce desired visual effects in artwork
- Use subjects, themes, images, symbols, and art elements and principles to express meaning in artwork

Measurement Topic: Elements and Principles of Art and Design

- Create artwork using multiple-point perspective to give the illusion of depth
- Use organizational structures as a way to communicate ideas and express meaning
- Create multiple types of 3-D art using various media and processes
- Demonstrate form, shape, line, and proportion when creating natural forms (human, animal, plant, etc.)
- Use techniques such as distortion, exaggeration, and optical illusion
- Identify and use all the elements of art and principles of design (focus on unity, space, repetition, proportion, variety)

Measurement Topic: Critical Analysis

- Analyze artworks for elements of art and design principles, art techniques, and media and describe using appropriate vocabulary
- Analyze media, techniques, and processes to determine what makes them effective or ineffective
- Interpret meanings derived from the images, symbols, techniques, art elements, or design principles used in artwork
- Generate questions about artwork; provide opinions, personal responses, and possible answers to questions about artwork
- Evaluate their own artwork and the artwork of others for elements of art, principles of design, expressive qualities, quality of techniques, and aesthetics

NHA Visual Arts Exemplar: Art Connections

The student will demonstrate knowledge of artists, art history, and world cultures by investigating works of art from different times and places. The student will apply their knowledge of visual arts to other disciplines and everyday life

Grade Eight

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify individual artist's style, including materials, design, methods, and subject matter
- Explain how political, social, geographical, and cultural factors influence how and what artists create
- Compare characteristics of artwork within a particular historical period or style with ideas, issues, or themes of the times
- Demonstrate knowledge of art history by placing artists, famous artworks, and art movements in chronological order

Measurement Topic: Real World Connections

- Identify examples of visual art as a part of own culture (advertising, political cartoons, product design, graphic novels, comic books, video games)
- Recognize and describe occupations associated with art (art therapist, video game designer, computer art and design, illustrator, set designer)
- Describe the types of skills and education required for art-related careers

Measurement Topic: Connections to Other Disciplines

- Identify art concepts in other subject areas (observation and contour drawing in social studies and science; rhythm and pattern in math, music, movement, and language arts; multiple 2-D views of 3-D object, nets of 3-D objects, transformations, scale drawings, use of measurement tools math; engineering design, light, and motion in science; and graphic display images of data in science and math; use visual media to enhance communication in other content areas; connections to literature in ELA)

Grade Eight Social Studies Topics: Early America, American Revolution, Westward Expansion, 19th Century America, Civil War, Late 19th to Early 20th Century America

Recommended Media and Processes

Grades 6-8

Drawing

Media: pencils, colored pencils, markers, ink, chalks, oil pastels, charcoals, oil pastels

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling, one- and two-point perspective

Painting

Media: tempera, watercolor, water-soluble oils, watercolor crayons; variety of surfaces, brushes and paint applicators

Processes: wet-on-wet, wet-on-dry, wash, resist, dry brush, watercolor techniques of sponging, salting, and masking

Printmaking

Media: found objects, printing ink, polystyrene foam, stencil, textile ink

Processes: calligraphic, collograph, silkscreen, etching, embossing, relief (linocuts)

Ceramics

Media: modeling clay, pottery clay, clay substitutes, glazes, stains, paint

Processes: pinch and pulled forms, slab, drape mold, coil, surface decoration techniques, incising, scratching, wax resist, hand hewn

Sculpture/Architecture/Jewelry

Media: paper, papier-mâché, clay, plaster, fiber cardboard, wood, foil, found objects, beads, sand, balsa, wire, foam, copper, foam core

Processes: carving, additive, subtractive, modeling, constructing 2-D, 3-D and kinetic art, casting, enameling

Fibers

Media: cloth, yarn, batik wax and dyes, ribbon, found objects, paper, reeds, rope

Processes: pulling threads, weaving, stitchery, tying and wrapping techniques, braiding, basketry, tie-dye, quilting, batik

Mixed Media

Media: tissue, photos, found objects, foil, fiber, paint, paper

Processes: collage, bas-relief

Other Media

Media: computer, interactive computer programs, disposable camera, digital camera, video, photography, film

Processes: computer processes in various open source and commercial programs

General Scoring Scales
Score 4.0: The student demonstrates learning that <i>goes beyond</i> what was taught in class.
Score 3.5: The student attempts to go beyond what was taught in class, but is <i>only partially successful</i> .
Score 3.0: The student is meeting learning goals at their grade level. This is the expected level of learning.
Score 2.5: The student understands basic information and is <i>partially successful</i> in meeting grade level learning goals.
Score 2.0: The student understands basic details and processes but is not yet successful in meeting grade-level learning goals.
Score 1.5: The student is beginning to perform basic skills but <i>needs some assistance</i> .
Score 1.0: The student can perform basic skills but <i>only with teacher assistance</i> .
Score 0.5: The student can perform <i>some basic skills</i> but only with teacher assistance.
Score 0: The student cannot perform basic skills even with teacher assistance.

Year-Long Planner

NHA Music Exemplar: Music Creation

Kindergarten

Measurement Topic: Music Composition and Performance

NHA ELA Objectives	Instructional Sequence			
• Create and play simple rhythmic patterns with a steady beat				
• Create and sing a short melodic pattern				
• Imitate a four beat rhythmic pattern using percussion instruments or clapping				
• Imitate melodic patterns sung by another				
• Demonstrate call and response in music				
• Recall short songs and perform them with a steady beat				

Measurement Topic: Music Theory

• Model short and long sounds vocally and instrumentally				
• Read beat icons and perform short patterns				

Measurement Topic: Music Analysis

• Identify reasons for listening to music				
• Identify the different contexts in which music is heard				
• Use movement to demonstrate simple rhythmic and pitch patterns				
• Distinguish between vocal, instrumental, and environmental sounds				
• Distinguish between musical sounds that are high or low, fast or slow, loud or soft, happy or sad				
• Compare and contrast singing, whispering, and speaking				

NHA Music Exemplar: Music Awareness

Measurement Topic: History, Culture, and Society

NHA ELA Objectives	Instructional Sequence			
• Identify “The Star-Spangled Banner” and “America the Beautiful”				
• List two ways the Native Americans used music				
• Identify different styles of music (e.g., Patriotic, folk, lullabies, or classical)				

Measurement Topic: Real World Connections

NHA ELA Objectives	Instructional Sequence			
• Connect music to situations in daily life				

Measurement Topic: Integrated Studies

NHA ELA Objectives	Instructional Sequence			
Not Applicable				

Music

Interaction of Disciplines

Developing knowledge and skills in each discipline requires the application of strategies, and content from other disciplines.

Music knowledge and skill is developed through the application of creating and performing music, analyzing music, learning about music in the historical context, communicating ideas, movement, and connecting music to other disciplines in life. This requires a variety of skills and strategies inherent in ELA, Math, History and Technology.

NHA Music Exemplar: Music Performance

The student will develop and use a variety of basic skills in order to perform both musical pieces both vocally and instrumentally. Students will engage in both group and individual music-related tasks.

NHA Music Exemplar: Music Creation

The student will be able to create, read, and describe music through knowledge of basic musical concepts.

NHA Music Exemplar: Music Awareness

The students will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from a variety of sources. Students will be exposed to a variety of music and determine the impact it had both locally and globally.

MUSIC CURRICULUM OVERVIEW			
NHA Music Exemplar: Music Performance			
Instrumental Performance		Vocal Performance	
NHA Music Exemplar: Music Creation			
Music Literacy	Music Composition		Music Improvisation
NHA Music Exemplar: Music Awareness			
Music History	Music Analysis	Music Professions	Integrated Studies

Music

Interaction of Disciplines

Developing knowledge and skills in each discipline requires the application of strategies, and content from other disciplines.

Music knowledge and skill is developed through the application of creating and performing music, analyzing music, learning about music in the historical context, communicating ideas, movement, and connecting music to other disciplines in life. This requires a variety of skills and strategies inherent in ELA, Math, History and Technology.

NHA Music Exemplar: Music Performance

The student will develop and use a variety of basic skills in order to perform musical pieces both vocally and instrumentally. Students will engage in both group and individual music-related tasks.

NHA Music Exemplar: Music Creation

The student will be able to create, read, and describe music through knowledge of basic musical concepts. They will use this knowledge to compose and improvise their own musical pieces.

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

MUSIC CURRICULUM OVERVIEW

NHA Music Exemplar: Music Performance

Instrumental Performance

Vocal Performance

NHA Music Exemplar: Music Creation

Music Theory

Music Composition

Music Improvisation

NHA Music Exemplar: Music Awareness

Music History

Music Analysis

Music Professions

Integrated Studies

Vertical Alignment for the Measurement Topic: <i>Music Composition and Performance</i>	
Grade Eight	<ul style="list-style-type: none"> Sing or play a musical piece using expression Sing or play a musical piece from memory Identify I, IV, and V chord patterns
Grade Seven	<ul style="list-style-type: none"> Sing or play a musical piece using a score while following the cues of a conductor Apply notation and composition skills (e.g., reorchestrate, revoice, or compose a short piece) Improvise a short piece
Grade Six	<ul style="list-style-type: none"> Sing or play scales and intervals Improvise solo rhythms on a single pitch Compose and notate short melodic patterns
Grade Five	<ul style="list-style-type: none"> Perform 2- and 3- part songs Improvise accompaniments on classroom instruments (e.g., mallet instruments, rhythm instruments, keyboards, etc.) Identify and perform intervals in major scales (eg., half/whole, step/skip, or 2nd/3rd)
Grade Four	<ul style="list-style-type: none"> Play musical patterns with correct rhythm, tempo, and dynamics by rote and by reading Play pitched classroom instruments using correct techniques (e.g., recorders, xylophone, or keyboard) Sing or play partner songs, rounds, ostinatos, and descants using dynamics and phrasing Improvise a variation of a familiar song or musical phrase
Grade Three	<ul style="list-style-type: none"> Perform ostinatos on classroom instruments independently and with a group Perform vocally using appropriate phrasing Sing rounds and ostinatos Improvise a short piece using non-traditional mediums (e.g., household sounds, environmental sounds, etc.) Compose lyrics to match a melody or rhythm Use classroom instruments to create an accompaniment for readings or dramatizations
Grade Two	<ul style="list-style-type: none"> Improvise a short melody (e.g., vocally, instrumentally) Create and perform short rhythmic and melodic phrases Use loud/soft dynamics when playing and singing Perform an ostinato as an individual or in group sing Interpret and follow the cues of a conductor in regards to tempo, dynamics, beginning, and ending
Grade One	<ul style="list-style-type: none"> Demonstrate a steady beat while singing songs Perform a short ostinato to be sung or played with a familiar song or poem Create and perform short rhythmic and melodic patterns using voice, clapping, or classroom instruments
Kindergarten	<ul style="list-style-type: none"> Create and play simple rhythmic patterns with a steady beat Create and sing a short melodic pattern Imitate a four beat rhythmic pattern using percussion instruments or clapping Imitate melodic patterns sung by another Demonstrate call and response in music Recall short songs and perform them with a steady beat

Vertical Alignment for the Measurement Topic: <i>Music Theory</i>	
Grade Eight	<ul style="list-style-type: none"> Identify and apply 2/4, 3/4, 4/4, 6/8, and alla breve meters Apply musical terms for dynamics, tempo, and articulation
Grade Seven	<ul style="list-style-type: none"> Read and notate music using a variety of notes and rests (e.g.; whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes) Notate melodies from aural examples Describe elements of non-standard notation
Grade Six	<ul style="list-style-type: none"> Sight read music written in major keys Sight read music in duple meter Apply musical symbols found in scores
Grade Five	<ul style="list-style-type: none"> Identify and apply key signatures Read and notate a short melody Identify and apply meters Define and apply dynamic markings (e.g., forte, piano, decrescendo, crescendo) Identify and apply the musical symbol for <i>staccato</i>, <i>accent</i>, <i>formatta</i>, and repeat signs
Grade Four	<ul style="list-style-type: none"> Read and notate quarter, dotted quarter, eighth, half, dotted half, sixteenth, and whole notes, and quarter, half, and whole rests in duple and triple meters Read and perform songs from notation Identify and define the musical symbols for <i>fermata</i>, <i>octave</i>, and <i>D.C. al fine</i> Identify the symbols for sharps, flats, and naturals Define the dynamic markings <i>forte</i>, <i>mezzo forte</i>, <i>piano</i>, <i>mezzo piano</i>, <i>crescendo</i>, and <i>diminuendo (decrescendo)</i> Identify AB, ABA, theme and variations, and rondo forms
Grade Three	<ul style="list-style-type: none"> Read and notate quarter, eighth, half, dotted quarter and half, and whole notes, and quarter, half, and whole rests Read and perform pitch patterns and songs using solfege and letter names of the treble clef Identify strong and weak beats and apply to 4/4 and 3/4 meter
Grade Two	<ul style="list-style-type: none"> Read and notate iconically quarter, eighth, and half notes, and quarter and half rests Determine simple pitch patterns by using solfege and hand signs Identify and classify groups of instruments (e.g., woodwinds, percussion, etc.) Identify voices as child, adult male, or adult female
Grade One	<ul style="list-style-type: none"> Identify quarter notes, eighth notes, and quarter rests represented iconically in simple four beat patterns Match pitch patterns using the notes of the pentatonic scale (e.g., do-re-mi-sol-la)
Kindergarten	<ul style="list-style-type: none"> Model short and long sounds vocally and instrumentally Read beat icons and perform short patterns

Vertical Alignment for the Measurement Topic: <i>Music Analysis</i>	
Grade Eight	<ul style="list-style-type: none"> Identify characteristics of effective performance Define characteristics of effective musical works
Grade Seven	<ul style="list-style-type: none"> Use musical terms to describe various musical styles, genres, or time periods Compare and contrast two musical pieces from the same style or genre using basic musical terminology
Grade Six	<ul style="list-style-type: none"> Identify basic musical form, style, and genre in musical pieces Identify musical elements that convey a certain emotion or mood Establish criteria to be used in evaluating the quality of a performance
Grade Five	<ul style="list-style-type: none"> Distinguish between major and minor keys Identify the form of longer musical pieces Compare pieces in terms of tone and mood
Grade Four	<ul style="list-style-type: none"> Describe tempo, dynamics, articulation, and rhythmic and melodic elements Classify singers based on vocal range and performance style (e.g., SATB, opera, country, jazz, etc.)
Grade Three	<ul style="list-style-type: none"> Describe changes in tempo using musical terms and movement Identify orchestral instruments by sight and by sound Explain personal preference for musical works by contrasting two styles of composition
Grade Two	<ul style="list-style-type: none"> Describe personal preference for musical works Compare two contrasting styles of composition using basic terms (e.g., high/low pitch, beat, repeated rhythmic patterns, fast/slow) Describe the mood and style of a variety of musical pieces
Grade One	<ul style="list-style-type: none"> Recognize vocal and instrumental sounds Use movement to demonstrate changes in tempo, dynamics, and mood in music Compare and contrast patterns of a song and listen for repetition of patterns
Kindergarten	<ul style="list-style-type: none"> Identify reasons for listening to music Identify the different contexts in which music is heard Use movement to demonstrate simple rhythmic and pitch patterns Distinguish between vocal, instrumental, and environmental sounds Distinguish between musical sounds that are high or low, fast or slow, loud or soft, happy or sad Compare and contrast singing, whispering, and speaking

Vertical Alignment for the Measurement Topic: <i>History, Culture, and Society</i>	
Grade Eight	<ul style="list-style-type: none"> Identify musicians within American genres (e.g.; jazz, blues, hip hop, country, etc.) Identify the origins of American musical genres
Grade Seven	<ul style="list-style-type: none"> Evaluate contemporary uses of music to influence societal changes (e.g.; campaign songs, songs of protest, etc.) Identify performing artists that influenced American culture
Grade Six	<ul style="list-style-type: none"> Identify the cultural origin and evolution of specific instruments (e.g., drums, guitar, keyboard, band, or orchestral instruments) Describe the historical background, composer, genre, and style of music pieces being studied
Grade Five	<ul style="list-style-type: none"> Listen to music of other cultures and explore the role of music and musicians related to the cultures Identify instruments associated with world cultures (e.g; sitar, maracas, accordion) Analyze the roles that musicians play in the media
Grade Four	<ul style="list-style-type: none"> Identify musical genres, musicians, or songs unique to your state or region
Grade Three	<ul style="list-style-type: none"> Perform music and dances from different cultures Compare music for special occasions in the United States to that of other world cultures
Grade Two	<ul style="list-style-type: none"> Describe the role that music plays in different cultures (e.g, Greek, India, China) Identify instruments associated with different cultures Perform a dance from a different culture
Grade One	<ul style="list-style-type: none"> Identify and describe the importance of music at home and other places in the community Identify different musical styles (e.g., jazz, folk, patriotic, or classical) Recall and perform short cultural songs
Kindergarten	<ul style="list-style-type: none"> Identify “The Star-Spangled Banner” and “America the Beautiful” List two ways the Native Americans used music Identify different styles of music (e.g., Patriotic, folk, lullabies, or classical)

Vertical Alignment for the Measurement Topic: <i>Real World Connections</i>	
Grade Eight	<ul style="list-style-type: none"> Identify career opportunities in music within other cultures
Grade Seven	<ul style="list-style-type: none"> Identify career opportunities related to American music
Grade Six	<ul style="list-style-type: none"> Respond to musical examples heard in class
Grade Five	<ul style="list-style-type: none"> Report on a community musician Evaluate a live musical performance
Grade Four	<ul style="list-style-type: none"> Identify local musicians and define their role in the community
Grade Three	<ul style="list-style-type: none"> Identify production careers associated with music (e.g., set designer, sound engineer, lighting technician, vocal coach, etc.)
Grade Two	<ul style="list-style-type: none"> Identify music for various special occasions and determine the role that it plays Demonstrate appropriate listening behavior during any performance Describe the roles that musicians play in the community
Grade One	<ul style="list-style-type: none"> Demonstrate appropriate listening behavior during any performance Identify musical professions (e.g., instrumentalist, vocalist, conductor)
Kindergarten	<ul style="list-style-type: none"> Connect music to situations in daily life

Vertical Alignment for the Measurement Topic: <i>Integrated Studies</i>	
Grade Eight	<ul style="list-style-type: none"> Compare the elements of music and art
Grade Seven	<ul style="list-style-type: none"> Interpret a piece of music using art, poetry, or writing
Grade Six	<ul style="list-style-type: none"> Identify the physical properties of sound including frequency, amplitude, and wavelength Apply mathematical concepts to the rhythms encountered in music (e.g., fractions to meter, patterns to form or rhythm)
Grade Five	<ul style="list-style-type: none"> Interpret music using dance, art, or writing
Grade Four	<ul style="list-style-type: none"> Compose a short musical piece based on a piece of artwork (e.g., painting, sculpture, etc.) Analyze how understanding of music could enhance understanding in another discipline (e.g., meter and fractions, musical phrases and language phrases)
Grade Three	<ul style="list-style-type: none"> Identify terms that apply to music as well as reading, writing, and mathematics (e.g., tone, pattern, phrase, meter, etc.)
Grade Two	<ul style="list-style-type: none"> Identify a specific emotion in a piece of music Identify the musical concepts of tone, repetition, and contrast and how they are used in other disciplines (e.g., tone of writing, patterns in math, contrasting two characters in a book)
Grade One	<ul style="list-style-type: none"> Represent musical terms and concepts through other art forms (e.g., drawing, dancing or movement, writing) Identify musical terms and concepts that are also used in other subjects (e.g., fast can be used in music or exercising, patterns in math)
Kindergarten	Not Applicable

Kindergarten Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Kindergarten

NHA Objectives

Measurement Topic: Music Composition and Performance

- Create and play simple rhythmic patterns with a steady beat
- Create and sing a short melodic pattern
- Imitate a four beat rhythmic pattern using percussion instruments or clapping
- Imitate melodic patterns sung by another
- Demonstrate call and response in music
- Recall short songs and perform them with a steady beat

Measurement Topic: Music Theory

- Model short and long sounds vocally and instrumentally
- Read beat icons and perform short patterns

Measurement Topic: Analysis of Music

- Identify reasons for listening to music
- Identify the different contexts in which music is heard
- Use movement to demonstrate simple rhythmic and pitch patterns
- Distinguish between vocal, instrumental, and environmental sounds
- Distinguish between musical sounds that are high or low, fast or slow, loud or soft, happy or sad
- Compare and contrast singing, whispering, and speaking

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Kindergarten

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify “The Star-Spangled Banner” and “America the Beautiful”
- List two ways the Native Americans used music
- Identify different styles of music (e.g., Patriotic, folk, lullabies, or classical)

Measurement Topic: Real World Connections

- Connect music to situations in daily life

Measurement Topic: Integrated Studies

Grade One Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade One

NHA Objectives

Measurement Topic: Music Composition and Performance

- Demonstrate a steady beat while singing songs
- Perform a short ostinato to be sung or played with a familiar song or poem
- Create and perform short rhythmic and melodic patterns using voice, clapping, or classroom instruments

Measurement Topic: Music Theory

- Identify quarter notes, eighth notes, and quarter rests represented iconically in simple four beat patterns
- Match pitch patterns using the notes of the pentatonic scale (e.g., do-re-mi-sol-la)

Measurement Topic: Analysis of Music

- Recognize vocal and instrumental sounds
- Use movement to demonstrate changes in tempo, dynamics, and mood in music
- Compare and contrast patterns of a song and listen for repetition of patterns

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade One

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify and describe the importance of music at home and other places in the community
- Identify different musical styles (e.g., jazz, folk, patriotic, or classical)
- Recall and perform short cultural songs

Measurement Topic: Real World Connections

- Demonstrate appropriate listening behavior during any performance
- Identify musical professions (e.g., instrumentalist, vocalist, conductor)

Measurement Topic: Integrated Studies

- Represent musical terms and concepts through other art forms (e.g., drawing, dancing or movement, writing)
- Identify musical terms and concepts that are also used in other subjects (e.g., fast can be used in music or exercising, patterns in math)

Grade Two Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Two

NHA Objectives

Measurement Topic: Music Composition and Performance

- Improvise a short melody (e.g., vocally, instrumentally)
- Create and perform short rhythmic and melodic phrases
- Use loud/soft dynamics when playing and singing
- Perform an ostinato as an individual or in group sing
- Interpret and follow the cues of a conductor in regards to tempo, dynamics, beginning, and ending

Measurement Topic: Music Theory

- Read and notate iconically quarter, eighth, and half notes, and quarter and half rests
- Determine simple pitch patterns by using solfege and hand signs
- Identify and classify groups of instruments (e.g., woodwinds, percussion, etc.)
- Identify voices as child, adult male, or adult female

Measurement Topic: Analysis of Music

- Describe personal preference for musical works
- Compare two contrasting styles of composition using basic terms (e.g., high/low pitch, beat, repeated rhythmic patterns, fast/slow)
- Describe the mood and style of a variety of musical pieces

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Two

NHA Objectives

Measurement Topic: History, Culture, and Society

- Describe the role that music plays in different cultures (e.g, Greek, India, China)
- Identify instruments associated with different cultures
- Perform a dance from a different culture

Measurement Topic: Real World Connections

- Identify music for various special occasions and determine the role that it plays
- Demonstrate appropriate listening behavior during any performance
- Describe the roles that musicians play in the community

Measurement Topic: Integrated Studies

- Identify a specific emotion in a piece of music
- Identify the musical concepts of tone, repetition, and contrast and how they are used in other disciplines (e.g., tone of writing, patterns in math, contrasting two characters in a book)

Grade Three Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Three

NHA Objectives

Measurement Topic: Music Composition and Performance

- Perform ostinatos on classroom instruments independently and with a group
- Perform vocally using appropriate phrasing
- Sing rounds and ostinatos
- Improvise a short piece using non-traditional mediums (e.g., household sounds, environmental sounds, etc.)
- Compose lyrics to match a melody or rhythm
- Use classroom instruments to create an accompaniment for readings or dramatizations

Measurement Topic: Music Theory

- Read and notate quarter, eighth, half, dotted quarter and half, and whole notes, and quarter, half, and whole rests
- Read and perform pitch patterns and songs using solfege and letter names of the treble clef
- Identify strong and weak beats and apply to 4/4 and 3/4 meter

Measurement Topic: Analysis of Music

- Describe changes in tempo using musical terms and movement
- Identify orchestral instruments by sight and by sound
- Explain personal preference for musical works by contrasting two styles of composition

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Three

NHA Objectives

Measurement Topic: History, Culture, and Society

- Perform music and dances from different cultures
- Compare music for special occasions in the United States to that of other world cultures

Measurement Topic: Real World Connections

- Identify production careers associated with music (e.g., set designer, sound engineer, lighting technician, vocal coach, etc.)

Measurement Topic: Integrated Studies

- Identify terms that apply to music as well as reading, writing, and mathematics (e.g., tone, pattern, phrase, meter, etc.)

Grade Four Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Four

NHA Objectives

Measurement Topic: Music Composition and Performance

- Play musical patterns with correct rhythm, tempo, and dynamics by rote and by reading
- Play pitched classroom instruments using correct techniques (e.g., recorders, xylophone, or keyboard)
- Sing or play partner songs, rounds, ostinatos, and descants using dynamics and phrasing
- Improvise a variation of a familiar song or musical phrase

Measurement Topic: Music Theory

- Read and notate quarter, dotted quarter, eighth, half, dotted half, sixteenth, and whole notes, and quarter, half, and whole rests in duple and triple meters
- Read and perform songs from notation
- Identify and define the musical symbols for *fermata*, *octave*, and *D.C. al fine*
- Identify the symbols for sharps, flats, and naturals
- Define the dynamic markings *forte*, *mezzo forte*, *piano*, *mezzo piano*, *crescendo*, and *diminuendo (decrescendo)*
- Identify AB, ABA, theme and variations, and rondo forms

Measurement Topic: Analysis of Music

- Describe tempo, dynamics, articulation, and rhythmic and melodic elements
- Classify singers based on vocal range and performance style (e.g., SATB, opera, country, jazz, etc.)

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Four

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify musical genres, musicians, or songs unique to your state or region

Measurement Topic: Real World Connections

- Identify local musicians and define their role in the community

Measurement Topic: Integrated Studies

- Compose a short musical piece based on a piece of artwork (e.g., painting, sculpture, etc.)
- Analyze how understanding of music could enhance understanding in another discipline (e.g., meter and fractions, musical phrases and language phrases)

Grade Five Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Five

NHA Objectives

Measurement Topic: Music Composition and Performance

- Perform 2- and 3- part songs
- Improvise accompaniments on classroom instruments (e.g., mallet instruments, rhythm instruments, keyboards, etc.)
- Identify and perform intervals in major scales (eg., half/whole, step/skip, or 2nd/3rd)

Measurement Topic: Music Theory

- Identify and apply key signatures
- Read and notate a short melody
- Identify and apply meters
- Define and apply dynamic markings (e.g., forte, piano, decrescendo, crescendo)
- Identify and apply the musical symbol for *staccato*, *accent*, *formatta*, and repeat signs

Measurement Topic: Analysis of Music

- Distinguish between major and minor keys
- Identify the form of longer musical pieces
- Compare pieces in terms of tone and mood

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Five

NHA Objectives

Measurement Topic: History, Culture, and Society

- Listen to music of other cultures and explore the role of music and musicians related to the cultures
- Identify instruments associated with world cultures (e.g; sitar, maracas, accordion)
- Analyze the roles that musicians play in the media

Measurement Topic: Real World Connections

- Report on a community musician
- Evaluate a live musical performance

Measurement Topic: Integrated Studies

- Interpret music using dance, art, or writing

Grade Six Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Six

NHA Objectives

Measurement Topic: Music Composition and Performance

- Sing or play scales and intervals
- Improvise solo rhythms on a single pitch
- Compose and notate short melodic patterns

Measurement Topic: Music Theory

- Sight read music written in major keys
- Sight read music in duple meter
- Apply musical symbols found in scores

Measurement Topic: Analysis of Music

- Identify basic musical form, style, and genre in musical pieces
- Identify musical elements that convey a certain emotion or mood
- Establish criteria to be used in evaluating the quality of a performance

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Six

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify the cultural origin and evolution of specific instruments (e.g., drums, guitar, keyboard, band, or orchestral instruments)
- Describe the historical background, composer, genre, and style of music pieces being studied

Measurement Topic: Real World Connections

- Respond to musical examples heard in class

Measurement Topic: Integrated Studies

- Identify the physical properties of sound including frequency, amplitude, and wavelength
- Apply mathematical concepts to the rhythms encountered in music (e.g., fractions to meter, patterns to form or rhythm)

Grade Seven Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Seven

NHA Objectives

Measurement Topic: Music Composition and Performance

- Sing or play a musical piece using a score while following the cues of a conductor
- Apply notation and composition skills (e.g., reorchestrate, revoice, or compose a short piece)
- Improvise a short piece

Measurement Topic: Music Theory

- Read and notate music using a variety of notes and rests (e.g.; whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes)
- Notate melodies from aural examples
- Describe elements of non-standard notation

Measurement Topic: Analysis of Music

- Use musical terms to describe various musical styles, genres, or time periods
- Compare and contrast two musical pieces from the same style or genre using basic musical terminology

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Seven

NHA Objectives

Measurement Topic: History, Culture, and Society

- Evaluate contemporary uses of music to influence societal changes (e.g.; campaign songs, songs of protest, etc.)
- Identify performing artists that influenced American culture

Measurement Topic: Real World Connections

- Identify career opportunities related to American music

Measurement Topic: Integrated Studies

- Interpret a piece of music using art, poetry, or writing

Grade Eight Music

NATIONAL HERITAGE ACADEMIES CURRICULUM Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Grade Eight

NHA Objectives

Measurement Topic: Music Composition and Performance

- Sing or play a musical piece using expression
- Sing or play a musical piece from memory
- Identify I, IV, and V chord patterns

Measurement Topic: Music Theory

- Identify and apply 2/4, 3/4, 4/4, 6/8, and alla breve meters
- Apply musical terms for dynamics, tempo, and articulation

Measurement Topic: Analysis of Music

- Identify characteristics of effective performance
- Define characteristics of effective musical works

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Grade Eight

NHA Objectives

Measurement Topic: History, Culture, and Society

- Identify musicians within American genres (e.g.; jazz, blues, hip hop, country, etc.)
- Identify the origins of American musical genres

Measurement Topic: Real World Connections

- Identify career opportunities in music within other cultures

Measurement Topic: Integrated Studies

- Compare the elements of music and art

NHA BAND

Music

NATIONAL HERITAGE ACADEMIES CURRICULUM

Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Band

NHA Objectives

Measurement Topic: Music Composition and Performance

- Perform 2- and 3- part songs
- Play scales and intervals
- Apply notation and composition skills (e.g., reorchestrate, revoice, or compose a short piece)
- Improvise a short piece
- Play a musical piece using expression
- Identify I, IV, and V chord patterns

Measurement Topic: Music Theory

- Read and notate music using a variety of notes and rests (e.g.; whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes)
- Identify and apply 2/4, 3/4, 4/4, 6/8, and alla breve meters
- Apply musical terms for dynamics, tempo, and articulation

Measurement Topic: Analysis of Music

- Distinguish between major and minor keys
- Establish criteria to be used in evaluating the quality of a performance
- Use musical terms to describe various musical styles, genres, or time periods
- Compare and contrast two musical pieces from the same style or genre using basic musical terminology
- Define characteristics of effective musical works

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Band

NHA Objectives

Measurement Topic: History, Culture, and Society

- Listen to music of other cultures and explore the role of music and musicians related to the cultures
- Describe the historical background, composer, genre, and style of music pieces being studied
- Analyze the roles that musicians play in the media
- Evaluate contemporary uses of music to influence societal changes (e.g.; campaign songs, songs of protest, etc.)
- Identify the origins of American musical genres

Measurement Topic: Real World Connections

- Respond to musical examples heard in class
- Evaluate a live musical performance
- Identify career opportunities in music

Measurement Topic: Integrated Studies

- Identify the physical properties of sound including frequency, amplitude, and wavelength
- Apply mathematical concepts to the rhythms encountered in music (e.g., fractions to meter, patterns to form or rhythm)
- Interpret a piece of music using art, poetry, writing, or dance

NHA CHOIR

Music

NATIONAL HERITAGE ACADEMIES CURRICULUM

Music

NHA EXEMPLARS

Music Expression

Music Composition and Performance
Music Theory
Analysis of Music

Music Awareness

History, Culture, and Society
Real World Connections
Integrated Studies

NHA Music Exemplar: Music Expression

The student will develop knowledge and a variety of skills in order to perform, create, read, and describe musical pieces through knowledge of basic musical concepts. Students will engage in both group and individual music-related tasks. They will use this knowledge to analyze, assess, judge merit and determine meaning from music, including their own.

Choir

NHA Objectives

Measurement Topic: Music Composition and Performance

- Perform 2- and 3- part songs
- Play scales and intervals
- Apply notation and composition skills (e.g., reorchestrate, revoice, or compose a short piece)
- Improvise a short piece
- Sing a musical piece using expression
- Identify I, IV, and V chord patterns

Measurement Topic: Music Theory

- Read and notate music using a variety of notes and rests (e.g.; whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes)
- Identify and apply 2/4, 3/4, 4/4, 6/8, and alla breve meters
- Apply musical terms for dynamics, tempo, and articulation

Measurement Topic: Analysis of Music

- Distinguish between major and minor keys
- Establish criteria to be used in evaluating the quality of a performance
- Use musical terms to describe various musical styles, genres, or time periods
- Compare and contrast two musical pieces from the same style or genre using basic musical terminology
- Define characteristics of effective musical works

NHA Music Exemplar: Music Awareness

The student will recognize the historical, cultural and social impact of music. They will be able to critically analyze and critique a variety of music from different eras, genres, and sources. Student will be exposed to a variety of music and determine the impact it had both locally and globally.

Choir

NHA Objectives

Measurement Topic: History, Culture, and Society

- Listen to music of other cultures and explore the role of music and musicians related to the cultures
- Describe the historical background, composer, genre, and style of music pieces being studied
- Analyze the roles that musicians play in the media
- Evaluate contemporary uses of music to influence societal changes (e.g.; campaign songs, songs of protest, etc.)
- Identify the origins of American musical genres

Measurement Topic: Real World Connections

- Respond to musical examples heard in class
- Evaluate a live musical performance
- Identify career opportunities in music

Measurement Topic: Integrated Studies

- Identify the physical properties of sound including frequency, amplitude, and wavelength
- Apply mathematical concepts to the rhythms encountered in music (e.g., fractions to meter, patterns to form or rhythm)
- Interpret a piece of music using art, poetry, writing, or dance

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Create and play simple rhythmic patterns with a steady beat • Create and sing a short melodic pattern • Imitate a four beat rhythmic pattern using percussion instruments or clapping • Imitate melodic patterns sung by another • Demonstrate call and response in music • Recall short songs and perform them with a steady beat

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Pattern ○ Beat • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognizing a beat ○ Singing a short song ○ Playing an instrument using correct form ○ Imitating a sound made by another ○ Identifying call and response ○ Singing a song with a recording
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Model short and long sounds vocally and instrumentally • Read beat icons and perform short patterns

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Vocal ○ Instrumental • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify short and long sounds ○ Identify beat icons
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify reasons for listening to music Identify the different contexts in which music is heard Use movement to demonstrate simple rhythmic and pitch patterns Distinguish between vocal, instrumental, and environmental sounds Distinguish between musical sounds that are high or low, fast or slow, loud or soft, happy or sad Compare and contrast singing, whispering, and speaking

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Sing Whisper Speak Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify places music is heard Imitate simple rhythmic and pitch patterns Define vocal, instrumental, and environmental Identify singing, whispering, and speaking
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
Kindergarten

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify “The Star-Spangled Banner” and “America the Beautiful” List two ways the Native Americans used music Identify different styles of music (e.g., Patriotic, folk, lullabies, or classical)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Anthem Native American Style Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify uses of music Define style
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Kindergarten

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Connect music to situations in daily life

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Connect • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify situations in which music is used
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrate a steady beat while singing songs • Perform a short ostinato to be sung or played with a familiar song or poem • Create and perform short rhythmic and melodic patterns using voice, clapping, or classroom instruments

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Beat ○ Ostinato ○ Pattern • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify a steady beat in a song ○ Repeat a short ostinato ○ Perform short rhythmic patterns
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify quarter notes, eighth notes, and quarter rests represented iconically in simple four beat patterns Match pitch patterns using the notes of the pentatonic scale (e.g., do-re-mi-sol-la)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Note Rest Scale Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify a musical note represented iconically Identify different pitches
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Recognize vocal and instrumental sounds Use movement to demonstrate changes in tempo, dynamics, and mood in music Compare and contrast patterns of a song and listen for repetition of patterns

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Vocal Instrumental Tempo Mood Repetition Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify a sound as being vocal or instrumental Identify changes in tempo, dynamics, and mood Recognize a pattern in a song
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify and describe the importance of music at home and other places in the community Identify different musical styles (e.g., jazz, folk, patriotic, or classical) Recall and perform short cultural songs

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Classical Jazz Folk Community Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify uses for music Define style in terms of music Sing along with a cultural song
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade One

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Demonstrate appropriate listening behavior during any performance • Identify musical professions (e.g., instrumentalist, vocalist, conductor)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Appropriate ○ Profession • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize appropriate behavior at a performance ○ Define the term profession
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Improvise a short melody (e.g., vocally, instrumentally) • Create and perform short rhythmic and melodic phrases • Use loud/soft dynamics when playing and singing • Perform an ostinato as an individual or in group sing • Interpret and follow the cues of a conductor in regards to tempo, dynamics, beginning, and ending

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Melody ○ Ostinato ○ Loud ○ Soft ○ Cue ○ Tempo • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Echo a short melody alone or with others ○ Perform patterns given vocally or instrumentally ○ Identify loud/soft dynamics in a musical piece ○ Identify an ostinato ○ Describe the role of a conductor
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Read and notate iconically quarter, eighth, and half notes, and quarter and half rests • Determine simple pitch patterns by using solfege and hand signs • Identify and classify groups of instruments (e.g., woodwinds, percussion, etc.) • Identify voices as child, adult male, or adult female

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Note ○ Rest ○ Woodwind ○ Percussion ○ Brass ○ Strings • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify symbols that represent notes and rests ○ Distinguish between high and low pitch ○ Identify common band and orchestral instruments (e.g., flute, clarinet, violin, trumpet, tuba, etc.) ○ Distinguish between different voices
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describe personal preference for musical works Compare two contrasting styles of composition using basic terms (e.g., high/low pitch, beat, repeated rhythmic patterns, fast/slow) Describe the mood and style of a variety of musical pieces

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Mood Pitch Beat Rhythm Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify simple traits from musical genres Determine the mood or style of a musical piece
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describe the role that music plays in different cultures (e.g, Greek, India, China) Identify instruments associated with different cultures Perform a dance from a different culture

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Culture Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Distinguish between American and other cultures
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify music for various special occasions and determine the role that it plays Demonstrate appropriate listening behavior during any performance Describe the roles that musicians play in the community

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Community Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Distinguish between music used for special occasions and music for enjoyment Determine appropriate listening behavior during a performance Identify local musicians
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Two

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify a specific emotion in a piece of music Identify the musical concepts of tone, repetition, and contrast and how they are used in other disciplines (e.g., tone of writing, patterns in math, contrasting two characters in a book)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Tone Repeating patterns Emotion
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Perform ostinatos on classroom instruments independently and with a group • Perform vocally using appropriate phrasing • Sing rounds and ostinatos • Improvise a short piece using non-traditional mediums (e.g., household sounds, environmental sounds, etc.) • Compose lyrics to match a melody or rhythm • Use classroom instruments to create an accompaniment for readings or dramatizations

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Ostinato ○ Phrase ○ Lyric ○ Accompaniment • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Perform ostinatos using voice or clapping ○ Define phrasing in music ○ Improvise a short melody ○ Define lyric ○ Create a short melody
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Read and notate quarter, eighth, half, dotted quarter and half, and whole notes, and quarter, half, and whole rests • Read and perform pitch patterns and songs using solfege and letter names of the treble clef • Identify strong and weak beats and apply to 4/4 and 3/4 meter

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Note ○ Rest ○ Treble Clef ○ Beat ○ Meter • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify quarter eighth, half, dotted quarter and half, and whole notes ○ Identify pitch patterns ○ Identify the beat in a piece of music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Describe changes in tempo using musical terms and movement • Identify orchestral instruments by sight and by sound • Explain personal preference for musical works by contrasting two styles of composition

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Tempo ○ Violin ○ Cello ○ Viola ○ Style • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Define the musical element of tempo ○ Determine the qualities of an orchestral instruments ○ Describe personal preference for music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Perform music and dances from different cultures • Compare music for special occasions in the United States to that of other world cultures

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Culture • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify songs from different cultures ○ Identify music used for special occasions in the United States
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Three

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify production careers associated with music (e.g., set designer, sound engineer, lighting technician, vocal coach, etc.)

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Career Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify careers associated with music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Three

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify terms that apply to music as well as reading, writing, and mathematics (e.g., tone, pattern, phrase, meter, etc.)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Tone Phrase Meter Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify musical terms (e.g., tone, pattern, phrase, meter, etc.)
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Play musical patterns with correct rhythm, tempo, and dynamics by rote and by reading • Play pitched classroom instruments using correct techniques (e.g., recorders, xylophone, or keyboard) • Sing or play partner songs, rounds, ostinatos, and descants using dynamics and phrasing • Improvise a variation of a familiar song or musical phrase

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Rhythm ○ Tempo ○ Dynamics ○ Round ○ Ostinato ○ Descant • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognizing musical patterns ○ Use pitched classroom instrument ○ Identify partner songs ○ Recognize a variation of a familiar songs or musical phrase
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Read and notate quarter, dotted quarter, eighth, half, dotted half, sixteenth, and whole notes, and quarter, half, and whole rests in duple and triple meters • Read and perform songs from notation • Identify and define the musical symbols for <i>fermata</i>, <i>octave</i>, and <i>D.C. al fine</i> • Identify the symbols for sharps, flats, and naturals • Define the dynamic markings <i>forte</i>, <i>mezzo forte</i>, <i>piano</i>, <i>mezzo piano</i>, <i>crescendo</i>, and <i>diminuendo (decrescendo)</i> • Identify AB, ABA, theme and variations, and rondo forms

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Note ○ Rest ○ Fermata ○ Octave ○ D. C. al Fine ○ Dynamics ○ Form • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize quarter, dotted quarter, eighth, half, and whole rests ○ Perform songs by rote ○ Recognize musical symbols and dynamic markings ○ Recognize different forms
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Describe tempo, dynamics, articulation, and rhythmic and melodic elements Classify singers based on vocal range and performance style (e.g., SATB, opera, country, jazz, etc.)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Tempo Dynamics Articulation Rhythm Melody Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize tempo, dynamics, articulation, and rhythmic and melodic elements Recognized different voice range and performance style
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Four

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify musical genres, musicians, or songs unique to your state or region

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Genre Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Recognize a variety of musical genres
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify local musicians and define their role in the community

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Community Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the use of music within a community
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Four

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Compose a short musical piece based on a piece of artwork (e.g., painting, sculpture, etc.) • Analyze how understanding of music could enhance understanding in another discipline (e.g., meter and fractions, musical phrases and language phrases)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Meter ○ Phrasing • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Notate a musical pattern or phrase ○ Identify areas of music that are used in other disciplines
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Perform 2- and 3- part songs • Improvise accompaniments on classroom instruments (e.g., mallet instruments, rhythm instruments, keyboards, etc.) • Identify and perform intervals in major scales (e.g., half/whole, step/skip, or 2nd/3rd)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Improvise ○ Accompaniment ○ Step ○ Skip • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Perform a song with a group ○ Play accompaniments on a classroom instrument ○ Read and write music notation
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Identify and apply key signatures • Read and notate a short melody • Identify and apply meters • Define and apply dynamic markings (e.g., forte, piano, decrescendo, crescendo) • Identify and apply the musical symbol for <i>staccato</i>, <i>accent</i>, <i>formatta</i>, and repeat signs

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Key ○ Melody ○ Meter ○ Dynamic • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the notes in a given scale ○ Read musical notation ○ Define meter ○ Identify dynamic markings
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Distinguish between major and minor keys • Identify the form of longer musical pieces • Compare pieces in terms of tone and mood

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Major ○ Minor ○ Form ○ Tone ○ Mood • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify the mood of a piece of music ○ Define form ○ Identify the tone of a piece of music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Listen to music of other cultures and explore the role of music and musicians related to the cultures • Identify instruments associated with world cultures (e.g; sitar, maracas, accordion) • Analyze the roles that musicians play in the media

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Sitar ○ Maraca ○ Accordion ○ Media • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify music from another culture ○ Identify popular musicians that students have heard about in the media
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Five

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Report on a community musician • Evaluate a live musical performance

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Community • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify community musicians ○ Determine criteria for evaluating a musical performance
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Five

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Interpret music using dance, art, or writing

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the mood, tone, and theme of a piece of music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Six

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Sing or play scales and intervals • Improvise solo rhythms on a single pitch • Compose and notate short melodic patterns

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Half Step ○ Whole Step ○ Major Scale • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identify intervals ○ Define melodic patterns ○ Identify rhythms on a single pitch in a song
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Sight read music written in major keys • Sight read music in duple meter • Apply musical symbols found in scores

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Key Signatures ○ Forte ○ Piano ○ Staccato • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Read and notate short melodies ○ Identify and apply meters ○ Identify musical symbols
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify basic musical form, style, and genre in musical pieces Identify musical elements that convey a certain emotion or mood Establish criteria to be used in evaluating the quality of a performance

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Major Scale, Minor Scale Form Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the form of a musical piece Distinguish between Major and Minor Identify tone or mood of music Identify criteria for evaluating a performance
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify the cultural origin and evolution of specific instruments (e.g., drums, guitar, keyboard, band, or orchestral instruments) Describe the historical background, composer, genre, and style of music pieces being studied

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Origin Composer Genre Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify orchestral instruments Name classical, modern, and baroque composers
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Six

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Respond to musical examples heard in class

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Describe a musical piece heard in class
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Six

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify the physical properties of sound including frequency, amplitude, and wavelength Apply mathematical concepts to the rhythms encountered in music (e.g., fractions to meter, patterns to form or rhythm)

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Frequency Amplitude Wavelength Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify mathematical concepts encountered in music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Sing or play a musical piece using a score while following the cues of a conductor • Apply notation and composition skills (e.g., reorchestrate, revoice, or compose a short piece) • Improvise a short piece

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Staff ○ Stanza ○ Measure ○ Pitch ○ Repeat ○ Voice ○ Range ○ Transpose • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Determining location within a musical piece ○ Reading written notation ○ Performing an improvised piece
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Read and notate music using a variety of notes and rests (e.g.; whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes) • Notate melodies from aural examples • Describe elements of non-standard notation

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Quarter note ○ Half note ○ Eighth note ○ Whole note ○ Pitch ○ Staff ○ Notate • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Reading and notating simple patterns ○ Repeating back a melody from an aural example ○ Identify non-standard notation
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Use musical terms to describe various musical styles, genres, or time periods • Compare and contrast two musical pieces from the same style or genre using basic musical terminology

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Jazz ○ Classical ○ Orchestral ○ Choral ○ Dynamics ○ Tempo ○ Range • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Describing a musical style, genre, or time period ○ Identify the difference between two pieces from the same style or genre
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Seven

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Evaluate contemporary uses of music to influence societal changes (e.g.; campaign songs, songs of protest, etc.) Identify performing artists that influenced American culture

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Popular Historical Society Protest Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify campaign songs, songs of protest, etc. Identify possible influences on music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Seven

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify career opportunities related to American music

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Composer Performer Arranger Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify music related careers
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
 Grade Seven

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Interpret a piece of music using art, poetry, or writing

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Shape ○ Color ○ Texture ○ Movement • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Identifying a visual map of a piece of music ○ Describing a piece of music
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Composition and Performance
 Grade Eight

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> • Sing or play a musical piece using expression • Sing or play a musical piece from memory • Identify I, IV, and V chord patterns

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> • Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> ○ Harmonic Accompaniment ○ Meter ○ Arranging ○ Form • Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> ○ Recognize and use dynamics and phrasing in musical pieces ○ Identify chords and intervals ○ Sing or play a notated musical piece
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Theory
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify and apply 2/4, 3/4, 4/4, 6/8, and alla breve meters Apply musical terms for dynamics, tempo, and articulation

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Fortissimo Mezzoforte Mezzopiano Pianissimo Allegro Largo Andante Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the meter in a musical piece Define musical terms for dynamics, tempo, and articulation
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC EXPRESSION
Measurement Topic: Music Analysis
Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify characteristics of effective performance Define characteristics of effective musical works

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Style Meter Form Intonation Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Define and use a variety of musical terms
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: History, Culture, and Society
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify musicians within American genres (e.g.; jazz, blues, hip hop, country, etc.) Identify the origins of American musical genres

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Genre Origin Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify musical genres unique to the United States
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Real World Connections
 Grade Eight

Evidence shows student has met or exceeded the learning target

Evidence shows misunderstanding, misconceptions, or omissions

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Identify career opportunities in music within other cultures

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Career Producer Composer Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify career opportunities in music within American culture
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

MUSIC AWARENESS
Measurement Topic: Integrated Studies
Grade Eight

Evidence shows student has met or exceeded the learning target

4.0	In addition to score 3.0, in-depth inferences and applications that go beyond what was taught
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
Score 3.0	Student exhibits no major errors or omissions and demonstrates understanding by: <ul style="list-style-type: none"> Compare the elements of music and art

Evidence shows misunderstanding, misconceptions, or omissions

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
Score 2.0	Student exhibits major errors or omissions with score 3.0 elements. No major errors or omissions regarding the simpler details and processes such as: <ul style="list-style-type: none"> Recognizing and recalling specific terminology such as: <ul style="list-style-type: none"> Form Mood Texture Performing basic processes and recognizing and recalling the accuracy of basic solutions and information such as: <ul style="list-style-type: none"> Identify the elements of art
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
1.0	With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

SECTION E

METHODS OF PUPIL ASSESSMENT

METHODS OF PUPIL ASSESSMENT

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.5, the Academy shall properly administer all state-mandated academic assessments identified in the Code, as applicable, and all academic assessments identified in the Public School Academy Chartering Policies adopted by the University Board, as applicable, in accordance with the requirements detailed in the Master Calendar annually issued by the Center.

The Academy shall authorize the Center to have access to the Academy’s Student/School Data Applications through the Center for Educational Performance and Information and to the electronic reporting system administered by the Michigan Department of Education to access the Academy’s state assessment results, as applicable. The Academy shall ensure that those involved with the administration of these assessments are properly trained and adhere to the ethical standards and testing procedures associated with these assessments.

Academic Assessments to Be Administered:

<u>Grade(s)</u>	<u>Academic Assessment(s)</u>
Grades 2-8	Assessments as identified in Schedule 7b including all state-mandated assessments.

SECTION F

APPLICATION AND ENROLLMENT OF STUDENTS

APPLICATION AND ENROLLMENT OF STUDENTS

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Sections 6.6 and 6.16, the Academy shall comply with the application and enrollment requirements identified in this Schedule.

Enrollment Limits

The Academy will offer kindergarten through eighth grade. The maximum enrollment shall be 825 students. The Academy Board will annually adopt maximum enrollment figures prior to its application and enrollment period.

Requirements

Section 504 of the Code provides that public school academies shall not charge tuition and shall not discriminate in its pupil admissions policies or practices on the basis of intellectual or athletic ability, measures of achievement or aptitude, status as a student with a disability, or any other basis that would be illegal if used by a Michigan school district. However, a public school academy may limit admission to pupils who are within a particular range of age or grade level or on any other basis that would be legal if used by a Michigan school district and may give enrollment priority as provided below.

- Academy enrollment shall be open to all individuals who reside in Michigan. Except for a foreign exchange student who is not a United States citizen, a public school academy shall not enroll a pupil who is not a Michigan resident.
- Academy admissions may be limited to pupils within a particular age range/grade level or on any other basis that would be legal if used by a Michigan school district.
- The Academy shall allow any pupil who was enrolled in the Academy in the immediately preceding school year to enroll in the Academy unless the appropriate grade is not offered.
- No student may be denied participation in the application process due to lack of student records.
- If the Academy receives more applications for enrollment than there are spaces available, pupils shall be selected for enrollment through a random selection drawing.

The Academy may give enrollment priority to one (1) or more of the following:

- A sibling of a pupil enrolled in the Academy.
- A pupil who transfers to the Academy from another public school pursuant to a matriculation agreement between the Academy and other public school that provides for this enrollment priority, if all of the following requirements are met:
 1. Each public school that enters into the matriculation agreement remains a separate and independent public school.
 2. The Academy shall select at least 5% of its pupils for enrollment using a random selection process.

3. The matriculation agreement allows any pupil who was enrolled at any time during elementary school in a public school that is party to the matriculation agreement and who was not expelled from the public school to enroll in the public school academy giving enrollment priority under the matriculation agreement.
- A child, including an adopted child or legal ward, of a person who is employed by or at the Academy or who is on the Academy Board.

Matriculation Agreement

- The Academy Board may enter into a matriculation agreement with another public school pursuant to section 504(4) of the Code.
- However, before the Academy Board approves a matriculation agreement, the Academy shall provide a draft copy of the agreement to the Center for review.
- Any matriculation agreement entered into by the Academy shall be added to this Schedule 7f through a contract amendment approved in accordance with Article IX in the Terms and Conditions of this Contract.
- Until the matriculation agreement is incorporated into this Contract, the Academy is prohibited from granting an enrollment priority to any student pursuant to that matriculation agreement.

Application Process

- The Academy shall make reasonable effort to advertise its enrollment openings.
- The Academy's open enrollment period shall be a minimum of two weeks (14 calendar days) in duration and shall include evening and weekend times.
- The Academy shall accept applications all year. If openings occur during the academic year, students shall be enrolled. If openings do not exist, applicants shall be placed on the official waiting list. The waiting list shall cease to exist at the beginning of the Academy's next open enrollment period.
- In the event there are openings in the class for which students have applied, students shall be admitted according to the official waiting list. The position on the waiting list shall be determined by the random selection drawing. If there is no waiting list, students shall be admitted on a first-come, first-served basis.
- The Academy may neither close the application period nor hold a random selection drawing for unauthorized grades prior to receipt of written approval from the Center.

Legal Notice or Advertisement

- The Academy shall provide legal notice or advertisement of the application and enrollment process in a local newspaper of general circulation. A copy of the legal notice or advertisement shall be forwarded to the Center.
- At a minimum, the legal notice or advertisement must include:

1. The process and/or location(s) for requesting and submitting applications.
 2. The beginning date and the ending date of the application period.
 3. The date, time, and place the random selection drawing(s) will be held, if needed.
- The legal notice or advertisement of the application period shall be designed to inform individuals that are most likely to be interested in attending the Academy.
 - The Academy, being an equal opportunity educational institution, shall be committed to good-faith affirmative action efforts to seek out, create and serve a diverse student body.

Re-enrolling Students

- The Academy shall notify parents or guardians of all enrolled students of the deadline for notifying the Academy that they wish to re-enroll their child.
- If the Academy Board has a sibling preference policy, the re-enrollment notice must also request that the parent or guardian indicate whether a sibling(s) seeks to enroll for the upcoming academic year.
- An enrolled student who does not re-enroll by the specified date can only apply to the Academy during the application period for new students.
- An applicant on the waiting list at the time a new application period begins must reapply as a new student.
- After collecting the parent or guardian responses, the Academy must determine the following:
 1. The number of students who have re-enrolled per grade or grouping level.
 2. The number of siblings seeking admission for the upcoming academic year per grade.
 3. If space is unavailable, the Academy must develop a waiting list for siblings of re-enrolled students.
 4. The number of spaces remaining, per grade, after enrollment of current students and siblings.

Random Selection Drawing

A random selection drawing is required if the number of applications exceeds the number of available spaces. Prior to the application period, the Academy shall:

- Establish written procedures for conducting a random selection drawing.
- Establish the maximum number of spaces available per grade or age grouping level.
- Establish the date, time, place and person to conduct the random selection drawing.
- Notify the Center of both the application period and the date of the random selection drawing, if needed. The Center may have a representative on-site to monitor the random selection drawing process.

The Academy shall use a credible, impartial individual who is not employed by, under contract with, a member of the Board of, or otherwise affiliated with the Academy to conduct the random selection drawing. Further, the Academy shall:

- Conduct the random selection drawing in a manner that is open to parents, community members and members of the public who want to observe the process.
- Use numbers, letters, or another system that guarantees fairness and does not give an advantage to any applicant.

The Academy shall notify applicants not chosen in the random selection drawing that they were not selected and that their name has been placed on the Academy's official waiting list for openings that may occur during the academic year. Students shall appear on the official waiting list in the order they were selected in the random selection drawing.

SECTION G

SCHOOL CALENDAR AND SCHOOL DAY SCHEDULE

SCHOOL CALENDAR AND SCHOOL DAY SCHEDULE

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.7, the Academy shall comply with the school calendar and school day schedule requirements identified in this schedule.

School Calendar

The Academy's school calendar shall comply with Sections 1175, 1284 and 1284a, if applicable, of the Code. The Academy's school calendar shall also comply with the minimum requirements set forth in Section 101 of the School Aid Act of 1979 (MCL 388.1701). The Academy Board must submit a copy of the Academy's school calendar to The Center for Charter Schools ("The Center") in accordance with the Master Calendar of Reporting Requirements.

School Day Schedule

The Academy Board must structure the Academy's school day schedule to meet the required number of instructional days and hours. The Academy Board must submit the school day schedule to The Center prior to the commencement of each academic year.

SECTION H

AGE OR GRADE RANGE OF PUPILS

AGE OR GRADE RANGE FOR PUPILS TO BE ENROLLED

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.8, the Academy shall comply with the age or grade ranges as stated in this schedule.

The Academy will enroll students in kindergarten through eighth grade. The Academy may add grades with the prior written approval of the authorizing body.

Students of the Academy will be children who have reached the age of 5 by the dates outlined in the Revised School Code.

SCHEDULE 8

**INFORMATION AVAILABLE TO
THE PUBLIC AND TO THE CENTER**

INFORMATION AVAILABLE TO THE PUBLIC AND THE CENTER

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article XI, Section 11.8, the Academy shall comply with this Schedule.

Information Available to the Public and The Center

The Code provides that the board of directors of a public school academy shall make information concerning its operation and management available to the public and to the Center in the same manner as is required by state law for school districts.

The Code provides that the board of directors of a public school academy shall collect, maintain, and make available to the public and The Center, in accordance with applicable law and the Contract, at least all of the following information concerning the operation and management of the Academy:

1. A copy of the Academy's Charter Contract.
2. A list of currently serving members of the Academy Board, including name, address, and term of office.
3. Copies of policies approved by the Academy Board.
4. The Academy Board meeting agendas and minutes.
5. The budget approved by the Academy Board and of any amendments to the budget.
6. Copies of bills paid for amounts of \$10,000.00 or more, as submitted to the Academy Board.
7. Quarterly financial reports submitted to The Center.
8. A current list of teachers and administrators working at the Academy that includes individual salaries as submitted to the Registry of Educational Personnel.
9. Copies of the teaching or administrator's certificates or permits of current teaching and administrative staff.
10. Evidence of compliance with the criminal background and records checks and unprofessional conduct check required under sections 1230, 1230a, and 1230b of the Code for all teachers and administrators working at the Academy.
11. Curriculum documents and materials given to The Center.
12. Proof of insurance as required by the Contract.
13. Copies of facility leases or deeds, or both.
14. Copies of any equipment leases.
15. Copies of any management contracts or services contracts approved by the Academy Board.
16. All health and safety reports and certificates, including those relating to fire safety, environmental matters, asbestos inspection, boiler inspection, and food service.
17. Any management letters issued as part of the Academy's annual financial audit, required under Article VI, Section 6.11 of the Terms and Conditions of this Contract.
18. Any other information specifically required under the Code.

Information to be Provided by the Academy's Educational Service Provider (if any)

Pursuant to the Terms and Conditions of this Contract, including Article III, Section 3.6, the University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. Any Educational Service Provider Management Agreement entered into by the Academy must contain a provision requiring the educational service provider to provide to the Academy Board information concerning the operation and management of the Academy (including without limitation, but not limited to, the items identified above and annually the information that a school district is required to disclose under Section 18(2) of the State School Aid Act of 1979, MCL 388.1618) available to the Academy Board in order to enable the Academy to fully satisfy its obligations under Section 11.8(a) of the Terms and Conditions.

AMENDMENT NO. 1

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 1

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), the parties agree to amend the Contract as follows:

- 1.) Amend Schedule 7, Section e: Methods of Pupil Assessment, by replacing the materials contained therein with the materials attached as Tab 1.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2016.



Dated: 10-20-16

By: Cynthia M. Schumacher, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 10/11/16

By: Roday Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 1

Tab 1

METHODS OF PUPIL ASSESSMENT

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.5, the Academy shall properly administer all state-mandated academic assessments identified in the Code, as applicable, and all academic assessments identified in the Public School Academy Chartering Policies adopted by the University Board, as applicable, in accordance with the requirements detailed in the Master Calendar annually issued by the Center.

The Academy shall authorize the Center to have access to the Academy's Student/School Data Applications through the Center for Educational Performance and Information and to the electronic reporting system administered by the Michigan Department of Education to access the Academy's state assessment results, as applicable. The Academy shall ensure that those involved with the administration of these assessments are properly trained and adhere to the ethical standards and testing procedures associated with these assessments.

Academic Assessments to Be Administered:

Assessments as identified in Schedule 7b and all state-mandated assessments.

AMENDMENT NO. 2

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

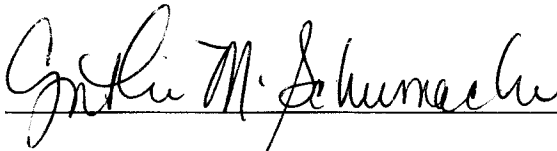
CONTRACT AMENDMENT NO. 2

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend Schedule 7, Section f: Application and Enrollment of Students, by inserting at the end of this Section the Matriculation Agreement, attached as Tab 1.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of January 1, 2017.



Dated: 3/14/17

By: Cynthia M. Schumacher, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 3/7/17

By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 2

Tab 1

Matriculation Agreement

This Matriculation Agreement ("Agreement") is entered into as of the 1st day of January, 2017, between Grand River Preparatory High School, a Michigan public school ("Receiving School") and Eagle Crest Charter Academy, a Michigan school of excellence ("Sending School") (both parties referred to as "Schools").

Both the Sending School and the Receiving School are separate and independent public schools, organized as such under the Michigan Revised School Code (the "Code").

Because the Sending School does not offer an educational program for high school students and the Receiving School desires to provide an enrollment preference for students entering its high school program, the parties desire to establish this arrangement for the matriculation of qualifying students from the Sending School to the Receiving School.

Therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, it is mutually agreed as follows:

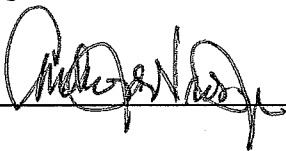
- 1. Term.** This Agreement shall be effective as of January 1, 2017, provided that it has been approved by each School's governing board and the Sending School's authorizing body. This shall be a perpetual contract unless rescinded by either party by adopting a board resolution.
- 2. Qualifying Students.** Students who meet all of the following requirements are deemed to be "Qualifying Students" for enrollment priority under this Agreement:
 - a. the student was enrolled in and attended the Sending School at any time during elementary school;
 - b. the student was not expelled from the Sending School;
 - c. the student has completed 8th grade from any school, including home school; and
 - d. the student is eligible to enroll in a public school in Michigan.
- 3. Application for matriculation.** Qualifying Students who desire an enrollment priority in the Receiving School must complete the Receiving School application for the applicable school year and submit it to the Receiving School during its Open Enrollment Period as set forth in the Receiving School's Admission and Enrollment policies, which shall be available in the offices of both the Sending and Receiving School.
- 4. Enrollment Priority.** The enrollment priority of Qualifying Students shall be

determined according to the Receiving School's Admission and Enrollment Policy.

5. **Enrollment.** Qualifying Students must attend school at the Receiving School on the first day of school in order to be enrolled. Any Qualifying Student who does not attend the first day of school and who does not obtain an excused absence from the Receiving School before the end of that school day, shall forfeit his or her priority to enroll in the Receiving School.
6. **Record Transfer.** Upon receipt of a properly completed records release form from the Receiving School and parent of the student, the Sending School shall transfer all student records of Qualifying Students to the Receiving School no later than 30 days after receipt of the request for transfer of records from the Receiving School.
7. **Termination.** Either party may terminate this Agreement at any time for any reason upon providing ninety (90) days' written notice. If such notice is given more than ninety (90) days before the end of the Open Enrollment Period, there shall be no enrollment priority for Qualifying Students for the subsequent school year. If the notice is given any time thereafter, the Qualifying Students who applied for enrollment priority at the Receiving School shall receive the priority for the subsequent school year pursuant to the terms of this Agreement. This Agreement shall be terminated automatically if the Sending School's Charter Contract is terminated or revoked.
8. **Entire Agreement.** This Agreement constitutes the entire agreement and understanding of the parties and there are no other promises, assurances or terms of agreement among the parties other than those written herein. Nothing in this Agreement shall give rights to any other person. This agreement shall not be modified except in writing and signed by each of the parties.

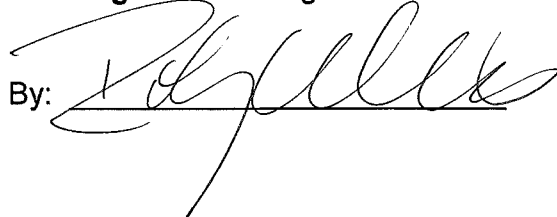
IN WITNESS WHEREOF, the parties have executed this Agreement on the date shown below.

Receiving School: Grand River Preparatory High School

By: 

Date: 11-17, 2017

Sending School: Eagle Crest Charter Academy

By: 

Date: 1-10, 2017

AMENDMENT NO. 3

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 3

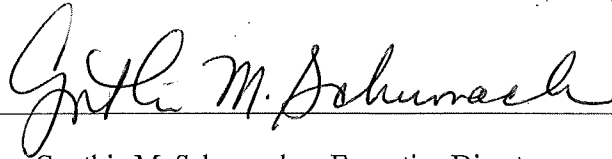
EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend the Terms and Conditions of Contract by inserting at the end of Section 1.1. Certain Definitions, the definitions attached as Tab 1.
- 2.) Amend Article II: Relationship Between the Academy and the University Board, Article III: Role of the University Board as Authorizing Body, Article IX: Amendment, Article X: Contract Revocation, Termination, and Suspension, and Article XII: General Terms, of the Terms and Conditions of Contract by inserting at the end of these Articles the corresponding language attached as Tab 2.
- 3.) Amend Section 2.1. Constitutional Status of Central Michigan University, Section 10.3. Automatic Amendment or Revocation and Procedures Initiated by State of Michigan, Section 10.4. Material Breach of Contract and Automatic Termination Caused by Placement of Academy in State School Reform/Redesign School District, Section 10.5. Grounds and Procedures for Academy Termination of Contract, Section 10.6. Grounds and Procedures for University Termination of Contract, Section 10.7(d). University Board’s Contract Reconstitution Provision, and Section 11.1. The Academy Budget, of the Terms and Conditions of Contract by replacing the language contained within these Sections with the corresponding language attached as Tab 3.
- 4.) Amend Schedule 1: Restated Articles of Incorporation, by replacing the materials contained therein with the materials attached as Tab 4.
- 5.) Amend Schedule 2: Amended Bylaws, by inserting at the end of Article XI: Amendments, the language attached as Tab 5.
- 6.) Amend Schedule 7, Section b: Educational Goal and Related Measures, by replacing the materials contained therein with the materials attached as Tab 6.

This space left intentionally blank.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2017.



Dated: 8/25/17

By: Cynthia M. Schumacher, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 8-1-17

By: Robyn Allison - Board President
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 1

- (x) “Accountability Plan” means a Community District accountability plan established, implemented and administered by the State School Reform/Redesign Officer under section 390 of the Code, MCL 380.390.
- (y) “Community District” means a community school district created under part 5B of the Code, MCL 380.381 et seq.
- (z) “State School Reform/Redesign Office” means the office created within the Michigan Department of Technology Management and Budget by Executive Reorganization Order 2015-02 and codified at MCL 18.445.
- (aa) “State School Reform/Redesign Officer” means the officer described in Section 1280c(9) of the Revised School Code, 1976 PA 451, MCL 380.1280c, and authorized to act as the superintendent of the State School Reform/Redesign District under Section 1280c(6)(b) of the Revised School Code, 1976 PA 451, MCL 380.1280c.

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 2

Section 2.5. Academy Site Is Former Site of Closed Community District School; State School Reform/Redesign Officer Approval Required. If the Academy's proposed site is located within the geographical boundaries of a Community District and is a site that was a former site of a Community District school closed by the State School Reform/Redesign Office within the last 3 school years, then the University Board shall not issue the Contract unless (a) the new Academy site has a substantially different leadership structure and curricular offering than the previous Community District school that operated at the site; and (b) the State School Reform/Redesign Officer has approved the Academy's use of the site.

Section 2.6. New Public School Academies Located Within the Boundaries of a Community District. If the circumstances listed below in (a) and (b) or (c) apply to the Academy's site, the Academy represents to the University Board, intending that the University Board rely on such representation as a precondition to issuing a contract for a new public school academy, that the Academy will have a substantially different governance, leadership and curriculum than the public school previously operating at the site:

- (a) The Academy's proposed site is the same location as a public school that (i) is currently on the list of the public schools in this State that the State School Reform/ Redesign Office has determined to be among the lowest achieving 5% of all public schools, under Section 1280c(1) of the Code; or (ii) has been on the list during the immediately preceding 3 school years.
- (b) If an Accountability System has been in effect for at least 3 full school years, the Academy's proposed site is at the same location as a public school that has been assigned a grade of "F" under the Accountability System for 3 of the preceding 5 school years; or
- (c) The Academy's proposed site is the same location of another public school academy, urban high school academy, school of excellence or strict discipline academy whose contract was revoked or terminated by an authorizing body.

Section 3.10. Reimbursement of University Board Services. The University Board shall be reimbursed for the actual cost of University services associated with responding to third party subpoenas and freedom of information act (FOIA) requests under the following circumstances:

If the University receives a subpoena or FOIA request from a third party (including the Academy, its counsel, the Academy's ESP or its counsel) demanding the production of Academy documents related to pending litigation or proceedings involving the Academy, the Academy's ESP (or any subcontractor of the ESP or other contractors of the Academy) or a third party, the University may charge the Academy for the actual cost of the services associated with the University's response to the subpoena or FOIA request(s) (including actual attorney's fees in fulfilling the request). The parties agree that the Academy may reduce or avoid the obligation to pay for services by the University Board associated with such responses by directly producing Academy documents to the requesting party.

Section 9.6. Emergency Action on Behalf of University Board. Notwithstanding any other provision of this Contract to the contrary, the contents of this Section shall govern in the event of an emergency situation that arises between meetings of the University Board. An emergency situation shall be deemed to occur if the University President, in his or her sole discretion, determines that the facts and circumstances warrant that emergency action take place before the next meeting of the University Board. Upon the determination that an emergency situation exists, the University President may temporarily take action on behalf of the University Board with regard to the Academy or the Contract, so long as such action is in the best interest of the University Board and the University President consults with the University Board Chairperson prior to taking the intended actions. When acting during an emergency situation, the University President shall have the authority to act in place of the University Board, and such emergency action shall only be effective in the interim before the earlier of (a) rejection of the emergency action by the Chairperson of the University Board; or (b) the next meeting of the University Board. The University President shall immediately report such action to the University Board for confirmation at the next meeting so that the emergency action continues or, upon confirmation by the University Board, becomes permanent.

Section 10.9. Appointment of Conservator/Trustee. Notwithstanding any other provision of the Contract, when the University Board determines that conditions or circumstances exist to lead the University Board to believe that the health, safety, educational or economic interest of the Academy or its students are at risk, the University Board may take immediate action against the Academy by appointing a conservator/trustee to manage the day to day operations of the Academy in place of the Academy Board for a definitive period of time. A conservator/trustee appointed by the University Board shall have all the powers and authority of the Academy Board under this Contract and Applicable Law. Upon the appointment of a conservator/trustee, the appointment and term of office for each Academy Board member shall be automatically suspended and the conservator/trustee shall act in the place and stead of the Academy Board and its members. The Center Director shall provide the Academy Board with a copy of the University Board's appointment. All Academy Board members, officers, employees, consultants and vendors (including any ESP and its members, officers, employees, consultants and subcontractors) shall cooperate with the conservator/trustee and provide the conservator/trustee with requested information or documentation in a timely manner. At the sole discretion of the University Board, the University Board shall rescind the appointment of the conservator/trustee and return governance and operational control of the Academy to the Academy Board when the conditions or circumstances leading the University Board to believe the health, safety, educational or economic interest of the Academy or its students are no longer at risk. The Center Director shall work with the conservator/trustee and the Academy Board to facilitate the appointment of the conservator/trustee and the transition back from conservator/trustee to Academy Board governance.

Section 12.17. Termination of Responsibilities. Upon termination or revocation of the Contract, the University Board or its designee shall have no further obligations or responsibilities under this Contract to the Academy or any other person or persons in connection with this Contract. Upon termination or revocation of the Contract, the Academy may amend its articles of incorporation or bylaws as necessary to allow the Academy Board to: (a) take action to appoint Academy Board members in order to have a quorum necessary to take Academy Board action; or (b) effectuate a dissolution, provided that the Academy Board may not amend the articles of incorporation with regard to the disposition of assets upon dissolution.

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 3

Section 2.1. Constitutional Status of Central Michigan University. Central Michigan University is a constitutionally established body corporate operating as a state public university. The University Board is an authorizing body as defined by the Code. In approving this Contract, the University Board voluntarily exercises additional powers given to the University under the Code. Nothing in this Contract shall be deemed to be any waiver of Central Michigan University's powers or independent status and the Academy shall not be deemed to be a part of Central Michigan University. If applicable, the University Board has provided to the State School Reform/Redesign Officer the accreditation notice required under Section 551.

Section 10.3. Automatic Amendment Of Contract; Automatic Termination of Contract If All Academy Sites Closed Or Placed In State School Reform/Redesign District; Voluntary Joint Termination of Contract Based On Economic Hardship. Except as otherwise provided in this Section 10.3, if the University Board is notified by the State School Reform/Redesign Officer that either (i) an Academy site is subject to closure under section 507 of the Code, MCL 380.507 (“State’s Automatic Closure Notice”), or (ii) an Academy site is being placed in the State School Reform/Redesign District (“State’s Reform District Notice”) pursuant to section 1280c(6) of the Code, MCL 380.1280c, then this Contract shall automatically be amended to eliminate the Academy’s authority to operate certain age and grade levels at the site or sites identified in the State’s Automatic Closure Notice or the State’s Reform District Notice. If the State’s Automatic Closure Notice or State’s Reform District Notice includes all of the Academy’s existing sites, then this Contract shall automatically be terminated at the end of the current school year in which either the State’s Automatic Closure Notice or the State’s Reform District Notice is received without any further action of the University Board or the Academy. If the Center Director determines, in his or her discretion, that either the closure of one or more Academy sites, or the placement of one or more Academy sites in the State School Reform/Redesign District, creates a significant economic hardship for the Academy as a going concern, then the Center Director may recommend that the University Board terminate the Contract at the end of the current school year. The University Board’s revocation procedures set forth in Section 10.7(c) do not apply to an automatic termination initiated by the State School Reform/Redesign Officer or a termination by the University Board under this Section 10.3.

Following receipt of the State’s Automatic Closure Notice or the State’s Reform District Notice, the Center Director shall forward a copy of the notice to the Academy Board and request a meeting with the Academy Board representatives to discuss the Academy’s plans and procedures for the elimination of certain age or grade levels at the identified site or sites, or if all of the Academy’s existing sites are included in that notice, then wind-up and dissolution of the Academy corporation at the current school year. All Academy inquiries and requests for reconsideration of the State’s Automatic Closure Notice or the State’s Reform District Notice, including the granting of any hardship exemption rescinding the State’s Automatic Closure Notice, shall be directed to the State School Reform/Redesign Officer, in a form and manner determined by the State School Reform/Redesign Office or the Michigan Department of Technology Management and Budget.

If the State School Reform/Redesign Officer rescinds the State’s Automatic Closure Notice or the State’s Reform District Notice for an Academy site or sites, the Academy is not required to close the identified site(s), but shall present to the Center a proposed Contract amendment incorporating the State School Reform/Redesign Officer’s school improvement plan, if applicable, for the identified site(s).

Section 10.4. Material Breach of Contract; Termination of Contract By University Board Caused By State School Reform/Redesign Officer Order. If the University Board receives notice that (i) an order has been issued by the State School Reform/Redesign Officer under Section 1280c(2) of the Code, MCL 380.1280c(2), placing an Academy site or sites under the supervision of the State School Reform/Redesign Officer; or (ii) an order is issued by the State School Reform/Redesign Officer appointing a Chief Executive Officer to take control of an Academy site or sites pursuant to Section 1280c(7) of the Code, MCL 380.1280c(7), the Center Director may, at his or her discretion, deem such actions a material breach of this Contract. If the Center Director determines that the issuance of such an order constitutes a material breach of this Contract, the Center Director shall notify the Academy of the material breach and request a meeting with Academy Board representatives to discuss the matter. To remedy the material breach, the Academy shall work toward the development of a corrective action plan within thirty (30) days that is acceptable to the Center Director. In addition to other matters, the corrective action plan shall include the Academy’s redesign plan, if applicable, prepared pursuant to section 1280c of the Code. The development of a corrective action plan under this Section 10.4 shall not in any way limit the rights of the University Board to revoke, terminate, or suspend this Contract. If the Center Director determines that the Academy is unable

to develop a corrective action plan that can remedy the material breach and that is acceptable to the University, the Center Director shall recommend that the University Board terminate the Contract at the end of the current school year. If the University Board approves to terminate the Contract under this Section 10.4, the Contract shall be terminated at the end of the current school year without any further action of either party. If this Contract is terminated pursuant to this Section 10.4, the termination and revocation procedures in Section 10.6 and Section 10.7 shall not apply.

Section 10.5. Grounds and Procedures for Academy Termination of Contract. The Academy Board, by majority vote of its Directors, may, at any time and for any reason, request termination of this Contract. The Academy Board's request for termination shall be made to the Center Director not less than six (6) calendar months in advance of the Academy's proposed effective date of termination. Upon receipt of an Academy request for termination, the Center Director shall present the Academy Board's request for termination to the University Board. A copy of the Academy Board's resolution approving of the Contract termination, including a summary of the reasons for terminating the Contract, shall be included with the Academy Board's request for termination. Upon receipt of the Academy Board's request for termination, the University Board shall consider and vote on the proposed termination request. The University Board may, in its sole discretion, waive the six (6) month advance notice requirement for terminating this Contract.

Section 10.6. Grounds and Procedures for University Termination of Contract. The University Board, in its sole discretion, reserves the right to terminate the Contract (i) for any reason or for no reason provided that such termination shall not take place less than six (6) months from the date of the University Board's action; or (ii) if there is a change in Applicable Law that the University Board, in its sole discretion, determines impairs its rights and obligations under the Contract or requires the University Board to make changes in the Contract that are not in the best interest of the University Board or the University, then such termination shall take effect at the end of the current Academy fiscal year. Following University Board approval, the Center Director shall provide notice of the termination to the Academy. If during the period between the University Board action to terminate and the effective date of termination, the Academy has violated the Contract or Applicable Law, the Contract may be revoked or suspended sooner pursuant to this Article X. If this Contract is terminated pursuant to this Section 10.6, the revocation procedures in Section 10.7 shall not apply.

Section 10.7(d). University Board's Contract Reconstitution Provision. The Center Director may reconstitute the Academy in an effort to improve student educational performance or to avoid interruption of the educational process. Reconstitution may include, but is not limited to, one of the following actions: (i) removal of 1 or more members of the Academy Board; (ii) termination of at-will board appointments of 1 or more Academy Board members in accordance with The Method of Selection, Appointment and Removal Resolution; (iii) withdrawing approval of a contract under Section 506 of the Code; or (iv) the appointment of a new Academy Board of Directors or a conservator/trustee to take over operations of the Academy.

Except as otherwise provided in this subsection, reconstitution of the Academy does not restrict the State School Reform/Redesign Officer from issuing an order under section 507 of the Code, MCL 380.507, directing the automatic closure of the Academy's site(s). If, however, the Academy is located within the boundaries of a Community District and an Accountability Plan is in place, the Center shall notify the State School Reform/Redesign Officer that the Plan of Correction includes a reconstitution of the Academy to ensure that the Academy is not subject to automatic closure by the State School Reform/Redesign Officer under section 507 of the Code, MCL 380.507.

Section 11.1. The Academy Budget; Transmittal of Budgetary Assumptions; Budget Deficit; Enhanced Deficit Elimination Plan. The Academy agrees to comply with all of the following:

- (a) The Academy Board is responsible for establishing, approving, and amending an annual budget in accordance with the Uniform Budgeting and Accounting Act, MCL 141.421, et seq. The Academy Board shall submit to the Center a copy of its annual budget for the upcoming fiscal year in accordance with the Master Calendar. The budget must detail budgeted expenditures at the object level as described in the Michigan Department of Education's Michigan School Accounting Manual. In addition, the Academy Board is responsible for approving all revisions and amendments to the annual budget. In accordance with the Master Calendar, revisions or amendments to the Academy's budget shall be submitted to the Center following Academy Board approval.
- (b) Unless exempted from transmitting under section 1219 of the Code, MCL 380.1219, the Academy, on or before July 7th of each school fiscal year, shall transmit to the Center for Educational Performance and Information ("CEPI") the budgetary assumptions used when adopting its annual budget pursuant to the Uniform Budgeting and Accounting Act, MCL 141.421 et seq.
- (c) The Academy shall not adopt or operate under a deficit budget, or incur an operating deficit in a fund during any fiscal year. At any time during the term of this Contract, the Academy shall not have an existing deficit fund balance, incur a deficit fund balance, or adopts a current year budget that projects a deficit fund balance. If the Academy has an existing deficit fund balance, incurs a deficit fund balance in the most recently completed school fiscal year, or adopts a current year budget that projects a deficit fund balance, all of the following apply:
 - i. The Academy shall notify the Superintendent and the State Treasurer immediately upon the occurrence of the circumstance, and provide a copy of the notice to the Center.
 - ii. Within 30 days after making notification under subdivision (i), the Academy shall submit to the Superintendent in the form and manner prescribed by the Department an amended budget for the current school fiscal year and a deficit elimination plan approved by the Academy Board, with a copy to the State Treasurer. The Academy shall transmit a copy of the amended budget and the deficit elimination plan to the Center.
 - iii. After the Superintendent approves Academy's deficit elimination plan, the Academy shall post the deficit elimination plan on the Academy's website.
- (d) If the Academy is required by the State Treasurer to submit an enhanced deficit elimination plan under section 1220 of the Code, MCL 380.1220, the Academy shall do all of the following:
 - i. The enhanced deficit elimination plan shall be approved by the Academy Board before submission.
 - ii. After the State Treasurer approves an enhanced deficit elimination plan for the Academy, the Academy shall post the enhanced deficit elimination plan on the Academy's website.
 - iii. As required, submit to the Superintendent and State Treasurer an enhanced monthly monitoring reports in a form and manner prescribed by the State Treasurer and post such monthly reports on the Academy's website.

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 4

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

FILING ENDORSEMENT

This is to Certify that the RESTATED ARTICLES OF INCORPORATION - NONPROFIT

for

EAGLE CREST CHARTER ACADEMY

ID NUMBER: 748508

received by facsimile transmission on August 16, 2017 is hereby endorsed.

Filed on August 23, 2017 by the Administrator.

This document is effective on the date filed, unless a subsequent effective date within 90 days after received date is stated in the document.



Sent by Facsimile Transmission

In testimony whereof, I have hereunto set my hand and affixed the Seal of the Department, in the City of Lansing, this 23rd day of August, 2017.

Julia Dale

***Julia Dale, Director
Corporations, Securities & Commercial Licensing Bureau***

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS CORPORATIONS, SECURITIES & COMMERCIAL LICENSING BUREAU																				
Date Received																				
This document is effective on the date filed, unless a subsequent effective date within 90-days after received date is stated in the document.																				
<table border="1"> <tr> <td colspan="3">Name</td> </tr> <tr> <td colspan="3">Candace L. Sorensen</td> </tr> <tr> <td colspan="3">Address</td> </tr> <tr> <td colspan="3">125 Ottawa Ave. NW, Ste. 245</td> </tr> <tr> <td>City</td> <td>State</td> <td>Zip</td> </tr> <tr> <td>Grand Rapids</td> <td>MI</td> <td>49503</td> </tr> </table>			Name			Candace L. Sorensen			Address			125 Ottawa Ave. NW, Ste. 245			City	State	Zip	Grand Rapids	MI	49503
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**RESTATED ARTICLES OF INCORPORATION
For Use by Domestic Nonprofit Corporations**

OF

EAGLE CREST CHARTER ACADEMY

Pursuant to the provisions of the Michigan Nonprofit Corporation Act (Act 162) of 1982, as amended (the "Act"), being MCL 450.2101 et seq. and Revised School Code (the "Code") as amended, being Sections 380.551 et seq. of the Michigan Compiled Laws, the undersigned corporation executes the following Restated Articles:

The present name of the corporation is: Eagle Crest Charter Academy.

The corporation identification number ("CID") assigned by the Bureau is: 748508.

The corporation has used no other names.

The date of filing the original Articles of Incorporation was: June 4, 1997.

The dates of filing restated Articles of Incorporation were: September 11, 1998, May 13, 2002, and June 13, 2011.

The following Restated Articles of Incorporation supersede the Articles of Incorporation and shall be the Articles of Incorporation for the corporation:

ARTICLE I

The name of the corporation is: Eagle Crest Charter Academy.

The authorizing body for the corporation is: Central Michigan University Board of Trustees.

ARTICLE II

The purpose or purposes for which the corporation is organized are:

1. The corporation is organized for the purpose of operating as a School of Excellence in the State of Michigan pursuant to Part 6E of the Code, being Section 380.551 et seq. of the Michigan Compiled Laws.

2. The corporation, including all activities incident to its purposes, shall at all times be conducted so as to be a governmental entity pursuant to Section 115 of the United States Internal Revenue Code ("IRC") or any successor law. Notwithstanding any other provision of these Restated Articles, the corporation shall not carry on any other activity not permitted to be carried on by a governmental instrumentality exempt from federal income tax under Section 115 of the IRC or by a nonprofit corporation organized under the laws of the State of Michigan and subject to a Contract authorized under the Code.

ARTICLE III

The corporation is organized on a non-stock basis.

The value of assets which the corporation possesses is:

Real Property: \$0.00

Personal Property: \$1727.00 (date of valuation of assets is as of 7/1/17)

The corporation is to be financed under the following general plan:

- a. State school aid payments received pursuant to the State School Aid Act of 1979 or any successor law.
- b. Federal funds.
- c. Donations.
- d. Fees and charges permitted to be charged by schools of excellence.
- e. Other funds lawfully received.

The corporation is organized on a directorship basis.

ARTICLE IV

The name of the resident agent at the registered office is Candace L. Sorensen.

The address of its registered office in Michigan is: 125 Ottawa Ave. NW Ste. 245, Grand Rapids, MI 49503.

The mailing address of the registered office in Michigan is: CS3 LAW PLLC, 125 Ottawa Ave. NW, Ste. 245, Grand Rapids, MI 49503.

ARTICLE V

The corporation is a governmental entity.

ARTICLE VI

The corporation and its incorporators, board members, officers, employees, and volunteers have governmental immunity as provided in section 7 of Act No. 170 of the Public Acts of 1964, being section 691.1407 of the Michigan Compiled Laws.

ARTICLE VII

Before execution of a Contract to charter a School of Excellence between the corporation and Central Michigan University Board of Trustees (the "University Board"), the method of selection, length of term, and the number of members of the Board of Directors of the corporation shall be approved by a resolution of the University Board as required by the Code.

ARTICLE VIII

The Board of Directors shall have all the powers and duties permitted by law to manage the business, property and affairs of the corporation.

ARTICLE IX

The officers of the corporation shall be a President, Vice-President, Secretary and a Treasurer, each of whom shall be a member of the Board of Directors and shall be selected by the Board of Directors. The Board of Directors may select one or more assistants to the Secretary or Treasurer, and may also appoint such other agents as it may deem necessary for the transaction of the business of the corporation.

ARTICLE X

No part of the net earnings of the corporation shall inure to the benefit of or be distributable to its board, directors, officers or other private persons, or organization organized and operated for a profit (except that the corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in the furtherance of the purposes set forth in Article II hereof). Notwithstanding any other provision of these Restated Articles, the corporation shall not carry on any other activities not permitted to be carried on by a governmental entity exempt from federal income tax under section 115 of the IRC, or comparable provisions of any successor law.

To the extent permitted by law, upon the dissolution of the corporation, the board shall after paying or making provision for the payment of all of the liabilities of the corporation, dispose of all of the assets of the corporation to the University Board for forwarding to the state school aid fund established under article IX, section 11 of the Constitution of the State of Michigan of 1963, as amended.

ARTICLE XI

These Restated Articles of Incorporation shall not be amended except by the process provided in Article IX of the Terms and Conditions incorporated as part of the Contract. This process is as follows:

The corporation, by a majority vote of its Board of Directors, may, at any time, propose specific changes to these Restated Articles of Incorporation or may propose a meeting to discuss potential revision to these Restated Articles of Incorporation. The proposal will be made to the University Board through its designee. The University Board delegates to The Governor John Engler Center for Charter Schools' ("The Center") Executive Director the review and approval of changes or amendments to these Restated Articles of Incorporation. In the event that a proposed change is not accepted by The Center's Executive Director, the University Board shall consider and vote upon a change proposed by the corporation following an opportunity for a written and oral presentation to the University Board by the corporation.

At any time and for any reason, the University Board or an authorized designee may propose specific changes to these Restated Articles of Incorporation or may propose a meeting to discuss potential revision. The corporation's Board of Directors may delegate to an officer of the corporation the review and negotiation of changes or amendments to these Restated Articles of Incorporation. The Restated Articles of Incorporation shall be amended as requested by the University Board or an authorized designee upon a majority vote of the corporation's Board of Directors.

Amendments to these Restated Articles of Incorporation take effect only after they have been approved by the corporation's Board of Directors and by the University Board or The Center's Executive Director, and the amendments are filed with the Michigan Department of Licensing and Regulatory Affairs, Bureau of Commercial Services. In addition, the corporation shall file with the amendment a copy of the University Board's or The Center's Executive Director's approval of the amendment.

Upon termination or revocation of the Contract, the Academy may amend its articles of incorporation as necessary to allow the Academy Board to: (a) take action to appoint Academy Board members in order to have a quorum necessary to take Academy Board action; or (b) effectuate a dissolution, provided that the Academy Board may not amend the articles of incorporation with regard to the disposition of assets upon dissolution.

ARTICLE XII

The definitions set forth in the Terms and Conditions incorporated as part of the Contract shall have the same meaning in these Restated Articles of Incorporation.

ADOPTION OF ARTICLES

These Restated Articles of Incorporation were duly adopted on the 16th day of August, 2017, in accordance with the provisions of Section 641 of the Act. These Restated Articles of Incorporation restate, integrate and do further amend the provisions of the Articles of Incorporation and were duly adopted by the directors. The necessary number of votes were cast in favor of these Restated Articles of Incorporation.

Signed this 1st day of August, 2017.

By: 

Ms. Robyn Allison, President

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 5

Upon termination or revocation of the Contract, the Academy may amend its Bylaws as necessary to allow the Academy Board to: (a) take action to appoint Academy Board members in order to have a quorum necessary to take Academy Board action; or (b) effectuate a dissolution, provided that the Academy Board may not amend the Bylaws with regard to the disposition of assets upon dissolution.

Eagle Crest Charter Academy

Contract Amendment No. 3

Tab 6

EDUCATIONAL GOAL AND RELATED MEASURES

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.2, the Academy shall achieve or demonstrate measurable progress for all groups of pupils toward the achievement of the educational goal identified in this schedule. Although an increase in academic achievement for all groups of pupils as measured by assessments and other objective criteria is the most important factor in determining the Academy's progress toward the achievement of the educational goal, the Center also considers other factors. Upon request, the Academy shall provide the Center with a written report, along with supporting data, assessing the Academy's progress toward achieving this goal. In addition, the University expects the Academy will meet the State of Michigan's accreditation standards pursuant to state and federal law.

Educational Goal to Be Achieved

Prepare students academically for success in college, work and life.

Measures to Assist in Determining Measurable Progress Towards Goal Achievement

To assist in determining whether the Academy is achieving measurable progress toward the achievement of this goal, the Center will annually assess the Academy's performance using the following measures:

Indicator 1: Student Achievement

The academic achievement of all students in grades three through eight, who have been enrolled three or more years at the Academy, will be assessed using the following measures and targets:

Grade(s)	Measure	Achievement Targets
3-8	The percentage of students achieving scaled scores meeting or surpassing national norms on the NWEA MAP reading and math tests administered in the Spring.	At least 50% of eligible students will produce scaled scores that meet or surpass the grade-level nationally normed benchmarks identified in this schedule.

NWEA MAP 2015 National Norms

Grade	Spring Benchmark in Reading ≥RIT score below	Spring Benchmark in Math ≥RIT score below
3	198.6	203.4
4	205.9	213.5
5	211.8	221.4
6	215.8	225.3
7	218.2	228.6
8	220.1	230.9

Indicator 2: Student Growth

The academic growth of all students in grades three through eight at the Academy will be assessed using the following measures and targets:

Grade(s)	Measure	Growth Targets
3-8	The median of student growth percentiles reflecting fall-to-spring scaled score growth on the reading and math NWEA MAP tests.	The median growth percentile will be at or above the 50 th percentile.

AMENDMENT NO. 4

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 4

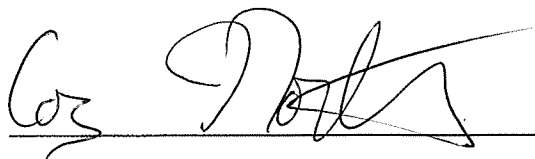
EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend Tab A: Reauthorizing Resolution, by replacing the Public School Academy Board of Directors: Method of Selection, Appointment, and Removal contained therein with the Public School Academy Board of Directors: Method of Selection, Appointment and Removal, attached as Tab 1.
- 2.) Amend Section 1.1. Certain Definitions, Section 2.5. Academy Site Is Former Site of Closed Community District School; State School Reform/Redesign Officer Approval Required, Section 3.8. Administrator and Teacher Evaluation Systems, Section 4.4. Incompatible Public Offices and Conflicts of Interest Statutes, Section 4.5. Prohibition of Identified Family Relationships, Section 10.9. Appointment of Conservator/Trustee, and Section 11.7. Special Education, of the Terms and Conditions of Contract by replacing the language contained within these Sections with the corresponding language attached as Tab 2.
- 3.) Amend Article I: Definitions, Article II: Relationship Between the Academy and the University Board, Article VI: Operating Requirements, Article X: Contract Revocation, Termination, and Suspension, and Article XII: General Terms, of the Terms and Conditions of Contract by inserting at the end of these Articles the corresponding language attached as Tab 3.
- 4.) Amend Article III: Role of the University Board as Authorizing Body, of the Terms and Conditions of Contract by removing from this Article Section 3.9. Teacher and Administrator Job Performance Criteria.
- 5.) Amend Article VIII: Contracts, Loans, Checks and Deposits; Special Corporate Acts of the Amended Bylaws by replacing the language contained within Section 6. Contracts Between Corporation and Related Persons, with the language attached as Tab 4.

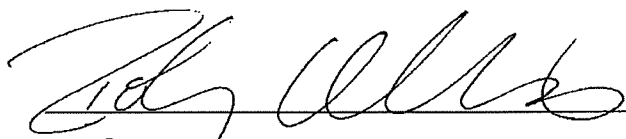
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This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2018.



Dated: 8-13-2018

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 8/7/18

By: Robyn Allison, Board President
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 4

Tab 1

Public School Academy Board of Directors: Method of Selection, Appointment and Removal

The Central Michigan University Board of Trustees declares that the method of selection, length of term, and number of board members shall be as follows.

Method of Selection and Appointment

The Central Michigan University Board of Trustees ("University Board") shall prescribe the method of appointment for members of an academy's board of directors. The director of the charter schools office is authorized to develop and administer an academy board selection and appointment process that includes an *Application for Public School Academy Board Appointment* and is in accord with these policies:

- a. The University Board shall appoint the initial and subsequent academy board of directors by resolution, except as prescribed by subparagraphs d and e. The director of the charter schools office shall recommend qualified individuals to the University Board, and ensure that the board of directors includes representation from the local community where the academy is located.
- b. The academy board of directors, by resolution and majority vote, shall nominate its subsequent members, except as provided otherwise. The academy board of directors shall recommend to the director of the charter schools office at least one nominee for each vacancy. Nominees shall submit the *Application for Public School Academy Board Appointment* for review by the charter schools office. The director of the charter schools office may or may not recommend the appointment of a nominee submitted by the academy board. If the director of the charter schools office does not recommend the appointment of a nominee submitted by the academy board, he/she may select and recommend another nominee or may request the academy board submit a new nominee for consideration.
- c. An individual appointed to fill a vacancy created other than by the expiration of a term shall be appointed for the unexpired term of that vacant position.
- d. Under exigent conditions, and with the approval of the University Board's chair and the president, the director of the charter schools office may appoint a qualified individual to an academy's board of directors. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any appointments made under this provision.
- e. In the event that the health, safety and welfare of an academy's students, property or funds are at risk, the president, after consulting with the University Board's chair, may appoint a person to serve as a conservator for the academy. Upon appointment, the conservator shall have all the powers of the academy's board of directors and shall act in the place and stead of the academy's board of directors. After the President appoints a conservator, the full Board of Trustees shall receive notice of the appointment as soon as possible. The president shall appoint the conservator for a definite term which may be extended in writing. During the conservator's appointment, the academy's board of directors, and all powers of the academy's board of directors, are suspended. The charter contract shall set forth any additional powers granted to the conservator during their appointment. All appointments made under this

Date: 2/15/18

Signature: my Hengar

provision must be presented to the University Board for final determination at its next regularly scheduled meeting.

Length of Term

The director of an academy board shall serve at the pleasure of the University Board. Terms of the initial positions of the academy board of directors shall be staggered in accordance with *The Academy Board of Directors Table of Staggered Terms and Appointments* established and administered by the director of the charter schools office. Subsequent appointments shall be for a term of office not to exceed four (4) years, except as prescribed by *The Academy Board of Directors Table of Staggered Terms and Appointments*.

Removal and Suspension

If the University Board determines that an academy board member's service in office is no longer necessary, then the University Board may remove an academy board member with or without cause and shall specify the date when the academy board member's service ends. An academy board member may also be removed as part of a reconstitution under the charter contract or from office by a two-thirds (2/3) vote of the academy's board of directors for cause.

With the approval of the University Board's chair and the president, the director of the charter schools office may suspend an academy board member's service, if in his/her judgment the person's continued presence would constitute a risk to persons or property, or would seriously impair the operation of the academy. Any suspension made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. The University Board reserves the right to review, rescind, modify, ratify, or approve any suspensions made under this provision.

Number of Directors

The number of members of the academy board of directors shall not be less than five (5) nor more than nine (9). If the academy board of directors fails to maintain its full membership by making appropriate and timely nominations, the University Board or its designee may deem that failure an exigent condition.

Qualifications of Academy Board Members

To be qualified to serve on an academy's board of directors, a person shall, among other things: (a) be a citizen of the United States; (b) be a resident of the State of Michigan; (c) submit all materials requested by the charter schools office including, but not limited to, the *Application for Public School Academy Board Appointment* which must include authorization to process a criminal background check; and (d) annually submit a conflict of interest disclosure as prescribed by the charter schools office.

The members of an academy board of directors shall not include: (a) employees of the academy; (b) any director, officer, or employee of an educational management organization or educational management corporation that contracts with the academy; (c) a Central Michigan University official or employee, as a representative of Central Michigan University.

CMU BDT APPROVED

Date: 2/15/18

Signature: m J. Flanagan

Oath of Public Office

All members of the academy board of directors must take the constitutional oath of office and sign the *Oath of Public Office* before beginning their service. No appointment shall be effective prior to the filing of the *Oath of Public Office* with the charter schools office.

Note: These provisions shall be implemented with new charter contracts and shall be phased in as existing charter contracts are reissued or amended. The charter schools office is authorized to negotiate changes in the terms and conditions of charter contracts to fully implement these provisions.

Amended by Board of Trustees: 18-0215

Adopted by Board of Trustees: 98-0918, 06-1207, 07-0712 and 11-0714

CMU BDT APPROVED

Date: 2/15/18

Signature: my Hanegea

Eagle Crest Charter Academy

Contract Amendment No. 4

Tab 2

Section 1.1. Certain Definitions.

- (o) “Method of Selection, Appointment, and Removal Resolution” means the policy adopted by resolution of the University Board on September 18, 1998, and amended on February 15, 2018, establishing the standard method of selection and appointment, length of term, removal and suspension, number of directors and qualifications of academy board members for schools of excellence issued a Contract by the University Board.
- (t) “State School Reform/Redesign Office” means the office created within the Michigan Department of Technology Management and Budget by Executive Reorganization Order 2015-02 codified at MCL 18.445, and transferred from the Michigan Department of Technology Management and Budget to the Michigan Department of Education by Executive Reorganization Order 2017-02, codified at MCL 388.1282.

Section 2.5. Academy Site Is Former Site of Closed Community District School; State School Reform/Redesign Officer Approval Required. If the Academy's proposed site is located within the geographical boundaries of a Community District and is a site that was a former site of a Community District school closed by the State School Reform/Redesign Office within the last 3 school years, then the University Board shall not issue the Contract unless (a) the new Academy site has a substantially different leadership structure and curricular offering than the previous Community District school that operated at the site; and (b) the State School Reform/Redesign Officer has approved the Academy's use of the site. A copy of the State School Reform/Redesign Officer's approval shall be provided to the Center.

Section 3.8. Administrator and Teacher Evaluation Systems. The Academy Board shall adopt, implement and maintain a rigorous, transparent, and fair performance evaluation system for its teachers and school administrators that complies with Applicable Law. If the Academy enters into an agreement with an Educational Service Provider, the Academy Board shall ensure that the Educational Service Provider complies with this section.

Section 4.4. Incompatible Public Offices and Conflicts of Interest Statutes. The Academy shall comply with the Incompatible Public Offices statute, being MCL 15.181 et seq. of the Michigan Compiled Laws, and the Contracts of Public Servants with Public Entities statute, being MCL 15.321 et seq. of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited conflicts of interest for purposes of this Contract:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an Educational Service Provider or an employee leasing company that has an agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school; and
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University.
- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any school building leased or subleased to the Academy.

Section 4.5. Prohibition of Identified Family Relationships. The Academy Board shall prohibit specifically identified family relationships pursuant to applicable law and the Terms and Conditions of this Contract. Language in this Section controls over section 1203 of the Code. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited familial relationships for the purposes of this Contract:

- (a) No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:
 - (i) Is employed by the Academy;
 - (ii) Works at or is assigned to the Academy;
 - (iii) Has an ownership, officer, policymaking, managerial, administrative non-clerical, or other significant role with the Academy's Educational Service Provider or employee leasing company; or
 - (iv) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy.
- (b) The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner.

Section 10.9. Conservator; Appointment By University President. Notwithstanding any other provision of the Contract, in the event that the University President, in his or her sole discretion, determines that the health, safety and welfare of Academy students, property or funds are at risk, the University President, after consulting with the University Board Chairperson, may appoint a person to serve as the Conservator of the Academy. Upon appointment, the Conservator shall have all the powers and authority of the Academy Board under this Contract and Applicable Law. The University President shall appoint the Conservator for a definite term which may be extended in writing at his or her sole discretion. During the appointment, the Academy Board members and their terms in office are suspended and all powers of the Academy Board are suspended. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. During their appointment, the Conservator shall have the following powers:

- (a) take into his or her possession all Academy property and records, including financial, board, employment and student records;
- (b) institute and defend actions by or on behalf of the Academy;
- (c) continue the business of the Academy including entering into contracts, borrowing money, and pledging, mortgaging, or otherwise encumbering the property of the Academy as security for the repayment of loans. However, the power shall be subject to any provisions and restrictions in any existing credit documents;
- (d) hire, fire and discipline employees of the Academy;
- (e) settle or compromise with any debtor or creditor of the Academy, including any taxing authority;
- (f) review all outstanding agreements to which the Academy is a party and to take those actions which the Academy Board may have exercised to pay, extend, rescind, renegotiate or settle such agreements as needed; and
- (g) perform all acts necessary and appropriate to fulfill the Academy's purposes as set forth under this Contract or Applicable Law.

Section 11.7. Special Education. Pursuant to Section 1701a of the Code, the Academy shall comply with Article III, Part 29 of the Code, MCL 380.1701 et seq., concerning the provision of special education programs and services at the Academy as referenced in Contract Schedule 7c. Upon receipt, the Academy shall notify the Center of any due process or state complaint filed against the Academy.

Eagle Crest Charter Academy

Contract Amendment No. 4

Tab 3

Section 1.1. Certain Definitions.

- (bb) “Conservator” means an individual appointed by the University President in accordance with Section 10.10 of these Terms and Conditions.

Section 2.7. Community District Accountability Plan. If any part of the Academy's proposed site is located within the geographical boundaries of a Community District, then the Academy shall comply with the Accountability Plan. This provision shall not apply if a statewide accountability system is enacted into law replacing the Accountability Plan.

Section 6.17. Postings of Accreditation Status. The Academy shall post notices to the Academy's homepage of its website disclosing the accreditation status of each school as required by the Code.

Section 10.10 Academy Dissolution Account. If the University Board terminates, revokes or fails to issue a new Contract to the Academy, the Center Director shall notify the Academy that, beginning thirty (30) days after notification of the University Board's decision, the University Board shall direct up to \$10,000 from each subsequent State School Aid Fund payment, not to exceed a combined total of \$30,000, to a separate Academy account ("Academy Dissolution Account") to be used exclusively to pay the costs associated with the wind up and dissolution responsibilities of the Academy. Within five (5) business days of the Center Director's notice, the Academy Board Treasurer shall provide the Center Director, in a form and manner determined by the Center, with account detail information and authorization to direct such funds to the Academy Dissolution Account. The Academy Dissolution Account shall be under the sole care, custody and control of the Academy Board, and such funds shall not be used by the Academy to pay any other Academy debt or obligation until such time as all the wind-up and dissolution expenses have been satisfied.

Section 12.18. Disposition of Academy Assets Upon Termination or Revocation of Contract. Following termination or revocation of the Contract, the Academy shall follow the applicable wind-up and dissolution provisions set forth in the Academy's articles of incorporation and in accordance with the Code.

Section 12.19. Student Privacy. In order to protect the privacy of students enrolled at the Academy, the Academy Board shall not:

- (a) sell or otherwise provide to a for-profit business entity any personally identifiable information that is part of a pupil's education records. This subsection does not apply to any of the following situations:
 - i. for students enrolled in the Academy, providing such information to an ESP that has a contract with the Academy and whose contract has not been disapproved by the University;
 - ii. providing the information as necessary for standardized testing that measures a student's academic progress and achievement; or
 - iii. providing the information as necessary to a person that is providing educational or educational support services to the student under a contract with either the Academy or an educational management organization that has a contract with the Academy and whose contract has not been disapproved by the University.
- (b) The terms "education records" and "personally identifiable information" shall have the same meaning as defined in MCL 380.1136.
 - i. Present the opt-out form to each student's parent or guardian within the first thirty (30) days of the school year and at other times upon request.
 - ii. If an opt-out form is signed and submitted to the Academy by a student's parent or guardian, then the Academy shall not include the student's directory information in any of the Uses that have been opted out of in the opt-out form.
- (c) The terms "directory information" shall have the same meaning as defined in MCL 380.1136.

Section 12.20. Disclosure of Information to Parents and Legal Guardians.

- (a) Within thirty (30) days after receiving a written request from a student's parent or legal guardian, the Academy shall disclose without charge to the student's parent or legal guardian any personally identifiable information concerning the student that is collected or created by the Academy as part of the student's education records.
- (b) Except as otherwise provided in this subsection (b) and within thirty (30) days after receiving a written request from a student's parent or legal guardian, the Academy shall disclose to a student's parent or legal guardian without charge any personally identifiable information provided to any person, agency or organization. The Academy's disclosure shall include the specific information that was disclosed, the name and contact information of each person, agency, or organization to which the information has been disclosed; and the legitimate reason that the person, agency, or organization had in obtaining the information. The parental disclosure requirement does not apply to information that is provided:
 - i. to the Department or CEPI;

- ii. to the student's parent or legal guardian;
 - iii. by the Academy to the University Board, University, Center or to the ESP with which the Academy has a management agreement that has not been disapproved by the University;
 - iv. by the Academy to the Academy's intermediate school district or another intermediate school district providing services to Academy or the Academy's students pursuant to a written agreement;
 - v. to the Academy by the Academy's intermediate school district or another immediate school district providing services to pupils enrolled in the Academy pursuant to a written agreement;
 - vi. to the Academy by the University Board, University, Center;
 - vii. to a person, agency, or organization with written consent from the student's parent or legal guardian, or from the student if the student is 18 years of age;
 - viii. to a person, agency, or organization seeking or receiving records in accordance with an order, subpoena, or ex parte order issued by a court of competent jurisdiction;
 - ix. to a person, agency, or organization as necessary for standardized testing that measures a student's academic progress and achievement; or
 - x. in the absence of, or in compliance with, a properly executed opt-out form, as adopted by the Academy in compliance with section 1136(6) of the Code, pertaining to uses for which the Academy commonly would disclose a pupil's "directory information."
- (c) If the Academy considers it necessary to make redacted copies of all or part of a student's education records in order to protect personally identifiable information of another student, the Academy shall not charge the parent or legal guardian for the cost of those redacted copies.
- (d) The terms "education records," "personally identifiable information," and "directory information" shall have the same meaning as defined in MCL 380.1136.

Section 12.21. List of Uses for Student Directory Information; Opt Out Form; Notice to Student's Parent or Legal Guardian. The Academy shall do all of the following:

- (a) Develop a list of uses (the "Uses") for which the Academy commonly would disclose a student's directory information; and
- (b) Develop an opt-out form that lists all of the Uses and allows a student's parent or guardian to elect not to have the student's directory information disclosed for one (1) or more Uses.

Eagle Crest Charter Academy

Contract Amendment No. 4

Tab 4

Section 6. Contracts Between Corporation and Related Persons. As required by Applicable Law, any Director, officer or employee of the Academy, who enters into a contract with the Academy, that meets the definition of contract under the statute on Contracts of Public Servants with Public Entities, Act No. 317 of the Public Acts of 1968, being sections 15.321 to 15.330 of the Michigan Compiled Laws, shall comply with the public disclosure requirements set forth in Section 3 of the statute.

The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. However, the Academy Board shall prohibit any individual from being employed by the Academy, an educational service provider or an employee leasing company involved in the operation of the Academy, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees. The Academy Board may contract with an educational service provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy. Before entering into an agreement with an educational service provider or an employee leasing company to perform services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by the Center. A copy of the agreement between the Academy Board and the educational service provider or employee leasing company shall be included as part of Schedule 5.

The Academy shall comply with the Incompatible Public Offices statute, Act No. 566 of the Public Acts of 1978, of the Michigan Compiled Laws, and the Contracts of Public Servants With Public Entities statute, Act No. 371 of the Public Acts of 1968, of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Language in this Section controls over section 1203 of the Code. The following shall be deemed prohibited conflicts of interest:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an educational service provider or an employee leasing company that has an agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school;
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University; and
- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any school building leased or subleased to the Academy.

No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:

- (a) Is employed by the Academy;
- (b) Works at or is assigned to the Academy;
- (c) Has an ownership, officer, policymaking, managerial, administrative non-clerical or other significant role with the Academy's educational service provider or employee leasing company; and
- (d) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy.

The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner.

AMENDMENT NO. 5

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

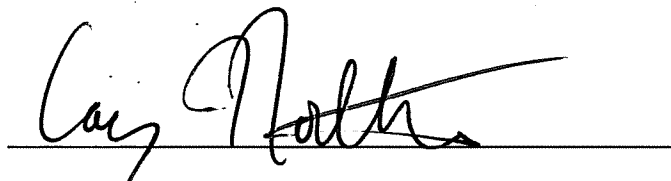
CONTRACT AMENDMENT NO. 5

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

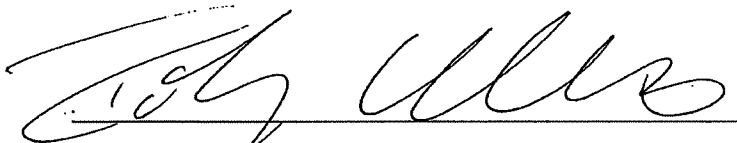
- 1.) Amend Schedule 7, Section c: Educational Programs, by replacing the materials contained therein with the materials attached as Tab 1.
- 2.) Amend Schedule 7, Section d: Curriculum, by replacing the materials contained therein with the materials attached as Tab 2.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of August 28, 2018.



Dated: 5/7/19

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 4/23/19

By: Board President
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 5

Tab 1

EDUCATIONAL PROGRAMS

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.3, the Academy shall implement, deliver, and support the educational programs identified in this schedule.

Mission

The staff, parents and board members of Eagle Crest Charter Academy (“Academy”) accept the responsibility to develop students of high moral character, who attain a mastery level of the basics, are superb communicators, and will have a solid foundation for life-long learning.

Values

The Academy is built on the four pillars of National Heritage Academies’ (“NHA”) model: academic excellence, moral focus, parent partnerships and student responsibility.

- Academic Excellence: A high-quality K-8 education sets the critical foundation for a student's success in high school, college, and beyond. Achievement may look different for each individual, but our goal is to prepare every student for college. This starts by creating a culture focused on high care and high expectations for each student each day.
- Moral Focus: A great school should aim to develop students' hearts as well as their minds. Our moral focus curriculum builds on the virtues of wisdom, courage, compassion, gratitude, respect, encouragement, integrity, self-control, and perseverance. Our students will build and maintain strong personal character and become good citizens as part of our program.
- Parental Partnerships: The Academy is committed to fostering strong partnerships with parents. Our school will actively engage parents in their children's learning, and there will be consistent communication. Included in this effort will be a dedicated parent room specifically to allow ongoing interaction between parents and teachers. The Academy plans to provide opportunities for teachers to share best practices and for parents to learn new tools to support their children.
- Student Responsibility: Children thrive in an environment where they clearly understand what is expected of them, and after putting forth their best effort, they take pride in seeing the results. Students will be taught that their best effort is vital to academic success, and teachers will reinforce the importance of students' accountability for their education and actions.

Curriculum

The Academy’s curriculum is designed to prepare students for a rigorous high school curriculum to provide the best opportunity for college success. The Academy partners with NHA to implement a curriculum built around the Michigan Academic Standards (“MAS”), which aligns with the mission, and prepares students for success in high school, college and beyond.

The curriculum is aligned with the MAS for English language arts (“ELA”), mathematics, science, social studies, art and music and the Physical Education Content Standards and Benchmarks. This approach ensures students are learning the appropriate content for each grade level.

Character development is an explicit and integrated component of the curriculum.¹ Individual responsibility, integrity, personal character and effort are important contributors to success in school and life. In addition, the Academy instills character traits which are highly correlated with college success. With high-quality instruction, solid curricular tools to support instruction and rigorous assessment, the curriculum promotes academic success for students and equips students with the knowledge, understanding and skills needed to meet or exceed MAS and content expectations.

Core Content Areas

ELA

Literacy, which includes reading, writing and speaking, is a critical component of college- and career-readiness. "Low literacy levels often prevent high school students from mastering other subjects," and struggling readers are often excluded from academically challenging courses. More specifically, students who are able to comprehend complex texts are more likely to be successful after high school.² Developing reading proficiency and strong literacy skills in elementary and middle grades is the cornerstone of the ELA curriculum, which upholds the MAS to ensure college- and career-readiness for all students. The ELA curriculum is designed to produce highly literate students who are proficient readers, evaluative writers and collaborative, analytical members of the classroom and future workplaces.

The MAS focus on five strands of literacy: reading, writing, speaking, listening and language. To best prepare students for school and life in the 21st century, each strand emphasizes the integration, critical analysis and production of a variety of media and technology. The reading standards focus on a gradual increase in text complexity to ensure students' readiness "for the demands of college- and career-level reading."³ The writing standards emphasize argument and informational writing "based on substantive claims, sound reasoning, and relevant evidence," as well as research, "both short, focused projects and longer, in-depth research."⁴ By challenging students to speak and listen, the standards require that "students gain, evaluate, and present increasingly complex information, ideas, and evidence" through academic discussion, collaboration and formal presentations. The language standards emphasize students' growth and expansion of vocabulary, appreciation of word nuances and use of formal English in writing and speaking.

- In kindergarten through second grades, the curriculum emphasizes the foundations of reading. These include the ability to decode automatically, read with fluency and gain the capacity to comprehend increasingly complex texts across a range of types and disciplines. Student literacy is emphasized through rich, domain-specific content in a variety of fiction and nonfiction texts, including a true balance of informational and literary genres.
- In third through fifth grades, reading instruction is centered on complex, grade-appropriate texts to prepare students for the complexity of college- and career-ready texts. Reading

¹ See Matthew Davidson and Thomas Lickona, *Smart & Good High Schools: Integrating Excellence and Ethics for Success in School, Work, and Beyond* (Cortland, NY: Center for the 4th and 5th Rs, 2005). Respect and Responsibility / Washington D.C.: Character Education Partnership.

² ACT, Inc., *Reading Between the Lines: What the ACT Reveals About College Readiness in Reading* (Iowa City, IA, 2006).

³ National Governors Association Center for Best Practices, Council of Chief State School Officers, "Key Points in English Language Arts," *Common Core State Standards* (Washington, D.C.: National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010).

⁴ *Ibid.*

instruction emphasizes a balance of informational and literary texts.

- In sixth through eighth grades, teachers of ELA, social studies and science each provide content-specific textual literary experiences. The middle school curriculum includes a blend of literature and substantial exposure to literary non-fiction, including historical and scientific documents.

For students to access grade-level texts with increasing complexity, the curriculum also focuses on the development of strong academic vocabulary. Students are exposed to extensive academic vocabulary through reading instruction, and practice is extended through listening, discussion and writing. Vocabulary instruction accentuates the nuances of word meanings and variances through a wide range of contexts.

Discussion and collaboration are also a focus of the ELA curriculum, as students apply reading skills to develop habits for providing text-based evidence in both conversation and writing. Students' writing emphasizes analysis of complex texts by supporting ideas and arguments with textual evidence and evaluation. Students learn to produce a variety of text types, including argument, informative, narrative and research-based pieces. Collaboration and integration of technology are important aspects of the writing process as students plan, draft, revise, edit and publish a wide range of writing pieces. The ELA curriculum also ensures students demonstrate adequate mastery of the essential conventions and grammar of Standard English in writing and speaking.⁵

Mathematics

If students are to be well-equipped for college and beyond, then students must be prepared through the kindergarten through eighth grade educational program to take Algebra II and other advanced mathematics courses in high school.

"A strong grounding in high school mathematics through Algebra II or higher correlates powerfully with access to college, graduation from college, and earning in the top quartile of income from employment."⁶ The development of a deep understanding of mathematical concepts makes such success possible. The Academy's mathematics curriculum is based on the MAS for mathematics. Through mastery of these standards, students develop a deep understanding of mathematical concepts. Students are also provided the opportunity to accelerate learning in seventh grade and complete Algebra I by eighth grade graduation, thus placing students on a college- and career-readiness trajectory. Research show that students who successfully complete Algebra I prior to entering high school are much more likely to complete other more advanced mathematics in high school and are "more than twice as likely to graduate from college" than students who do not complete Algebra I by eighth grade.⁷

The National Council for Teachers of Mathematics has recognized the importance of the study of algebra in developing mathematical fluency and has also noted the importance of the study of other

⁵ Coleman, David and Susan Pimentel, "Revised Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy," *Common Core State Standards* (Washington, D.C.: National Governors Association Center for Best Practices, Council of Chief State School Officers, 2012).

⁶ National Mathematics Advisory Panel, *Foundations for Success: The Final Report of the National Mathematics Advisory Panel* (Washington, D.C.: U.S. Department of Education, 2008).

⁷ *Ibid.*

mathematics components such as number sense and operations, measurement, geometry, data analysis and probability and problem-solving. Number sense is developed through a variety of concrete models allowing students to use the area of the brain used for the comprehension of mathematical knowledge. Students are prepared to be fluent in computation using formal algorithms and also learn essential measurement and data analysis skills. In addition, students learn to make connections and apply mathematical knowledge through problem-solving and inquiry.

- In kindergarten through second grades, number sense and computational fluency are the main focus areas of students' learning. Students develop the skills necessary to progress into higher-level mathematics; through open-ended problem-solving, an increase of critical thinking skills and ability to see connections across mathematics as well as other subjects.
- In third through fifth grades, learning will shift from computation to fractional awareness. The ability to compose and decompose numbers, developed in the early grades, leads to a deeper understanding of fractions, percents, decimals and computation. Algebraic skills are developed as students begin working with patterns and equations with missing numbers.
- In sixth through eighth grades, the concentration will shift to the study of algebra and functions. Number sense remains a critical focus area through the study of integers, rational and irrational numbers, exponents and absolute values. Conceptual ideas are integrated through lab activities that provide exploratory opportunities for students to explicitly connect abstract ideas to concrete examples.

The mathematics curriculum also teaches effective mathematical communication by engaging students in thinking, reading and writing about mathematics. This helps students understand the foundational concepts for success in more complex mathematical coursework.

Science

As the Association for the Advancement of Science and the National Council on Science explains, developing college-ready and scientifically literate students involves teaching a mixture of content knowledge, the practices and skills of scientists and information on the nature of science. The MAS were created around the work and philosophy of these organizations and the NHA curriculum aligns to the MAS. The curriculum, which includes study in life science, physical science, earth and space science and engineering, incorporates the use of STEMscopes™, Full Option Science System™ (“FOSS”), Delta Science Modules (“DSM”) and non-fiction readers to give students hands-on opportunities to develop content knowledge about the results of scientific discoveries regarding the natural world. The curriculum and resources also provide students the chance to participate in the scientific process of inquiry and discovery through conducting investigations, using instruments and applying mathematical skills that model the process used by scientists to learn about the universe. It also incorporates the skills required by the MAS for Literacy in Science for sixth through eighth grades, which require students to do high-level thinking and problem solving, incorporating scientific reading, writing, discussing and presenting.

- In kindergarten through second grades, the content of the science curriculum focuses on scientific inquiry and engineering designs primarily through the study of events and phenomena in nature as observed through the five senses. Investigations and design solutions at this level are modeled, simple and structured allowing students to write journals on personal discoveries, create simple pictographs of data and draw conclusions

from observations under the direction of the teacher. The incorporation of non-fiction readers on each topic provide students opportunities to develop grade-level appropriate science vocabulary.

- In third through fifth grades, the curriculum builds on these foundational skills and directs students to begin exploring the science and engineering practices, crosscutting concepts and engineering design solutions by making connections between events (e.g., the sun rises every day and it gets warmer during the day, therefore, the sun provides heat to earth). Investigations and engineering design solutions for students in third through fifth grades will still often be modeled, but the investigations are more complex and involve more detailed measurements, use of a variety of tools such as balances and microscopes and require students to control for multiple variables. Students engage in the practices of scientists and engineers by developing methods and solutions, analyzing and interpreting various representations of data, engage in argumentation, and by completing lab reports in order to communicate results of investigations and engineering designs orally and in writing.
- In sixth through eighth grades, the curriculum includes further exploration of the relationships between science and engineering practices and crosscutting concepts while also connecting knowledge of scientific concepts to real world examples and solidifying congruence between students' understanding of phenomena to that of the scientific community. Investigations are more student-directed, from the guiding question through the scientific procedures, to the organizing, analyzing and reporting of data. Within each unit of instruction, students employ the skills of scientists and engineers by making connections with respect to the content of the unit using the methods of science. The scientific processes are consistently integrated into content units throughout the year and students conduct science investigations and engineering design solutions through closed and open lab investigations in response to posed questions during content studies.

Social Studies

According to the Michigan Department of Education (“MDE”), “the purpose of social studies instruction is to develop social understanding and civic efficacy. The Grade Level Content Expectations (“GLCE”) balance disciplinary content and processes and skills that contribute to responsible citizenship and form a foundation for high school social studies coursework.” The NHA social studies curriculum, which is aligned to the MAS, ensures students are not only prepared for high school and college, but also prepared for life as global citizens. Developing students' understanding in the disciplines of history, geography, civics and government, economics and public discourse ensures readiness for college and responsible citizen involvement. In addition to supporting learning in these areas, the social studies curriculum also incorporates the skills required by the MAS for Literacy in History/Social Studies in sixth through eighth grades, which allow students to develop and utilize critical thinking skills by making connections, inferences and arguments around the content and learned skills. This focus on content, skills and critical thinking produces students who are knowledgeable in social studies and prepared to participate in society as informed citizens.

The curriculum supports the social studies disciplines that best prepare students to be contributing members of society. Students who master the social studies curriculum understand how history, geography, civics and economics interact in a global society. Through exposure to primary and

secondary sources, students develop knowledge of shared national and world history and are able to make connections between the past and present as well as between cultures and government systems.

- In kindergarten through second grades, students learn about the social studies disciplines by developing an understanding of culture and community through the lens of “Myself and Others,” “Families and Schools” and “The Local Community.” In these early grades, students begin to learn about history and culture in the surrounding world. Students study personal history, family history and examine local examples of the community and school to become familiar with basic geography, economy and functions of government.
- In third through fifth grades, students explore the social studies disciplines through the context of Michigan and the United States. Students build on prior social studies knowledge and apply new concepts to the study of the state of Michigan, the regions of the United States and the early history of the United States. By fifth grade, students apply the concepts of social studies to the history of pre-European America through the adoption of the Bill of Rights in 1791.
- In sixth through eighth grades, students regularly practice how to make connections between historical events in the United States, the world and current events. Students also develop knowledge of the relationship between geography, history, economics and culture. In sixth and seventh grades, students apply social studies concepts to the study of the Western and Eastern Hemispheres during ancient and modern times. In eighth grade, students continue the study of United States history from the writing of the Constitution through Reconstruction. The middle school curriculum gives students opportunities to extend this basic knowledge to gather more complex information, describe concepts in more detail and deepen the understanding of the relationship between geography, economics and civics.

Co-curricular areas

The Academy nurtures high-achieving, well-rounded students. The Academy offers the following co-curricular areas: art, music, library and educational technology and character development.

Art

The study of art allows students to understand and appreciate the subject while understanding the significant role art plays in the expression of ideas throughout history. Students in lower grades learn to recognize and describe art forms from a variety of historical eras and places, while learning that art takes many forms and has many purposes. Students study and reproduce styles and techniques used by artists and discuss art by examining and critiquing the work of artists. Students in upper elementary and middle school grades focus on comparing and contrasting artwork from different time periods, cultures, artists and mediums. Historical and contemporary art is studied as students create a variety of original works using appropriate styles and mediums to express themes, tone, mood and images.

Music

Students study the basics of music theory, music appreciation and the work of great composers. Students first learn to identify basic music forms and patterns, describe elements of music using appropriate music vocabulary and sing and play basic instruments. By listening to a variety of

music, students compare and contrast music from different composers, historical periods, cultures, styles and genres. Students continue to refine musical knowledge and skills by singing, playing, improvising and composing. In addition, students learn to identify and use key signature, meter signature, notation, bass and treble clef, tempo and dynamic markings as well as learn to perform and respond to a conductor's cues and make necessary adjustments.

Physical Education

Physical education includes a sequence of developmental experiences through which children learn by moving. Students first learn and practice basic movement skills and manipulate objects by throwing, catching, striking, pushing, pulling and climbing. Students take part in a variety of individual and group activities, games to increase body awareness, practice new skills and learn to move safely with respect to other people. Students also begin to learn about the physical and mental benefits of a healthy lifestyle characterized by physical activity. Students will then use movement skills in more complex ways by learning the concepts of fairness, positive attitude, teamwork and sportsmanship. Students learn to recognize the correlation between practice and mastery of skill and complete various types of drills to increase abilities. Students ultimately refine all the simple and complex skills necessary for physical activity of various types and focus on healthy lifestyles through nutrition and fitness.

Library and Educational Technology

The Library and Educational Technology Program is designed to expose students to a wide variety of classic and contemporary literature, instill a life-long love of reading and develop information literacy skills. The library collections contain specific materials that support the curriculum and provide students with a variety of high-quality literature and technological resources. The program has been crafted to reflect expectations of students set forth in several authoritative sources, including:

- The *Big6* model for teaching information skills created by Mike Eisenberg and Bob Berkowitz (1998),
- Information Literacy Standards developed by the American Association of School Librarians (“AASL”),
- The Association for Educational Communications and Technology (“AECT”).

Technology also plays a supporting role in the core academic curriculum. Classroom teachers plan lessons that leverage technology and provide technology resources for students. Students use technology to research, compose and present information related to topics of study. The Academy has a designated area to serve as the library and computer lab, enabling students to access technology needed to support the technology program. Moreover, students have access to a computer in the classroom to promote the integrated use of technology to support learning.

Character Development

To foster the desired culture, the Academy emphasizes strong personal character and accountability. Many schools offer character development programs, but the Academy melds character education throughout instruction and challenges the Academy community to model the desired traits. In this way, students develop a strong character while learning about virtues and different types of character. This approach to character development creates a culture within the Academy conducive to teaching and learning, and it makes parents and educators true

collaborators in the learning process.

The Academy implements the character development curriculum to promote college readiness, create an environment that is conducive to teaching and learning and support the academic goals of the Academy.

During each month of the school year, the Academy focuses on a monthly virtue: wisdom, respect, gratitude, self-control, perseverance, courage, encouragement, compassion and integrity. Students develop and practice the virtues that, in time, become ingrained habits.

Students are encouraged to develop moral character, show performance character and interact well with others through social character. Character is both taught and caught; in other words, students acquire the behaviors that are modeled. The Academy will ensure school staff continually model moral, performance and social character in formal and informal settings. Students also participate in character development assemblies, where staff and other students speak on the monthly virtue and share how the virtue is implemented. Students are encouraged to share experiences and progress is recognized.

The Academy believes this innovative piece of the Educational Program prepares students for success academically and in life.

Special Education

When making educational placement decisions for students with disabilities, the Academy will ensure that parents are contributing members of the Individualized Educational Program (“IEP”) team, and together the team will make decisions that are subject to requirements regarding provision of the least-restrictive environment. When determining how services will be delivered to students with disabilities, the Academy will follow all Special Education Rules as issued by the Michigan Department of Education. If a child with a current IEP enrolls in the Academy, the Academy will implement the existing IEP to the extent possible or will provide an interim IEP and review with parents until a new IEP can be developed. IEPs will be developed, revised and implemented in accordance with the Individuals with Disabilities Education Improvement Act (“IDEIA”) and state law and regulations.

The Academy will fully comply with federal laws and regulations governing children with disabilities as follows:

1. The Academy is responsible for providing a free, appropriate public education to children with disabilities enrolled in the Academy that have been determined through an IEP to require Special Education programs and services.
2. The Academy will ensure that children who are suspected of having disabilities are properly evaluated by a multidisciplinary team, as defined in the Michigan Special Education Rules, and that children who have already been identified are re-evaluated by the multidisciplinary team at least every three years.
3. When a multidisciplinary team determines that a special education student requires Special Education programs and services, the Academy will ensure that the IEP is fully

implemented in accordance with IDEIA and reviewed on an annual basis or more frequently as determined by the IEP team.

If a student is not able to access the general education curriculum through Special Education services and accommodations, the IEP team will review the student's learning needs. When determined appropriate by the IEP team, the curricular tools may be modified to best allow the student to make progress in the curriculum.

Educational Development Plan ("EDP")

As per P.A. 141 of 2007, the Academy provides students with the opportunity to develop EDPs in grade seven. These EDPs include students' personal information, career goals, assessment results, educational/training goals, plans of action for high school and post-secondary and post-school options, in accordance with the requirements of the law. EDPs are reviewed by parents as appropriate.

Assessments

The Academy has a robust and purposeful formative assessment process embedded into the instructional approach, using measurements of academic growth and proficiency beyond those required by state law. One of these assessments is a nationally normed assessment administered multiple times each year to measure individual student progress over time, provide a national peer-group comparison point and evaluate grade and school level achievement and growth. The Academy begins the assessment program in the early grades with diagnostic assessments that provide teachers with key individualized student information. This helps teachers differentiate instruction and modify teaching approaches to meet specific needs as early as possible in a student's career. The Academy also administers lesson and unit-level assessments to check understanding and to measure grade level content knowledge. The Academy uses common interim assessments, shared across all schools partnering with NHA, to drive forward the instructional program by learning from other schools. The common interim assessment results in ELA and math are used as an indicator of proficiency on the state assessment for students in grades 3 through 8.

Nationally-Normed Assessments

A nationally-normed assessment is administered multiple times each year in reading and mathematics to allow teachers, deans and the Academy leader to continually gauge student progress, make changes in instruction where necessary and measure the effectiveness of those changes. Typically, NHA-partner schools have used the Northwest Evaluation Association's™ Measures of Academic Progress® Growth assessment ("NWEA™-MAP®" Growth, Grades 2+, or NWEA for short). Under the NWEA program, each student takes a personalized assessment using a computer-adaptive exam. The assessment zeroes-in on the student's instructional level, sets individualized goals for student achievement and provides teachers with a robust tool that articulates the skills a student has acquired, the skills a student needs to solidify and the skills a student will be ready to learn next. NWEA assessments are dynamically developed as the test is being administered: the program instantly analyzes a student's response to each test item and determines the appropriate difficulty level to present throughout the remainder of the test. This type of adaptive test makes the results more accurate and individually actionable.

Fall assessments provide formative information, both as baseline data for the current year and comparative data to the previous school year. End-of-year assessments provide summative growth

data. The tests are delivered and immediately scored electronically to measure growth for individual students, classrooms and the school as a whole.

The MAP Growth K-2 (formerly “MAP for Primary Grades”) version of the NWEA assessment has been used in other NHA-partner schools and administered to all kindergarten and first-grade students as a computer-adaptive, norm-referenced test designed to assess achievement levels in reading and math in these early grades. The key content areas covered are:

- Reading: Phonics, Phonological Awareness, Concepts of Print, Vocabulary and Word Structure, Comprehension, and Writing.
- Mathematics: Problem Solving, Number Sense, Computation, Measurement and Geometry, Statistics and Probability, and Algebra.

With the MAP Growth K-2 assessment, teachers are provided numerous reports and resources to help teachers identify areas of strengths and weaknesses in individual students and allow them to differentiate instruction accordingly.

Program Evaluation

Formative Assessment Process

The education scholar W. James Popham defines the formative assessment approach embraced by NHA schools as follows: “Formative assessment is a planned process in which assessment-elicited evidence of students’ status is used by teachers to adjust their ongoing instructional procedures or by students to adjust their current learning tactics.”⁸ The Academy’s process provides assessment-based feedback to both teachers and students, occurs throughout the instructional periods of the school day and is purposefully designed to help teachers modify instructional techniques to help students achieve individual educational objectives. The steps of the formative assessment process include: 1) identifying objectives and determining end-of-instruction assessments; 2) developing building blocks; 3) analyzing evidence; 4) responding to evidence; and 5) daily planning. These are described further below.

Identifying objectives and determining end-of-instruction assessments: During the formative assessment process, teachers first identify the objectives for units of instruction based on the year-long plan. Teachers then use end-of-instruction assessments to gauge students’ status at the end of each unit. Assessment methods are selected based on the learning goal and sound assessment design. This “assessment-influenced” approach is important, for through it teachers “exemplify the curricular aim or aims being sought ...and ultimately decide what mastery of those aims looks like.”

Developing building blocks: After the educational objectives are reviewed and appropriate end-of-instruction assessments are determined, grade-level teams identify building blocks of instruction that scaffold student learning toward mastery of each educational objective. These building blocks are used to construct a variety of formative assessments that are woven into daily instruction and serve as check points during the learning process. Grade-level teams utilize building block assessments across the classrooms. Both teachers and students track student progress over time.

⁸ James W. Popham, *Instruction that Measures Up* (Alexandria, VA: ASCD, 2009).

Analyzing evidence: Whether gathered through building block assessments or end-of-instruction assessments, teachers analyze evidence at the student and classroom level. The specificity of the building block assessments enables teachers to determine exactly what knowledge or skills need further development for particular students. As teachers meet to examine student work, they gauge the effectiveness of instruction and determine students' degree of mastery of the educational objectives. Teachers analyze evidence to discover student misconceptions and to identify knowledge or skill gaps that may inhibit student learning success. Grade-level teams also analyze end-of-instruction assessments to ensure that the curriculum is coherent across classrooms within the school.

Responding to evidence: As units are prepared, teachers identify opportunities for planned instructional adjustments in case students do not learn as expected. Teachers may then make these adjustments during the course of unit instruction, as prompted by evidence from the building block assessments or end-of-instruction assessments. If learning progresses more quickly than expected, then instruction will move at an accelerated rate through the unit plan. If learning progresses more slowly than expected, then more time will be spent delivering instruction within the unit. Because students play a role in tracking individual progress, students know precisely where focus is needed to improve learning. Teachers consider end-of-instruction assessment evidence to develop subsequent units of instruction.

Daily planning: Daily planning allows teachers to connect educational objectives with instructional resources, effective teaching strategies and instructional methods that best support student learning. It also allows teachers to develop strategies to check for understanding on an ongoing basis and determine if learning activities are providing intellectual engagement for each student. Teachers work backwards from the unit plan to structure instruction in the way that will best lead to mastery of educational objectives. In addition, the teacher's daily instructional objectives are presented in student-friendly language through "I Can" statements. These "I Can" statements are incorporated into lessons so that students know precisely what the learning goal is and can articulate it in their own terms. The Academy may also use "I Can" statements for English Learners to ensure students are presented with proper proficiency standards and can articulate individual progress in acquiring English.

The formative assessment process plays a central role in the Academy's overall academic assessment system, as it provides teachers and Academy leadership with regular access to relevant information pertaining to students' mastery of learning goals.

Eagle Crest Charter Academy

Contract Amendment No. 5

Tab 2

CURRICULUM

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.4, the Academy shall implement, deliver, and support the curriculum identified in this schedule.

The Academy has adopted the National Heritage Academies curriculum. The curriculum for all core subjects has been received, reviewed and approved by the Center.

Elementary

The following subjects/courses are offered at the Academy.*

Course	K	1	2	3	4	5	6	7	8
English Language Arts	X	X	X	X	X	X	X	X	X
Mathematics	X	X	X	X	X	X	X	X	X
Science	X	X	X	X	X	X	X	X	X
Social Studies	X	X	X	X	X	X	X	X	X
Health (<i>included in science</i>)	X	X	X	X	X	X	X	X	X
Physical Education	X	X	X	X	X	X	X	X	X

* The Academy updates course offerings each school year based on the needs and interests of students as well as teacher certification. As a result some courses are rotated and are not offered each year. All core subjects are taught every year and high school students are required to meet the requirements of the Michigan Merit Curriculum.

AMENDMENT NO. 6

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 6

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

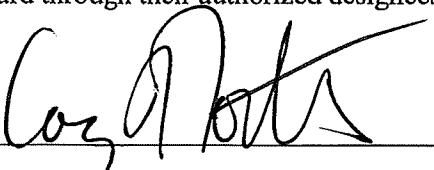
- 1.) Amend the Terms and Conditions of Contract by replacing the language contained within the Preamble; Article I: Definitions; Article II: Relationship Between the Academy and the University Board; Article III, Section 3.6. Authorization to Employ or Contract and Section 3.7. Teacher Certification and Teaching Methods; Article IV, Section 4.2. Other Permitted Activities and Section 4.5. Prohibition of Identified Family Relationships; Article VI, Section 6.5. Methods of Pupil Assessment and Section 6.16. Matriculation Agreements; Article VII: Tuition Prohibited; Article VIII: Compliance with State and Federal Laws; Article X: Contract Revocation, Termination, and Suspension; Article XI: Provisions Relating to Public School Academies; and Article XII: General Terms, with the corresponding language attached as Tab 1.
- 2.) Amend Schedule 7, Section b: Educational Goal and Related Measures, by replacing the materials contained therein with the materials attached as Tab 2.

The changes identified in Sections 1 and 2 shall have an effective date of July 1, 2019.

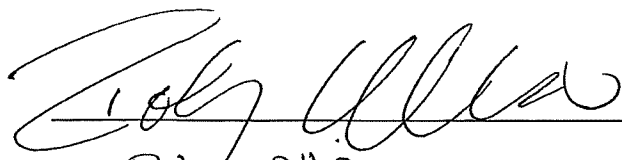
- 3.) Amend Schedule 6: Physical Plant Description, by replacing the materials contained therein with the materials attached as Tab 3.

The changes identified in Section 3 shall have an effective date of September 3, 2019.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees.


By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board

Dated: 10-25-19


By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Dated: 10/15/19

Eagle Crest Charter Academy

Contract Amendment No. 6

Tab 1

Preamble:

WHEREAS, the People of Michigan through their Constitution have provided that schools and the means of education shall forever be encouraged and have authorized the Legislature to maintain and support a system of free public elementary and secondary schools; and

WHEREAS, all public schools are subject to the leadership and general supervision of the State Board of Education; and

WHEREAS, the Legislature has authorized an alternative form of public school designated a "public school academy" to be created to serve the educational needs of pupils and has provided that pupils attending these schools shall be eligible for support from the State School Aid Fund; and

WHEREAS, the Legislature has delegated to the governing boards of state public universities, community college boards, intermediate school district boards and local school district boards, the responsibility for authorizing the establishment of public school academies; and

WHEREAS, the Central Michigan University Board of Trustees ("University Board") has considered and has approved the issuance of a contract to Eagle Crest Charter Academy ("the Academy");

NOW, THEREFORE, pursuant to the Revised School Code, the University Board issues a contract conferring certain rights, franchises, privileges, and obligations and confirms the Academy's status as a school of excellence. In addition, the parties agree that the issuance of this Contract is subject to the following terms and conditions:

ARTICLE I DEFINITIONS

Section 1.1. Certain Definitions. For purposes of this Contract, and in addition to the terms defined throughout this Contract, each of the following words or expressions, whenever initially capitalized, shall have the meaning set forth in this section:

- (a) "Academy" means the Michigan nonprofit corporation named Eagle Crest Charter Academy which is established as a school of excellence pursuant to this Contract.
- (b) "Academy Board" means the Board of Directors of the Academy.
- (c) "Applicable Law" means all state and federal law applicable to a school of excellence.
- (d) "Application" means the school of excellence application and supporting documentation submitted to the University for the establishment of the Academy.
- (e) "Code" means the Revised School Code, Act No. 451 of the Public Acts of 1976, as amended, being Sections 380.1 to 380.1852 of the Michigan Compiled Laws.
- (f) "Community District" means a community school district created under part 5B of the Code, MCL 380.381 et seq.
- (g) "Conservator" means an individual appointed by the University President in accordance with Section 10.8 of these Terms and Conditions.
- (h) "Contract" means, in addition to the definition set forth in the Code, these Terms and Conditions, the Reauthorizing Resolution, the Method of Selection, Appointment, and Removal Resolution, the Schedules, the Educational Service Provider Policies, the Master Calendar and the Application.
- (i) "Department" means the Michigan Department of Education.
- (j) "Director" means a person who is a member of the Academy Board of Directors.
- (k) "Educational Service Provider" or "ESP" means an educational management organization, or employee leasing company, as defined under section 503c of the Code, MCL 380.503c, that has entered into a contract or agreement with the Academy Board for operation or management of the Academy, which contract has been submitted to the Center for review and has not been disapproved by the Center Director, and is consistent with the Educational Service Provider Policies, as they may be amended from time to time, and Applicable Law.
- (l) "Educational Service Provider Policies" or "ESP Policies" means the Educational Service Provider Policies, adopted by The Governor John Engler Center for Charter Schools at Central Michigan University that apply to a Management Agreement. The Educational Service Provider Policies may be amended from time to time. Upon amendment, changes to the ESP Policies shall automatically be incorporated into this Contract and shall be exempt from the amendment procedures under Article IX of these Terms and Conditions.

- (m) "Fund Balance Deficit" means the Academy has more liabilities than assets at the end of any given school fiscal year, and includes any fiscal year where the Academy would have had a budget deficit but for a financial borrowing by the Academy or a monetary contribution by an Educational Service Provider or other person or entity to the Academy. If the Academy receives a gift or grant of money or financial support from an Educational Service Provider or other person or entity that does not require repayment by the Academy, and is not conditioned upon the action or inactions of the Academy Board, then such gift or grant shall not constitute a borrowing or contribution for purposes of determining a Fund Balance Deficit.
- (n) "Management Agreement" or "ESP Agreement" means an agreement as defined under section 503c of the Code, MCL 380.503c, that has been entered into between an ESP and the Academy Board for the operation and/or management of the Academy which has been submitted to the Center for review and has not been disapproved by the Center Director.
- (o) "Master Calendar" means the Master Calendar of Reporting Requirements as annually issued by The Governor John Engler Center for Charter Schools setting forth reporting and document submission requirements for the Academy.
- (p) "Method of Selection, Appointment, and Removal Resolution" means the policy adopted by resolution of the University Board on September 18, 1998, and amended on February 15, 2018, establishing the standard method of selection and appointment, length of term, removal and suspension, number of directors and qualifications of academy board members for public school academies issued a Contract by the University Board.
- (q) "Reauthorizing Resolution" means the resolution adopted by the University Board on December 17, 2015, approving the issuance of a Contract to the Academy.
- (r) "Schedules" means the following Contract documents of the Academy: Schedule 1: Restated Articles of Incorporation, Schedule 2: Amended Bylaws, Schedule 3: Fiscal Agent Agreement, Schedule 4: Oversight, Compliance and Reporting Agreement, Schedule 5: Description of Staff Responsibilities, Schedule 6: Physical Plant Description, Schedule 7: Required Information for a School Of Excellence, and Schedule 8: Information Available to the Public and the Center.
- (s) "State Board" means the State Board of Education, established pursuant to Article 8, Section 3 of the 1963 Michigan Constitution and MCL 388.1001 et seq.
- (t) "State School Aid Fund" means the State School Aid Fund established pursuant to Article IX, Section 11 of the Michigan Constitution of 1963, as amended.
- (u) "State School Reform/Redesign Office" means the office created within the Michigan Department of Technology Management and Budget by Executive Reorganization Order 2015-02 codified at MCL 18.445, and transferred from the Michigan Department of Technology Management and Budget to the Michigan Department of Education by Executive Reorganization Order 2017-02, codified at MCL 388.1282.
- (v) "Superintendent" means the Michigan Superintendent of Public Instruction.
- (w) "Terms and Conditions" means this document entitled "Terms and Conditions of Contract, Dated July 1, 2016, Issued by the Central Michigan University Board of Trustees Confirming the Status of Eagle Crest Charter Academy as a School Of Excellence."

- (x) "The Governor John Engler Center for Charter Schools" or "The Center" means the office designated by the University Board as the initial point of contact for school of excellence applicants and schools of excellence authorized by the University Board. The Center is also responsible for administering the University Board's responsibilities with respect to the Contract.
- (y) "The Governor John Engler Center for Charter Schools Director" or "The Center Director" means the person designated at the University to administer the operations of the Center.
- (z) "University" means Central Michigan University, established pursuant to Article 8, sections 4 and 6 of the 1963 Michigan Constitution and MCL 390.551 et seq.
- (aa) "University Board" means the Central Michigan University Board of Trustees.
- (bb) "University Charter Schools Hearing Panel" or "Hearing Panel" means such persons as designated by the University President.
- (cc) "University President" means the President of Central Michigan University or his or her designee. In section 1.1(bb) above, "University President" means the President of Central Michigan University.

Section 1.2. Captions. The captions and headings used in this Contract are for convenience only and shall not be used in construing the provisions of this Contract.

Section 1.3. Gender and Number. The use of any gender in this Contract shall be deemed to be or include the other genders, including neuter, and the use of the singular shall be deemed to include the plural (and vice versa) wherever applicable.

Section 1.4. Statutory Definitions. Statutory terms defined in the Code shall have the same meaning in this Contract.

Section 1.5. Schedules. All Schedules to this Contract are incorporated into, and made part of, this Contract.

Section 1.6. Application. The Application submitted to the University Board for the establishment of the Academy is incorporated into, and made part of, this Contract. To the extent there is a difference between the Contract and the Application, the Contract shall control.

Section 1.7. Conflicting Contract Provisions. In the event that there is a conflict between language contained in the provisions of this Contract, the Contract shall be interpreted as follows: (i) The Method of Selection, Appointment, and Removal Resolution shall control over any other conflicting language in the Contract; (ii) the Reauthorizing Resolution shall control over any other conflicting language in the Contract with the exception of language in The Method of Selection, Appointment, and Removal Resolution; (iii) the Terms and Conditions shall control over any other conflicting language in the Contract with the exception of language in The Method of Selection, Appointment, and Removal Resolution and the Reauthorizing Resolution; and (iv) the Restated Articles of Incorporation shall control over any other conflicting language in the Contract with the exception of language in the Method of Selection, Appointment, and Removal Resolution, Reauthorizing Resolution and these Terms and Conditions.

ARTICLE II

RELATIONSHIP BETWEEN THE ACADEMY AND THE UNIVERSITY BOARD

Section 2.1. Constitutional Status of Central Michigan University. Central Michigan University is a constitutionally established body corporate operating as a state public university. The University Board is an authorizing body as defined by the Code. In approving this Contract, the University Board voluntarily exercises additional powers given to the University under the Code. Nothing in this Contract shall be deemed to be any waiver of Central Michigan University's powers or independent status and the Academy shall not be deemed to be a part of Central Michigan University. If applicable, the University Board has provided to the Department the accreditation notice required under the Code.

Section 2.2. Independent Status of the Academy. The Academy is a body corporate and governmental entity authorized by the Code. It is organized and shall operate as a school of excellence and a nonprofit corporation. It is not a division or part of Central Michigan University. The relationship between the Academy and the University Board is based solely on the applicable provisions of the Code and the terms of this Contract or other agreements between the University Board and the Academy.

Section 2.3. Financial Obligations of the Academy Are Separate From the State of Michigan, University Board and the University. Any contract, mortgage, loan or other instrument of indebtedness entered into by the Academy and a third party shall not in any way constitute an obligation, either general, special, or moral, of the State of Michigan, the University Board, or the University. Neither the full faith and credit nor the taxing power of the State of Michigan or any agency of the State, nor the full faith and credit of the University Board or the University shall ever be pledged for the payment of any Academy contract, mortgage, loan or other instrument of indebtedness.

Section 2.4. Academy Has No Power To Obligate or Bind the State of Michigan, the University Board or the University. The Academy has no authority whatsoever to enter into any contract or other agreement that would financially obligate the State of Michigan, the University Board or the University, nor does the Academy have any authority whatsoever to make any representations to lenders or third parties, that the State of Michigan, the University Board or the University in any way guarantee, are financially obligated, or are in any way responsible for any contract, mortgage, loan or other instrument of indebtedness entered into by the Academy.

Section 2.5. New Public School Academies Located Within the Boundaries of a Community District. If the circumstances listed below in (a) or (b) apply to the Academy's site, the Academy represents to the University Board, intending that the University Board rely on such representation as a precondition to issuing a contract for a new school of excellence, that the Academy will have a substantially different governance, leadership and curriculum than the public school previously operating at the site:

- (a) The Academy's proposed site is the same location as a public school that (i) is currently on the list under Section 1280c(1), MCL 380.1280c(1) or Section 1280g(3), MCL 380.1280g(3) of the Code, as applicable; or (ii) has been on the list under Section 1280c(1) or 1280g(3) of the Code, as applicable, during the immediately preceding 3 school years.
- (b) The Academy's proposed site is the same location of another public school academy, urban high school academy, school of excellence or strict discipline academy whose contract was revoked or terminated by an authorizing body.

ARTICLE III

ROLE OF THE UNIVERSITY BOARD AS AUTHORIZING BODY

Section 3.6. Authorization to Employ or Contract. The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. The Academy Board shall prohibit any individual from being employed by the Academy or an Educational Service Provider, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees.

The Academy Board may contract with an Educational Service Provider to provide comprehensive educational, administrative, management, or instructional services or staff to the Academy. Before entering into a Management Agreement with an Educational Service Provider, the Academy Board shall first comply with the Educational Service Provider Policies issued by the Center. Any Management Agreement entered into by the Academy shall also comply with Section 11.2 and 12.10 of these Terms and Conditions. A copy of the Management Agreement between the Academy Board and the Educational Service Provider shall be incorporated into this Contract under Schedule 5. Any changes to the Management Agreement shall be incorporated into this Contract by amendment in accordance with Article IX, as applicable.

Section 3.7. Teacher Certification. Except as otherwise provided by law, the Academy shall use certificated teachers according to State Board rule.

ARTICLE IV
REQUIREMENT THAT THE ACADEMY ACT SOLELY AS GOVERNMENTAL ENTITY

Section 4.2. Other Permitted Activities.

- (a) Nothing in this Contract shall prohibit the Academy from engaging in other lawful activities that are not in derogation of the Academy's status as a public school or that would not jeopardize the eligibility of the Academy for state school aid funds. Except as provided for the agreements identified below in Section 4.2(b), the Academy may enter into agreements with other public schools, governmental units, businesses, community and nonprofit organizations where such agreements contribute to the effectiveness of the Academy or advance education in this state.
- (b) The Academy shall submit to the Center for prior review the following agreements:
 - (i) In accordance with the Educational Service Provider Policies, a draft copy of any ESP Agreement and any subsequent amendments;
 - (ii) In accordance with the Master Calendar, a draft copy of any Academy deed or lease, amendments to existing leases or any new leasing agreements for any Academy facility; and
 - (iii) In accordance with the Master Calendar, draft long-term or short-term financing closing documents and intercept requests.

Section 4.5. Prohibition of Identified Family Relationships. The Academy Board shall prohibit specifically identified family relationships pursuant to applicable law and the Terms and Conditions of this Contract. Language in this Section controls over section 1203 of the Code. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited familial relationships for the purposes of this Contract:

- (a) No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:
 - (i) Is employed by the Academy;
 - (ii) Works at or is assigned to the Academy;
 - (iii) Has an ownership, officer, policymaking, managerial, administrative non-clerical, or other significant role with the Academy's Educational Service Provider or employee leasing company;
 - (iv) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy; or
 - (v) Is a current Academy Board member.
- (b) The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner.

ARTICLE VI OPERATING REQUIREMENTS

Section 6.5. Methods of Pupil Assessment. The Academy shall properly administer the academic assessments identified in Schedule 7e and in accordance with the requirements detailed in the Master Calendar. The Academy shall provide the Center direct access to the results of these assessments, along with any other measures of academic achievement reasonably requested by the Center.

Section 6.16. Matriculation Agreements. Before the Academy Board approves a matriculation agreement with another public school, the Academy shall provide a draft copy of the agreement to the Center for review. Any matriculation agreement entered into by the Academy shall be added to Schedule 7f through a contract amendment approved in accordance with the Contract. Until the matriculation agreement is incorporated into the Contract, the Academy is prohibited from granting an enrollment priority to any student pursuant to that matriculation agreement.

ARTICLE VII
TUITION PROHIBITED

Section 7.1. Tuition Prohibited; Fees and Expenses. The Academy shall not charge tuition. The Academy may impose fees and require payment of expenses for activities of the Academy where such fees and payments are not prohibited by Applicable Law.

ARTICLE VIII
COMPLIANCE WITH APPLICABLE LAWS

Section 8.1. Compliance with Applicable Law. The Academy shall comply with all applicable state and federal laws. Nothing in this Contract shall be deemed to apply any other state or federal law to the Academy.

ARTICLE X

CONTRACT REVOCATION, TERMINATION, AND SUSPENSION

Section 10.1. Statutory Grounds for Revocation. In addition to the other grounds for revocation in Section 10.2 and the automatic revocation in Section 10.3 of these Terms and Conditions, the University Board may revoke this Contract, pursuant to the procedures set forth in Section 10.6, upon a determination that one or more of the following has occurred:

- (a) Failure of the Academy to demonstrate improved pupil academic achievement for all groups of pupils or abide by and meet the educational goal and related measures set forth in this Contract;
- (b) Failure of the Academy to comply with all Applicable Law;
- (c) Failure of the Academy to meet generally accepted public sector accounting principles and to demonstrate sound fiscal stewardship; or
- (d) The existence of one or more other grounds for revocation as specified in this Contract.

Section 10.2. Other Grounds for Revocation. In addition to the statutory grounds for revocation set forth in Section 10.1 and the grounds for an automatic revocation set forth in Section 10.3, the University Board may revoke this Contract, pursuant to the procedures set forth in Section 10.6, upon a determination that one or more of the following has occurred:

- (a) The Academy fails to achieve or demonstrate measurable progress toward achieving the educational goal and related measures identified in this Contract;
- (b) The Academy fails to properly implement, consistently deliver, and support the educational programs or curriculum identified in this Contract;
- (c) The Academy is insolvent, has been adjudged bankrupt, or has operated for two or more school fiscal years with a Fund Balance Deficit;
- (d) The Academy has insufficient enrollment to successfully operate a school of excellence, or the Academy has lost more than fifty percent (50%) of its student enrollment from the previous school year;
- (e) The Academy fails to fulfill the compliance and reporting requirements or defaults in any of the terms, conditions, promises or representations contained in or incorporated into this Contract or, during the term of this Contract, it is discovered by the Center that the Academy failed to fulfill the compliance and reporting requirements or there was a violation of a prior Contract issued by the University Board;
- (f) The Academy files amendments to its Articles of Incorporation with the Michigan Department of Licensing and Regulatory Affairs, Bureau of Commercial Services without first obtaining the Center's approval;
- (g) The Center Director discovers grossly negligent, fraudulent or criminal conduct by the Academy's applicant(s), directors, officers, employees or agents in relation to their performance under this Contract; or

- (h) The Academy's applicant(s), directors, officers, employees or agents have provided false or misleading information or documentation to the Center in connection with the University Board's approval of the Application, the issuance of this Contract, or the Academy's reporting requirements under this Contract or Applicable Law.

Section 10.3. Automatic Amendment Of Contract; Automatic Termination of Contract If All Academy Sites Closed; Economic Hardship Termination. Except as otherwise provided in this Section 10.3, if the University Board is notified by the Department that an Academy site is subject to closure under section 507 of the Code, MCL 380.507 ("State's Automatic Closure Notice"), then this Contract shall automatically be amended to eliminate the Academy's authority to operate certain age and grade levels at the site or sites identified in the State's Automatic Closure Notice. If the State's Automatic Closure Notice includes all of the Academy's existing sites, then this Contract shall automatically be terminated at the end of the current school year in which either the State's Automatic Closure Notice is received without any further action of the University Board or the Academy.

Following receipt of the State's Automatic Closure Notice, the Center Director shall forward a copy of the notice to the Academy Board and request a meeting with the Academy Board representatives to discuss the Academy's plans and procedures for the elimination of certain age or grade levels at the identified site or sites, or if all of the Academy's existing sites are included in that notice, then wind-up and dissolution of the Academy corporation at the end of the current school year. All Academy inquiries and requests for reconsideration of the State's Automatic Closure Notice, including the granting of any hardship exemption by the Department rescinding the State's Automatic Closure Notice ("Pupil Hardship Exemption"), shall be directed to the Department, in a form and manner determined by the Department.

If the Department rescinds the State's Automatic Closure Notice for an Academy site or sites by granting a Pupil Hardship Exemption, the Academy is not required to close the identified site(s), but shall present to the Center a proposed Contract amendment incorporating the Department's school improvement plan, if applicable, for the identified site(s).

If the Department elects not to issue a Pupil Hardship Exemption and the Center Director determines, in his or her discretion, that the closure of one or more sites as directed by the Department creates a significant economic hardship for the Academy as a going concern or the possibility of a mid-year school closure, then the Center Director may recommend to the University Board that the Contract be terminated at the end of the current school year (hereinafter "Economic Hardship Termination"). If the University Board approves the Economic Hardship Termination recommendation, then this Contract shall terminate at the end of the current school year without any further action of the parties.

The University Board's revocation procedures set forth in Section 10.6 do not apply to an automatic termination initiated by the State's Automatic Closure Notice or an Economic Hardship Termination under this Section 10.3.

Section 10.4. Grounds and Procedures for Academy Termination of Contract. The Academy Board, by majority vote of its Directors, may, at any time and for any reason, request termination of this Contract. The Academy Board's request for termination shall be made to the Center Director not less than six (6) calendar months in advance of the Academy's proposed effective date of termination. Upon receipt of an Academy request for termination, the Center Director shall present the Academy Board's request for termination to the University Board. A copy of the Academy Board's resolution approving of the Contract termination, including a summary of the reasons for terminating the Contract, shall be included with the Academy Board's request for termination. Upon receipt of the Academy Board's request for termination,

the University Board shall consider and vote on the proposed termination request. The University Board may, in its sole discretion, waive the six (6) month advance notice requirement for terminating this Contract.

Section 10.5. Grounds and Procedures for University Termination of Contract. The University Board, in its sole discretion, reserves the right to terminate the Contract (i) for any reason or for no reason provided that such termination shall not take place less than six (6) months from the date of the University Board's action; or (ii) if there is a change in Applicable Law that the University Board, in its sole discretion, determines impairs its rights and obligations under the Contract or requires the University Board to make changes in the Contract that are not in the best interest of the University Board or the University, then such termination shall take effect at the end of the current Academy fiscal year. Following University Board approval, the Center Director shall provide notice of the termination to the Academy. If during the period between the University Board action to terminate and the effective date of termination, the Academy has violated the Contract or Applicable Law, the Contract may be revoked or suspended sooner pursuant to this Article X. If this Contract is terminated pursuant to this Section 10.5, the revocation procedures in Section 10.6 shall not apply.

Section 10.6. University Board Procedures for Revoking Contract. Except for the automatic revocation and procedures initiated by the State of Michigan set forth in Section 10.3, the University Board's process for revoking the Contract is as follows:

- (a) Notice of Intent to Revoke. The Center Director, upon reasonable belief that grounds for revocation of the Contract exist, shall notify the Academy Board of such grounds by issuing the Academy Board a Notice of Intent to Revoke for non-compliance with the Contract or Applicable Law. The Notice of Intent to Revoke shall be in writing and shall set forth in sufficient detail the alleged grounds for revocation.
- (b) Academy Board's Response. Within thirty (30) days of receipt of the Notice of Intent to Revoke, the Academy Board shall respond in writing to the alleged grounds for revocation. The Academy Board's response shall be addressed to the Center Director, and shall either admit or deny the allegations of non-compliance. If the Academy's response includes admissions of non-compliance with the Contract or Applicable Law, the Academy Board's response must also contain a description of the Academy Board's plan and time line for correcting the non-compliance with the Contract or Applicable Law. If the Academy's response includes a denial of non-compliance with the Contract or Applicable Law, the Academy's response shall include sufficient documentation or other evidence to support a denial of non-compliance with the Contract or Applicable Law. A response not in compliance with this Section shall be deemed to be non-responsive. As part of its response, the Academy Board may request that a meeting be scheduled with the Center Director prior to a review of the Academy Board's response.
- (c) Plan of Correction. Within fifteen (15) days of receipt of the Academy Board's response or after a meeting with Academy Board representatives, the Center Director shall review the Academy Board's response and determine whether a reasonable plan for correcting the deficiencies can be formulated. If the Center Director determines that a reasonable plan for correcting the deficiencies set forth in the Notice of Intent to Revoke can be formulated, the Center Director shall develop a plan for correcting the non-compliance ("Plan of Correction") which may include Reconstitution pursuant to 10.6(d) of these Terms and Conditions. In developing a Plan of Correction, the Center Director is permitted to adopt, modify or reject some or all of the Academy Board's response for correcting the deficiencies outlined in the Notice of Intent to Revoke. The Notice of Intent to Revoke shall be closed if the Center Director determines any of the following: (i) the Academy Board's denial of non-compliance is persuasive; (ii) the non-compliance set forth in the Notice of

Intent to Revoke has been corrected by the Academy Board; or (iii) the Academy Board has successfully completed the Plan of Correction.

- (d) University Board's Contract Reconstitution Provision. The Center Director may reconstitute the Academy in an effort to improve student educational performance or to avoid interruption of the educational process. Reconstitution may include, but is not limited to, one of the following actions: (i) removal of 1 or more members of the Academy Board; (ii) termination of at-will board appointments of 1 or more Academy Board members in accordance with The Method of Selection, Appointment and Removal Resolution; (iii) withdrawing approval of a contract under Section 506 of the Code; or (iv) the appointment of a new Academy Board of Directors or a Conservator to take over operations of the Academy.

Except as otherwise provided in this subsection, reconstitution of the Academy does not prohibit the Department from issuing an order under section 507 of the Code, MCL 380.507, directing the automatic closure of the Academy's site(s).

- (e) Request for Revocation Hearing. The Center Director may initiate a revocation hearing before the University Charter Schools Hearing Panel if the Center Director determines that any of the following has occurred:

- (i) the Academy Board has failed to respond to the Notice of Intent to Revoke as set forth in Section 10.6(b);
- (ii) the Academy Board's response to the Notice of Intent to Revoke is non-responsive;
- (iii) the Academy Board's response admits violations of the Contract or Applicable Law which the Center Director deems cannot be remedied or cannot be remedied in an appropriate period of time, or for which the Center Director determines that a Plan of Correction cannot be formulated;
- (iv) the Academy Board's response contains denials that are not supported by sufficient documentation or other evidence showing compliance with the Contract or Applicable Law;
- (v) the Academy Board has not complied with part or all of a Plan of Correction established in Section 10.6(c);
- (vi) the Academy Board has engaged in actions that jeopardize the financial or educational integrity of the Academy; or
- (vii) the Academy Board has been issued multiple or repeated Notices of Intent to Revoke.

The Center Director shall send a copy of the request for revocation hearing to the Academy Board at the same time the request is sent to the Hearing Panel. The request for revocation shall identify the reasons for revoking the Contract.

- (f) Hearing before the University Charter Schools Hearing Panel. Within thirty (30) days of receipt of a request for revocation hearing, the Hearing Panel shall convene a revocation hearing. The Hearing Panel shall provide a copy of the notice of hearing to the Center and the Academy Board at least ten (10) days before the hearing. The purpose of the Hearing Panel is to gather facts surrounding the Center Director's request for Contract revocation, and to make a recommendation to the University Board on whether the Contract should be revoked. The revocation hearing shall be held at a location, date and time as determined by the Center Director and shall not last more than three hours. The hearing shall be transcribed and the cost shall be divided equally between the University and the Academy. The Center Director or his or her designee, and the Academy Board or its designee, shall each have equal time to make their presentation to the Hearing Panel. Although each party is permitted to submit affidavits and exhibits in support of their positions, the

Hearing Panel will not hear testimony from any witnesses for either side. The Hearing Panel may, however, question the Center Director and the Academy Board. Within thirty (30) days of the revocation hearing, the Hearing Panel shall make a recommendation to the University Board concerning the revocation of the Contract. For good cause, the Hearing Panel may extend any time deadline set forth in this subsection. A copy of the Hearing Panel's recommendation shall be provided to the Center and the Academy Board at the same time that the recommendation is sent to the University Board.

- (g) University Board Decision. If the Hearing Panel's recommendation is submitted to the University Board at least fourteen (14) days before the University Board's next regular meeting, the University Board shall consider the Hearing Panel's recommendation at its next regular meeting and vote on whether to revoke the Contract. The University Board reserves the right to modify, reject or approve all or any part of the Hearing Panel's recommendation. The University Board shall have available to it copies of the Hearing Panel's recommendation and the transcript from the hearing. The University Board may waive the fourteen (14) day submission requirement or hold a special board meeting to consider the Hearing Panel's recommendation. A copy of the University Board's decision shall be provided to the Center, the Academy Board and the Department.
- (h) Effective Date of Revocation. If the University Board votes to revoke the Contract, the revocation shall be effective on the date of the University Board's act of revocation, or at a later date as determined by the University Board.
- (i) Disposition of State School Aid Funds. Notwithstanding any other provision of the Contract, any state school aid funds received by the University Board after a recommendation is made by the Hearing Panel to revoke the Contract, or a decision by the University Board to revoke the Contract, may be withheld by the University Board or returned to the Michigan Department of Treasury upon request.

Section 10.7. Contract Suspension. The University Board's process for suspending the Contract is as follows:

- (a) The Center Director Action. If the Center Director determines, in his or her sole discretion, that certain conditions or circumstances exist such that the Academy Board:
 - (i) has placed staff or students at risk;
 - (ii) is not properly exercising its fiduciary obligations to protect and preserve the Academy's public funds and property;
 - (iii) has lost its right to occupancy of the physical facilities described in Schedule 6, and cannot find another suitable physical facility for the Academy prior to the expiration or termination of its right to occupy its existing physical facilities;
 - (iv) has failed to secure or has lost the necessary fire, health, and safety approvals as required by Schedule 6;
 - (v) has willfully or intentionally violated this Contract or Applicable Law; or
 - (vi) has violated Section 10.2(g) or (h), then the Center Director may immediately suspend the Contract, pending completion of the procedures set forth in Section 10.6. A copy of the suspension notice, setting forth the grounds for suspension, shall be sent to the Academy Board and to the Hearing Panel. If this subsection is implemented, the notice and hearing procedures set forth in Section 10.6 shall be expedited as much as possible.
- (b) Disposition of State School Aid Funds. Notwithstanding any other provision of the Contract, any state school aid funds received by the University Board after a decision by the Center Director to

suspend the Contract, shall be retained by the University Board for the Academy until the Contract is reinstated, or shall be returned to the Michigan Department of Treasury upon the State's request.

- (c) Immediate Revocation Proceeding. If the Academy Board, after receiving a notice of Contract suspension from the Center Director, continues to engage in conduct or activities that are covered by the suspension notice, the Hearing Panel may immediately convene a revocation hearing in accordance with the procedures set forth in section 10.6(e) of this Contract. The Hearing Panel has the authority to accelerate the time line for revoking the Contract, provided that notice of the revocation hearing shall be provided to the Center and the Academy Board at least five (5) days before the hearing. If the Hearing Panel determines that the Academy Board has continued to engage in conduct or activities that are covered by the suspension notice, the Hearing Panel may recommend revocation of the Contract. The University Board shall proceed to consider the Hearing Panel's recommendation in accordance with sections 10.6(f) through (h).

Section 10.8. Conservator; Appointment By University President. Notwithstanding any other provision of the Contract, in the event that the University President, in his or her sole discretion, determines that the health, safety and welfare of Academy students, property or funds are at risk, the University President, after consulting with the University Board Chairperson, may appoint a person to serve as the Conservator of the Academy. Upon appointment, the Conservator shall have all the powers and authority of the Academy Board under this Contract and Applicable Law and shall act in the place and stead of the Academy Board. The University President shall appoint the Conservator for a definite term which may be extended in writing at his or her sole discretion. During the appointment, the Academy Board members and their terms in office are suspended and all powers of the Academy Board are suspended. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. During their appointment, the Conservator shall have the following powers:

- (a) take into his or her possession all Academy property and records, including financial, board, employment and student records;
- (b) institute and defend actions by or on behalf of the Academy;
- (c) continue the business of the Academy including entering into contracts, borrowing money, and pledging, mortgaging, or otherwise encumbering the property of the Academy as security for the repayment of loans. However, the power shall be subject to any provisions and restrictions in any existing credit documents;
- (d) hire, fire and discipline employees of the Academy;
- (e) settle or compromise with any debtor or creditor of the Academy, including any taxing authority;
- (f) review all outstanding agreements to which the Academy is a party and to take those actions which the Academy Board may have exercised to pay, extend, rescind, renegotiate or settle such agreements as needed; and
- (g) perform all acts necessary and appropriate to fulfill the Academy's purposes as set forth under this Contract or Applicable Law.

Section 10.9. Academy Dissolution Account. If the University Board terminates, revokes or fails to issue a new Contract to the Academy, the Center Director shall notify the Academy that, beginning thirty (30) days after notification of the University Board's decision, the University Board may direct up to \$10,000 from each subsequent State School Aid Fund payment, not to exceed a combined total of \$30,000,

to a separate Academy account (“Academy Dissolution Account”) to be used exclusively to pay the costs associated with the wind-up and dissolution responsibilities of the Academy. Within five (5) business days of the Center Director’s notice, the Academy Board Treasurer shall provide the Center Director, in a form and manner determined by the Center, with account detail information and authorization to direct such funds to the Academy Dissolution Account. The Academy Dissolution Account shall be under the sole care, custody and control of the Academy Board, and such funds shall not be used by the Academy to pay any other Academy debt or obligation until such time as all the wind-up and dissolution expenses have been satisfied.

ARTICLE XI
PROVISIONS RELATING TO PUBLIC SCHOOL ACADEMIES

Section 11.1. The Academy Budget; Transmittal of Budgetary Assumptions; Budget Deficit; Enhanced Deficit Elimination Plan. The Academy agrees to comply with all of the following:

- (a) The Academy Board is responsible for establishing, approving, and amending an annual budget in accordance with the Uniform Budgeting and Accounting Act, MCL 141.421, et seq. The Academy Board shall submit to the Center a copy of its annual budget for the upcoming fiscal year in accordance with the Master Calendar. The budget must detail budgeted expenditures at the object level as described in the Department's Michigan School Accounting Manual. In addition, the Academy Board is responsible for approving all revisions and amendments to the annual budget. In accordance with the Master Calendar, revisions or amendments to the Academy's budget shall be submitted to the Center following Academy Board approval.
- (b) Unless exempted from transmitting under section 1219 of the Code, MCL 380.1219, the Academy, on or before July 7th of each school fiscal year, shall transmit to the Center for Educational Performance and Information ("CEPI") the budgetary assumptions used when adopting its annual budget pursuant to the Uniform Budgeting and Accounting Act, MCL 141.421 et seq.
- (c) The Academy shall not adopt or operate under a deficit budget, or incur an operating deficit in a fund during any fiscal year. At any time during the term of this Contract, the Academy shall not have an existing deficit fund balance, incur a deficit fund balance, or adopts a current year budget that projects a deficit fund balance. If the Academy has an existing deficit fund balance, incurs a deficit fund balance in the most recently completed school fiscal year, or adopts a current year budget that projects a deficit fund balance, all of the following apply:
 - i. The Academy shall notify the Superintendent and the State Treasurer immediately upon the occurrence of the circumstance, and provide a copy of the notice to the Center.
 - ii. Within 30 days after making notification under subdivision (i), the Academy shall submit to the Superintendent in the form and manner prescribed by the Department an amended budget for the current school fiscal year and a deficit elimination plan approved by the Academy Board, with a copy to the State Treasurer. The Academy shall transmit a copy of the amended budget and the deficit elimination plan to the Center.
 - iii. After the Superintendent approves Academy's deficit elimination plan, the Academy shall post the deficit elimination plan on the Academy's website.
- (d) If the Academy is required by the State Treasurer to submit an enhanced deficit elimination plan under section 1220 of the Code, MCL 380.1220, the Academy shall do all of the following:
 - i. The enhanced deficit elimination plan shall be approved by the Academy Board before submission.
 - ii. After the State Treasurer approves an enhanced deficit elimination plan for the Academy, the Academy shall post the enhanced deficit elimination plan on the Academy's website.
 - iii. As required, submit to the Superintendent and State Treasurer an enhanced monthly monitoring reports in a form and manner prescribed by the State Treasurer and post such monthly reports on the Academy's website.

Section 11.2. Insurance. The Academy Board shall secure and maintain in its own name, as the "first named insured," insurance coverage as required by the University's insurance carrier.

The insurance must be obtained from a licensed mutual, stock, or other responsible company licensed to do business in the State of Michigan. The Academy may join with other public school academies to obtain insurance if the Academy Board finds that such an association provides economic advantages to the Academy, provided that each Academy maintains its identity as first named insured. The Academy shall list the University on the insurance policies as an additional insured as required by the University's insurance carrier. The coverage provided to the University as an additional covered person or organization will be primary and non-contributory with the University's insurance carrier. The Academy shall have a provision included in all policies requiring notice to the University, at least thirty (30) days in advance, upon termination or non-renewal of the policy for any reason other than nonpayment which would require a ten (10) day advance notice to the University. In addition, the Academy shall provide the Center copies of all insurance policies required by this Contract.

When changing insurance programs or carriers, the Academy must provide copies of the proposed policies to the Center at least thirty (30) days prior to the proposed change. The Academy shall not cancel or change its existing carrier without the prior review of the Center.

The University's insurance carrier periodically reviews the types and amounts of insurance coverage that the Academy must secure in order for the University to maintain insurance coverage for the authorization and oversight of the Academy. In the event that the University's insurance carrier requests additional changes in coverage identified in this Section 11.2, the Academy agrees to comply with any additional changes in the types and amounts of coverage requested by the University's insurance carrier within thirty (30) days after notice of the insurance coverage change.

The Academy may expend funds for payment of the cost of participation in an accident or medical insurance program to insure protection for pupils while attending school or participating in a school program or activity. Other insurance policies and higher minimums may be required depending upon academic offerings and program requirements.

Pursuant to Section 3.6 of these Terms and Conditions, the University requires that any Educational Service Provider or employee leasing company that enters into a contract with the Academy must obtain insurance coverage similar to the insurance coverage that is currently required for the Academy. Accordingly, any agreement between the Academy and an Educational Service Provider or employee leasing company shall contain a provision requiring the Educational Service Provider or employee leasing company to comply with the coverage requirements recommended by the University's insurance carrier. Furthermore, the agreement between the Educational Service Provider or employee leasing company and the Academy shall contain a provision stating that "in the event that the University's insurance carrier recommends any change in coverage by the Educational Service Provider or employee leasing company, the Educational Service Provider or employee leasing company agrees to comply with any changes in the type and amount of coverage as requested by the University or the University's insurance carrier within thirty (30) days after notice of the insurance coverage change."

Section 11.3. Legal Liabilities and Covenant Against Suit. The Academy acknowledges and agrees that it has no authority to extend the faith and credit of the University or to enter into a contract that would bind the University. The Academy also is limited in its authority to contract by the amount of funds obtained from the state school aid fund, as provided hereunder, or from other independent sources. The Academy hereby covenants not to sue the University Board, the University or any of its Trustees, officers, employees, agents or representatives for any matters that arise under this Contract. The University does not assume any obligation with respect to any director, employee, agent, parent, guardian, student, or independent contractor of the Academy, and no such person shall have the right or standing to bring suit against the University Board, the University or any of its Trustees, employees, agents, or independent

contractors as a result of the issuance, non-issuance, oversight, revocation, termination or suspension of this Contract.

Section 11.4. Lease or Deed for Proposed Site. The Academy shall provide to the Center copies of its proposed lease or deed for the premises in which the Academy shall operate. Following the Center's review, a copy of the Academy's lease or deed shall be incorporated into this Contract under Schedule 6 and in accordance with Article IX, as applicable.

Section 11.5. Certificate(s) of Use and Occupancy. The Academy Board shall: (i) ensure that the Academy's physical facilities comply with all fire, health and safety standards applicable to schools; and (ii) possess the necessary occupancy certificates for the Academy's physical facilities. The Academy Board shall not occupy or use any facility until approved for occupancy by the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes. Copies of these Certificate(s) of Use and Occupancy shall be incorporated into this Contract under Schedule 6 and in accordance with Article IX, as applicable.

Section 11.6. New Building Construction or Renovations. The Academy shall not commence construction on a new school building or the major renovation of an existing school building unless the Academy consults on the plans of the construction or major renovation regarding school safety issues with the law enforcement agency that is or will be the first responder for that school building. School building includes either a building intended to be used to provide pupil instruction or a recreational or athletic structure or field used by pupils.

Section 11.7. Criminal Background and History Checks; Disclosure of Unprofessional Conduct. The Academy shall comply with section 1230 and 1230a of the Code concerning criminal background and criminal history checks for its teachers, school administrator(s), and for any other position requiring State Board approval. In addition, the Academy shall comply with section 1230b of the Code concerning the disclosure of unprofessional conduct by persons applying for Academy employment. This Section 11.7 shall apply to such persons irrespective of whether they are employed by the Academy or employed by another entity contracting with the Academy.

Section 11.8. Special Education. Pursuant to Section 1701a of the Code, the Academy shall comply with Article III, Part 29 of the Code, MCL 380.1701 et seq., concerning the provision of special education programs and services at the Academy as referenced in Contract Schedule 7c. Upon receipt, the Academy shall notify the Center of any due process or state complaint filed against the Academy or notice of state audit.

Section 11.9. Information Available to the Public and the Center.

- (a) Information to be provided by the Academy. In accordance with Applicable Law, the Academy shall make information concerning its operation and management, including without limitation information in Schedule 8, available to the public and the Center.
- (b) Information to be provided by Educational Service Provider. The agreement between the Academy and the Educational Service Provider shall contain a provision requiring the Educational Service Provider to make information concerning the operation and management of the Academy, including the information in Schedule 8, available to the Academy as deemed necessary by the Academy Board in order to enable the Academy to fully satisfy its obligations under paragraph 11.9 (a) above.

Section 11.10. Deposit of Public Funds by the Academy. The Academy Board agrees to comply with Section 1221 of the Revised School Code, being MCL 380.1221, regarding the deposit of all public

or private funds received by the Academy. Such deposit shall be made within three (3) days after receipt of the funds by the Academy. Only Academy Board members or designated Academy Board employees may be a signatory on any Academy bank account.

ARTICLE XII GENERAL TERMS

Section 12.1. Notices. Any and all notices permitted or required to be given hereunder shall be deemed duly given: (i) upon actual delivery, if delivery is by hand; or (ii) upon receipt by the transmitting party of confirmation or answer back if delivery is by facsimile or electronic mail; or (iii) upon delivery into United States mail if delivery is by postage paid first class mail. Each such notice shall be sent to the respective party at the address indicated below or to any other address or person as the respective party may designate by notice delivered pursuant hereto:

If to the University Board:	The Governor John Engler Center for Charter Schools Attn: Executive Director Central Michigan University EHS 200 Mt. Pleasant, MI 48859
General Counsel:	General Counsel Central Michigan University Mt. Pleasant, MI 48859
Chief Financial Officer:	Vice President Finance & Admin. Services Central Michigan University Mt. Pleasant, MI 48859
If to the Academy:	Academy Board President Eagle Crest Charter Academy 11950 Riley Street Holland, MI 49424

Section 12.2. Severability. If any provision in this Contract is held to be invalid or unenforceable, it shall be ineffective only to the extent of the invalidity, without affecting or impairing the validity and enforceability of the remainder of the provision or the remaining provisions of this Contract. If any provision of this Contract shall be or become in violation of any local, state or federal law, such provision shall be considered null and void, and all other provisions shall remain in full force and effect.

Section 12.3. Successors and Assigns. The terms and provisions of this Contract are binding on and shall inure to the benefit of the parties and their respective successors and permitted assigns.

Section 12.4. Entire Contract. Except as specifically provided in this Contract, this Contract sets forth the entire agreement between the University Board and the Academy with respect to the subject matter of this Contract. All prior contracts, representations, statements, negotiations, understandings, and undertakings are superseded by this Contract.

Section 12.5. Assignment. This Contract is not assignable by the Academy.

Section 12.6. Non-Waiver. Except as provided herein, no term or provision of this Contract shall be deemed waived and no breach or default shall be deemed excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. No consent by any party to, or waiver of, a breach or default by the other, whether expressed or implied, shall constitute consent to, waiver of, or excuse for any different or subsequent breach or default.

Section 12.7. Governing Law. This Contract shall be governed and controlled by the laws of the State of Michigan as to interpretation, enforcement, validity, construction, and effect, and in all other respects.

Section 12.8. Counterparts. This Contract may be executed in any number of counterparts. Each counterpart so executed shall be deemed an original, but all such counterparts shall together constitute one and the same instrument.

Section 12.9. Term of Contract. This Contract is for a fixed term and shall terminate at the end of the Contract term without any further action of either the University Board or the Academy. This Contract shall commence on the date first set forth above and shall remain in full force and effect for a period of ten (10) academic years and shall terminate on June 30, 2026, unless sooner revoked, terminated, or suspended pursuant to Article X of these Terms and Conditions. Pursuant to University Board policy, the standards by which the Academy may be considered for the issuance of a new contract will be guided by the following core questions:

Is the Academy's academic program successful?

Is the Academy's organization viable?

Is the Academy demonstrating good faith in following the terms of its charter and applicable law?

The Center shall establish the process and timeline for the issuance of a new contract. The standards for the issuance of a new contract shall include increases in academic achievement for all groups of pupils as measured by assessments and other objective criteria established by the University Board as the most important factor of whether to issue or not issue a new contract. Consistent with the Code, the University Board in its sole discretion may elect to issue or not issue a new contract to the Academy.

Section 12.10. Indemnification of University. As a condition to receiving a grant of authority from the University Board to operate a public school pursuant to the Terms and Conditions of this Contract, the Academy agrees to indemnify, defend and hold harmless the University Board, the University and its officers, employees, agents or representatives from and against all demands, claims, actions, suits, causes of action, losses, judgments, liabilities, damages, fines, penalties, forfeitures, or any other liabilities or losses of any kind whatsoever, including costs and expenses (not limited to reasonable attorney fees, expert and other professional fees) settlement and prosecution imposed upon or incurred by the University, and not caused by the sole negligence of the University, which arise out of or are in any manner connected with the University Board's approval of the school of excellence application, the University Board's consideration of or issuance of a Contract, the Academy's preparation for or operation of a public school, or which are incurred as a result of the reliance by the University Board, the University and its officers, employees, agents or representatives upon information supplied by the Academy, or which arise out of the Academy's failure to comply with this Contract or Applicable Law. The foregoing provision shall not be deemed a relinquishment or waiver of any kind of Section 7 of the Governmental Liability for Negligence Act, being Act No. 170, Public Acts of Michigan, 1964.

Section 12.11. Construction. This Contract shall be construed fairly as to both parties and not in favor of or against either party, regardless of which party prepared the Contract.

Section 12.12. Force Majeure. If any circumstances occur which are beyond the control of the parties, which delay or render impossible the obligations of one or both of the parties, the parties' obligations to perform such services shall be postponed for an equivalent period of time or shall be canceled, if such performance has been rendered impossible by such circumstances.

Section 12.13. No Third Party Rights. This Contract is made for the sole benefit of the Academy and the University Board. Except as otherwise expressly provided, nothing in this Contract shall create or be deemed to create a relationship between the parties hereto, or either of them, and any third person, including a relationship in the nature of a third party beneficiary or fiduciary.

Section 12.14. Non-agency. It is understood that the Academy is not the agent of the University.

Section 12.15. University Board or the Center's General Policies on Public School Academies Shall Apply. Notwithstanding any provision of this Contract to the contrary, and with the exception of existing University Board or the Center policies regarding public school academies which shall apply immediately, University Board or the Center general policies clarifying procedure and requirements applicable to public school academies under this Contract, as from time to time adopted or amended, will automatically apply to the Academy, provided they are not inconsistent with provisions of this Contract. Before issuing general policies under this section, the University Board or the Center shall provide a draft of the proposed policies to the Academy Board. The Academy Board shall have at least thirty (30) days to provide comment to the Center on the proposed policies before such policies shall become effective.

Section 12.16. Survival of Provisions. The terms, provisions, and representations contained in Section 11.2, Section 11.3, Section 11.9, Section 12.10, Section 12.13 and any other provisions of this Contract that by their sense and context are intended to survive termination of this Contract shall survive.

Section 12.17. Termination of Responsibilities. Upon termination or revocation of the Contract, the University Board or its designee shall have no further obligations or responsibilities under this Contract to the Academy or any other person or persons in connection with this Contract. Upon termination or revocation of the Contract, the Academy may amend its articles of incorporation or bylaws as necessary to allow the Academy Board to: (a) take action to appoint Academy Board members in order to have a quorum necessary to take Academy Board action; or (b) effectuate a dissolution, provided that the Academy Board may not amend the articles of incorporation with regard to the disposition of assets upon dissolution.

Section 12.18. Disposition of Academy Assets Upon Termination or Revocation of Contract. Following termination or revocation of the Contract, the Academy shall follow the applicable wind-up and dissolution provisions set forth in the Academy's articles of incorporation and in accordance with the Code.

Section 12.19. Student Privacy. In order to protect the privacy of students enrolled at the Academy, the Academy Board shall not:

- (a) sell or otherwise provide to a for-profit business entity any personally identifiable information that is part of a pupil's education records. This subsection does not apply to any of the following situations:
 - i. for students enrolled in the Academy, providing such information to an ESP that has a contract with the Academy and whose contract has not been disapproved by the University;
 - ii. providing the information as necessary for standardized testing that measures a student's academic progress and achievement; or
 - iii. providing the information as necessary to a person that is providing educational or educational support services to the student under a contract with either the Academy or an educational management organization that has a contract with the Academy and whose contract has not been disapproved by the University.
- (b) The terms "education records" and "personally identifiable information" shall have the same meaning as defined in MCL 380.1136.

Section 12.20. Disclosure of Information to Parents and Legal Guardians.

- (a) Within thirty (30) days after receiving a written request from a student's parent or legal guardian, the Academy shall disclose without charge to the student's parent or legal guardian any personally identifiable information concerning the student that is collected or created by the Academy as part of the student's education records.
- (b) Except as otherwise provided in this subsection (b) and within thirty (30) days after receiving a written request from a student's parent or legal guardian, the Academy shall disclose to a student's parent or legal guardian without charge any personally identifiable information provided to any person, agency or organization. The Academy's disclosure shall include the specific information that was disclosed, the name and contact information of each person, agency, or organization to which the information has been disclosed; and the legitimate reason that the person, agency, or organization had in obtaining the information. The parental disclosure requirement does not apply to information that is provided:
 - i. to the Department or CEPI;
 - ii. to the student's parent or legal guardian;
 - iii. by the Academy to the University Board, University, Center or to the ESP with which the Academy has a Management Agreement that has not been disapproved by the Center Director;
 - iv. by the Academy to the Academy's intermediate school district or another intermediate school district providing services to Academy or the Academy's students pursuant to a written agreement;
 - v. to the Academy by the Academy's intermediate school district or another immediate school district providing services to pupils enrolled in the Academy pursuant to a written agreement;
 - vi. to the Academy by the University Board, University, Center;
 - vii. to a person, agency, or organization with written consent from the student's parent or legal guardian, or from the student if the student is 18 years of age;
 - viii. to a person, agency, or organization seeking or receiving records in accordance with an order, subpoena, or ex parte order issued by a court of competent jurisdiction;
 - ix. to a person, agency, or organization as necessary for standardized testing that measures a student's academic progress and achievement; or
 - x. in the absence of, or in compliance with, a properly executed opt-out form, as adopted by the Academy in compliance with section 1136(6) of the Code, pertaining to uses for which the Academy commonly would disclose a pupil's "directory information."
- (c) If the Academy considers it necessary to make redacted copies of all or part of a student's education records in order to protect personally identifiable information of another student, the Academy shall not charge the parent or legal guardian for the cost of those redacted copies.
- (d) The terms "education records," "personally identifiable information," and "directory information" shall have the same meaning as defined in MCL 380.1136.

Section 12.21. List of Uses for Student Directory Information; Opt Out Form; Notice to Student's Parent or Legal Guardian.

- (a) The Academy shall do all of the following:
 - i. Develop a list of uses (the "Uses") for which the Academy commonly would disclose a

- student's directory information.
- ii. Develop an opt-out form that lists all of the Uses and allows a student's parent or guardian to elect not to have the student's directory information disclosed for one (1) or more Uses.
 - iii. Present the opt-out form to each student's parents or guardian within the first thirty (30) days of the school year and at other times upon request.
 - iv. If an opt-out form is signed and submitted to the Academy by a student's parent or guardian, then the Academy shall not include the student's directory information in any of the Uses that have been opted out of in the opt-out form.

(b) The terms "directory information" shall have the same meaning as defined in MCL 380.1136.

Section 12.22. Partnership Agreement. If the Department and State School Reform/Redesign Office impose a partnership agreement on the Academy, the Academy shall work collaboratively with the Department, the State School Reform/Redesign Office and other partners to implement the partnership agreement. In the event that a provision in the partnership agreement is inconsistent with a provision in this Contract, this Contract shall control.

Eagle Crest Charter Academy

Contract Amendment No. 6

Tab 2

EDUCATIONAL GOAL AND RELATED MEASURES

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.2, the Academy shall achieve or demonstrate measurable progress for all groups of pupils toward the achievement of the educational goal identified in this schedule. Although an increase in academic achievement for all groups of pupils as measured by assessments and other objective criteria is the most important factor in determining the Academy's progress toward the achievement of the educational goal, the Center also considers other factors. Upon request, the Academy shall provide the Center with a written report, along with supporting data, assessing the Academy's progress toward achieving this goal. In addition, the University expects the Academy will meet the State of Michigan's accreditation standards pursuant to state and federal law.

Educational Goal to be Achieved

Prepare students academically for success in college, work and life.

Measures to Assist In Determining Measurable Progress Toward Goal Achievement

To assist in determining whether the Academy is achieving measurable progress toward the achievement of this goal, the Center will annually assess the Academy's performance using the following measures.

Measure 1: Student Achievement

The academic achievement of **all students who have been at the academy for one or more years¹** in grades 3-8 will be assessed using the following measures and targets:

Sub Indicator	Measure	Metric	Target
Against a Standard:	The percentage of students meeting or surpassing grade-level national norms on the NWEA MAP reading and math tests administered in the spring.	Distribution (which will be in the form of percentages): Exceeds $\geq 70.0\%$ Meets $\geq 50.0\%$ Approaching $\geq 30.0\%$ Does not meet $< 30.0\%$	50%
In the event that performance against the standard falls below these required expectations, "measurable progress towards the achievement of this goal" will be defined using the following measures and targets:			
Over Time:	The percentage of students meeting or surpassing grade-level national norms over time (CY-AVG(PY1+PY2+PY3)).	Trend score (which will be in the form of $-x$ to $+x$): Exceeds $\geq 6.0\%$ Meets $\geq 3.0\%$ Approaching $\geq 1.0\%$ Does not meet $< 1.0\%$	3.0%
Comparison Measure:	The percentage of students categorized as proficient or advanced on the most recent state assessment will surpass the school's Composite Resident District (CRD) percentage.	Portfolio Distribution (which will be in the form of $-x$ to $+x$): Exceeds $\geq 10.0\%$ Meets $\geq 5.0\%$ Approaching $\geq 0.0\%$ Does not meet $< 0.0\%$	5.0%

¹ One or more years students (also called 1+ students) are students who are enrolled in the academy on or before count day and are still enrolled at the end of a given academic year.

Grade	MAP National Norms	
	Reading	Math
3	198.6	203.4
4	205.9	213.5
5	211.8	221.4
6	215.8	225.3
7	218.2	228.6
8	220.1	230.9

Measure 2: Student Growth

The academic growth of all students in grades 3-8 at the Academy will be assessed using the following measures and targets:

Sub Indicator	Measure	Metric	Target
Against a Standard:	The median of student growth percentiles (MGP) reflecting fall-to-spring scaled score growth on the reading and math NWEA MAP tests.	MGP: Exceeds ≥ 65 th Meets ≥ 50 th Approaching ≥ 45 th Does not meet < 45 th	Reading: 50 Math: 50
In the event that performance against the standard falls below these required expectations, “measurable progress towards the achievement of this goal” will be defined using the following measures and targets:			
Over Time:	The percentage of students making at least one year’s growth over time (CY-AVG(PY1+PY2+PY3)).	Trend score (which will be in the form of $-x$ to $+x$): Exceeds $\geq 6.0\%$ Meets $\geq 3.0\%$ Approaching $\geq 1.0\%$ Does not meet $< 1.0\%$	3.0%
Comparison Measure:	The MGP reflecting growth on the two most recent state assessments will surpass the school’s Composite Resident District.	Portfolio Distribution (which will be in the form of $-x$ to $+x$): Exceeds $\geq 10.0\%$ Meets $\geq 5.0\%$ Approaching $\geq 0.0\%$ Does not meet $< 0.0\%$	5.0%

Eagle Crest Charter Academy

Contract Amendment No. 6

Tab 3

PHYSICAL PLANT DESCRIPTION

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article XI, Section 11.5, the Academy is authorized to operate at the physical facility or facilities outlined in this schedule. The Academy shall not occupy or use any facility until approved for occupancy by the Michigan Department of Licensing and Regulatory Affairs’ Bureau of Construction Codes and Bureau of Fire Services.

Physical Plant Description 6-1

Site Plan 6-3

Floor Plans 6-4

Amended and Restated Lease 6-6

Office of Fire Safety Approvals..... 6-30

Certificates of Use and Occupancy 6-34

1. Applicable Law requires that a public school academy application and contract must contain a description of and the address for the proposed physical plant in which the public school academy will be located. See MCL 380.502(3)(i) and 380.503(6)(f);

2. The address and a description of the site and physical plant (the "Site") of Eagle Crest Charter Academy (the "Academy") is as follows:

Address: 11950 Riley St.
Holland, MI 49424

Description: The Site includes an approximately 55,000 square foot, one-story facility with an exterior comprised of brick and vinyl. The facility contains 28 classrooms, 11 restrooms, a gymnasium, computer room, media room, music room, conference room, student service rooms, and several offices. The Site also includes a large parking area, an outdoor play area, and a basketball court.

Configuration of Grade Levels: Kindergarten through Eighth Grade.

Term of Use: Term of Contract.

Name of School District and Intermediate School District:

Local: West Ottawa Public Schools
ISD: Ottawa Area

3. It is acknowledged and agreed that the following information about this Site is provided on the following pages, or must be provided to the satisfaction of the University Board or its designee, before the Academy may operate as a public school in this state.

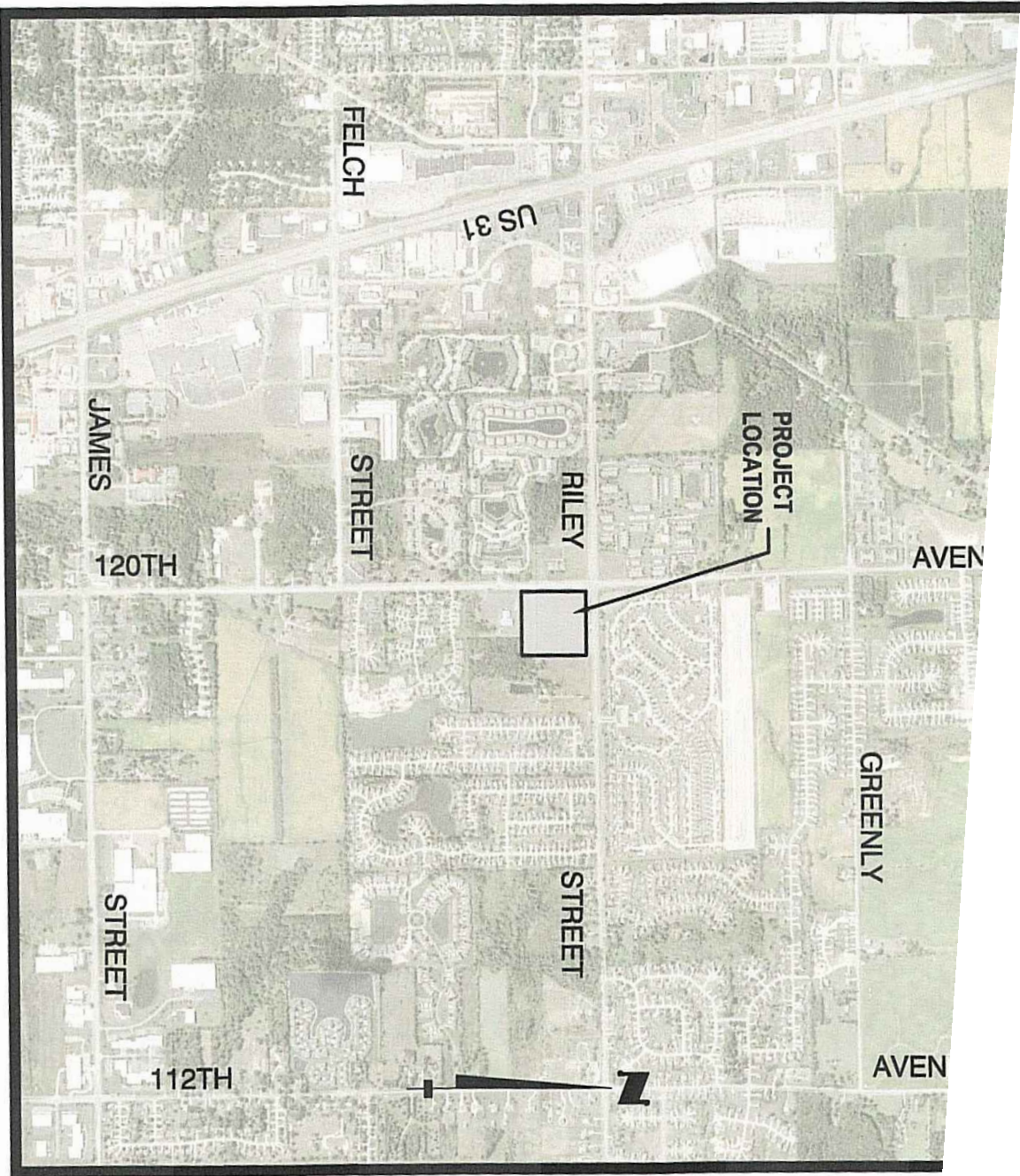
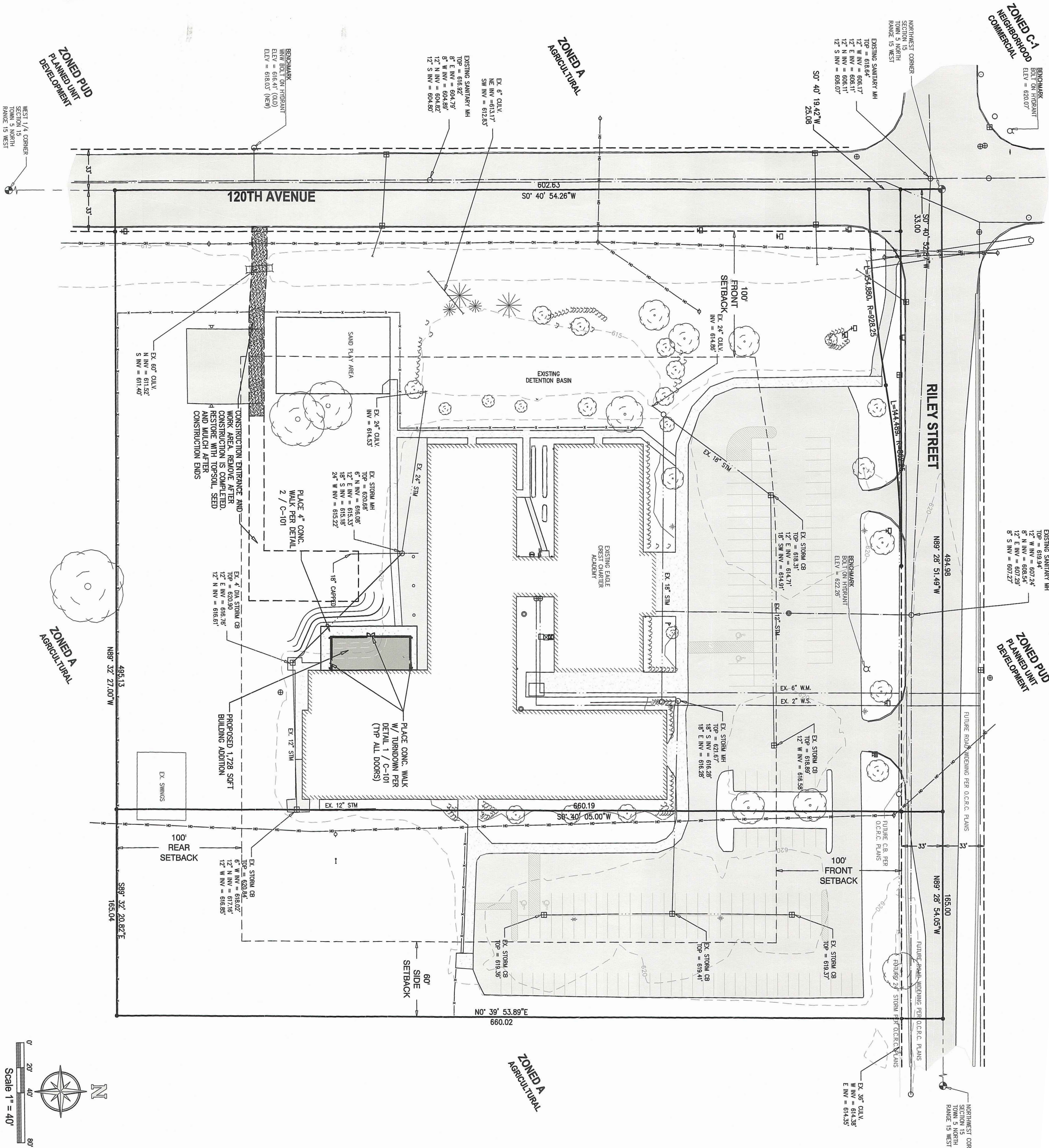
- A. Narrative description of physical facility
- B. Size of building
- C. Scaled floor plan
- D. Copy of executed lease or purchase agreement

4. In addition, the Academy and the University Board hereby acknowledge and agree that this Contract is being issued to the Academy with the understanding that the Academy cannot conduct classes as a public school academy in this state until it has obtained the necessary fire, health and safety approvals for the above-described physical facility. These approvals must be provided and be acceptable to the University Board or its designee prior to the Academy operating as a public school. In cases of disagreement, the Academy may not begin operations without the consent of the University Board or its designee.

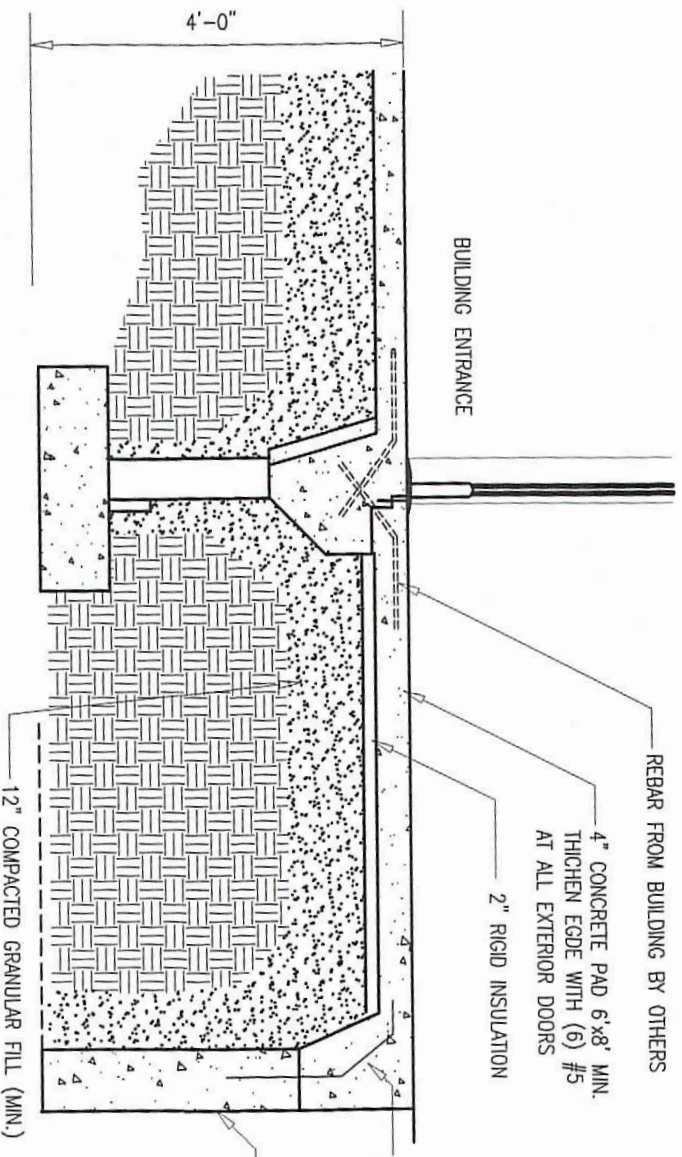
5. If the Site described above is not used as the physical facilities for the Academy, then Schedule 6 of this Contract between the Academy and the University Board must be amended pursuant to Article IX of the Terms and Conditions of Contract, to designate, describe, and agree upon the Academy's physical facilities. The Academy must submit to the University Board or its

designee complete information about the new site to be actually used. This information includes that described in paragraphs 2, 3 and 4 of this Schedule 6. It is acknowledged and agreed that the public school academy cannot conduct classes as a public school in this state until it has submitted all the information described above, to the satisfaction of the University Board or its designee, and the amendment regarding the new site has been executed.

6. Any change in the configuration of grade levels at the Site requires an amendment to this Schedule 6 pursuant to Article IX of the Terms and Conditions of Contract set forth above.

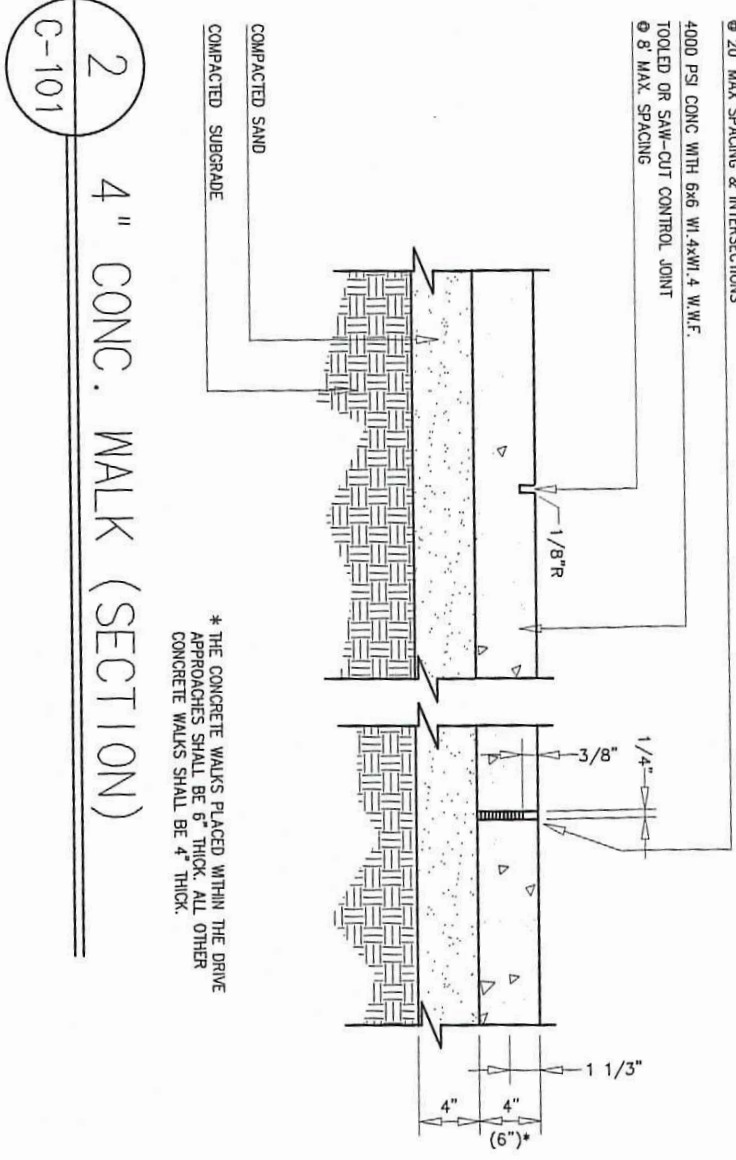


LOCATION MAP NOT TO SCALE



1 CONC. WALK W/ TURNDOWN

4" CONC. WALK (PLAN)



2 4" CONC. WALK (SECTION)

- NOTES:
1. ON-SITE LIGHTING SHALL BE DIRECTED DOWNWARD AND AWAY FROM ADJACENT PROPERTIES AS REQUIRED PER THE HOLLAND CHARTER TOWNSHIP ZONING ORDINANCE.
 2. ALL STORM SEWER PIPING SHALL BE POLYETHYLENE (PE) PLASTIC PIPE AND FITTINGS BY ADS N-12, HANCOCK H-Q OR APPROVED EQUIVALENT UNLESS OTHERWISE NOTED.
 3. ALL STORM PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF TABLES 1102.4, 1102.5, AND 1102.7 OF THE 2012 MICHIGAN PLUMBING CODE.
 4. MAINTAIN A MINIMUM OF 18" CLEARANCE BETWEEN UTILITIES AT CROSSINGS.

Eagle Crest Charter Academy
Building Addition
11950 Riley Street
Holland, MI 49424
Part of the NW 1/4, Section 15, T5N, R15W
Holland Twp., Ottawa Co., Michigan

National Heritage Academies
3830 Broadmoor SE Suite 201, Grand Rapids, MI 49512
Phone: 616-225-1700 FAX: 616-375-6409
www.heritageacademies.com

ANDRUS ARCHITECTURE
11629 NORTHLAND DR
SUITE 200
ROCKFORD, MI 49341

The Surveyor's / Engineer's liability for any and all claims, including but not limited to those arising out of the Surveyor's / Engineer's professional services, negligence, gross misconduct, warranties or misrepresentations shall be deemed limited to an amount no greater than the service fee.

HOLL ENGIN
ENGINEERING | SURVEYING
220 Hoover
Holland, MI
www.holl.com
T 616-392-5938

Issued for:			No.
Date	Description		
08/24/2018	50% REVIEW	A	
09/06/2018	90% REVIEW & APPROVALS	B	
09/10/2018	PERMITS & CONSTRUCTION	C	
Plans are preliminary & incomplete until ISSUED FOR CONSTRUCTION			
Project Information			
Project Name	Eagle Crest Charter Academy		
Owner	Brooks Zehnle, RLA		
Design Team	LOCAL		
Drawn By	STEVE A. MORRIS		
Checked By	Date		
Survey	-		
City	-		
State	-		
L.A.	-		
File Number	18-08-046		
Sheet No.	C-101		

EAGLECREST ACADEMY
HOLLAND, MICHIGAN 49424

YOUNG 5'S ADDITION

ISSUED FOR:
REVIEW
REVIEW

DATE:
03/03/08
03/25/08

SEAL

PROJECT NUMBER
NHA22208

SHEET NUMBER
A100

Code Information

Eagle Crest Charter Academy
11950 Riley Street
Holland, MI 49424

NOTE: PREVIOUS OFS NUMBER 4-00-0448-97 (PHASE 1) .
961686, B#97-615
PROJECT: EAGLECREST CHARTER ACADEMY
11950 RILEY STREET
HOLLAND, MICHIGAN 49424
PROJECT #: NHA22208

JURISDICTION: BUREAU OF CONSTRUCTION CODES
BUREAU OF FIRE SERVICES

APPLICABLE CODES:

MICHIGAN BUILDING CODE 2003
MICHIGAN PLUMBING CODE 2003
MICHIGAN MECHANICAL CODE 2003
MICHIGAN ELECTRICAL CODE 2002
NFPA 10 ED

USE GROUP
E

CONSTRUCTION TYPE
V B (V000)

FIRE PROTECTION
COMPLETE APPROVED AUTOMATIC SPRINKLER SYSTEM

BUILDING AREA
CHAPTER 5
GENERAL BUILDING HEIGHTS AND AREAS

TABLE 503 TYPE V(B)
1 STORY
9,500 SF
SECTION 506
AREA MODIFICATIONS
 $A_a = A + \left[\frac{A_{11}}{100} \right] + \left[\frac{A_{12}}{100} \right]$ EQUATION 5-1
 $A_a = 9,500 + \left[\frac{9500 * 0}{100} \right] + \left[\frac{9,500 * 300}{100} \right]$
 $A_a = 9,500 + 0 + 28500$
 $A_a = 38,000$ SF ALLOWED
ACTUAL - POD 4 - 10,523 EXISTING + 1870 ADDITION = 12,393 SF

BUILDING HEIGHT
ALLOWABLE HEIGHT - 1 STORY
ACTUAL HEIGHT - 1 STORY

EGRESS REQUIREMENTS - POD 4

OCCUPANT LOAD
1 STUDENT PER 20 SF NET CLASSROOM 887 SF EACH

EXITS
POD 4 - 67.5" REQUIRED - 144" PROVIDED IN 2 EXITS

EXIT ACCESS TRAVEL
LESS THAN 200 FOOT TRAVEL DISTANCE

ACCESSIBLE EXIT DISCHARGE
ALL REQUIRED EXITS ARE ACCESSIBLE

SPECIFIC OCCUPANCY AREAS
N A

PORTABLE FIRE EXTINGUISHERS
NOT REQUIRED

BUILDING FIRE ALARM
REQUIRED

PLUMBING FIXTURES
REQUIRED

REQUIRED FIXTURES
Water Closet - 1/50
Lavatories - 1/50
Drinking Fountain - 1/100
Service Sink - 1/100
Provided Fixtures
MALES (198 STUDENTS)
6-Water Closets, 4 Urinals, 4 Lavatories
FEMALES (198 STUDENTS)
10 WaterClosets, 4 Lavatories
STAFF - MALE
1 WaterClosets, 1 Urinol, 1 Lavatories
STAFF - FEMALE
2 WaterClosets, 1 Lavatory
Water Coolers - 6 provided
Service Sink - 2 provided

ABBREVIATIONS
ACF - Accessory Ceiling Tile
ALUM - Aluminum
CONC - Concrete
COR - Corbel
ELEM - Elementary
FRP - Fire-Resistant Plastic
GYP - Gypsum Board
INSUL - Insulated
K - Kindergarten
LB - Load Bearing
M.S. - Middle School
MECH - Mechanical
MIN - Minimum
N.B. - Noted
O.C. - On Center
OSB - Oriented Strand Board
SPEC - Specifications
STYP - Standard
TYP - Typical
UE - Upper Elementary
W/ - With

Sheet Index

A100 OVERALL FLOOR PLAN
A101 ENLARGED FLOOR PLAN
A201 ELEVATIONS
A301 DETAILS
A305 WALL SECTIONS
A306

WALL TYPES

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD
OR GIBBER BASE APPLIED AT RIGHT ANGLES
TO EACH OTHER TO EACH SIDE OF 3/8" METAL
STUDS 16" O.C. WITH 1" TYPE S DRYWALL
SCREWS 8" O.C. TO VERTICAL EDGE AND
12" O.C. TO TOP AND BOTTOM RUNNERS AND
INTERMEDIATE STUDS. STAGGER ALL VERTICAL
AND HORIZONTAL JOINTS 24" O.C. EACH SIDE
AND OPPOSITE SIDES.(N/B)

3/4" 5/8" FIRE RATED
STUDS 16" O.C. BOARD
1" BATT SOUND
INSUL

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD
OR GIBBER BASE APPLIED AT RIGHT ANGLES
TO EACH OTHER TO EACH SIDE OF 3/8" METAL
STUDS 16" O.C. WITH 1" TYPE S DRYWALL
SCREWS 8" O.C. TO VERTICAL EDGE AND
12" O.C. TO TOP AND BOTTOM RUNNERS AND
INTERMEDIATE STUDS. STAGGER ALL VERTICAL
AND HORIZONTAL JOINTS 24" O.C. EACH SIDE
AND OPPOSITE SIDES.(N/B)

6" 3/4" 5/8" FIRE RATED
STUDS 16" O.C. BOARD
1 1/2" FIBERGLASS
WOOD POST BY OTHERS
6" BATT INSULATION
BY OTHERS

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD
OR GIBBER BASE APPLIED AT RIGHT ANGLES
TO EACH OTHER TO EACH SIDE OF 3/8" METAL
STUDS 16" O.C. WITH 1" TYPE S DRYWALL
SCREWS 8" O.C. TO VERTICAL EDGE AND
12" O.C. TO TOP AND BOTTOM RUNNERS AND
INTERMEDIATE STUDS. STAGGER ALL VERTICAL
AND HORIZONTAL JOINTS 24" O.C. EACH SIDE
AND OPPOSITE SIDES.(N/B)

3/4" 5/8" FIRE RATED
STUDS 16" O.C. BOARD
1" BATT SOUND
INSUL

SYMBOL LEGEND

ROOM NUMBER CLASSROOM ROOM NAME
CLASSROOM ROOM NUMBER

DOOR NUMBER DOOR NUMBER

WALL TYPE WALL TYPE LETTER

DETAIL / WALL CUT SYMBOL
DETAIL NUMBER
DETAIL IS SHOWN

ELEVATION SYMBOL
ELEVATION NUMBER
SHEET WHERE
DETAIL IS SHOWN

DETAIL NUMBER
DETAIL IS SHOWN

MATCH LINE

DETAIL NUMBER
DETAIL NAME

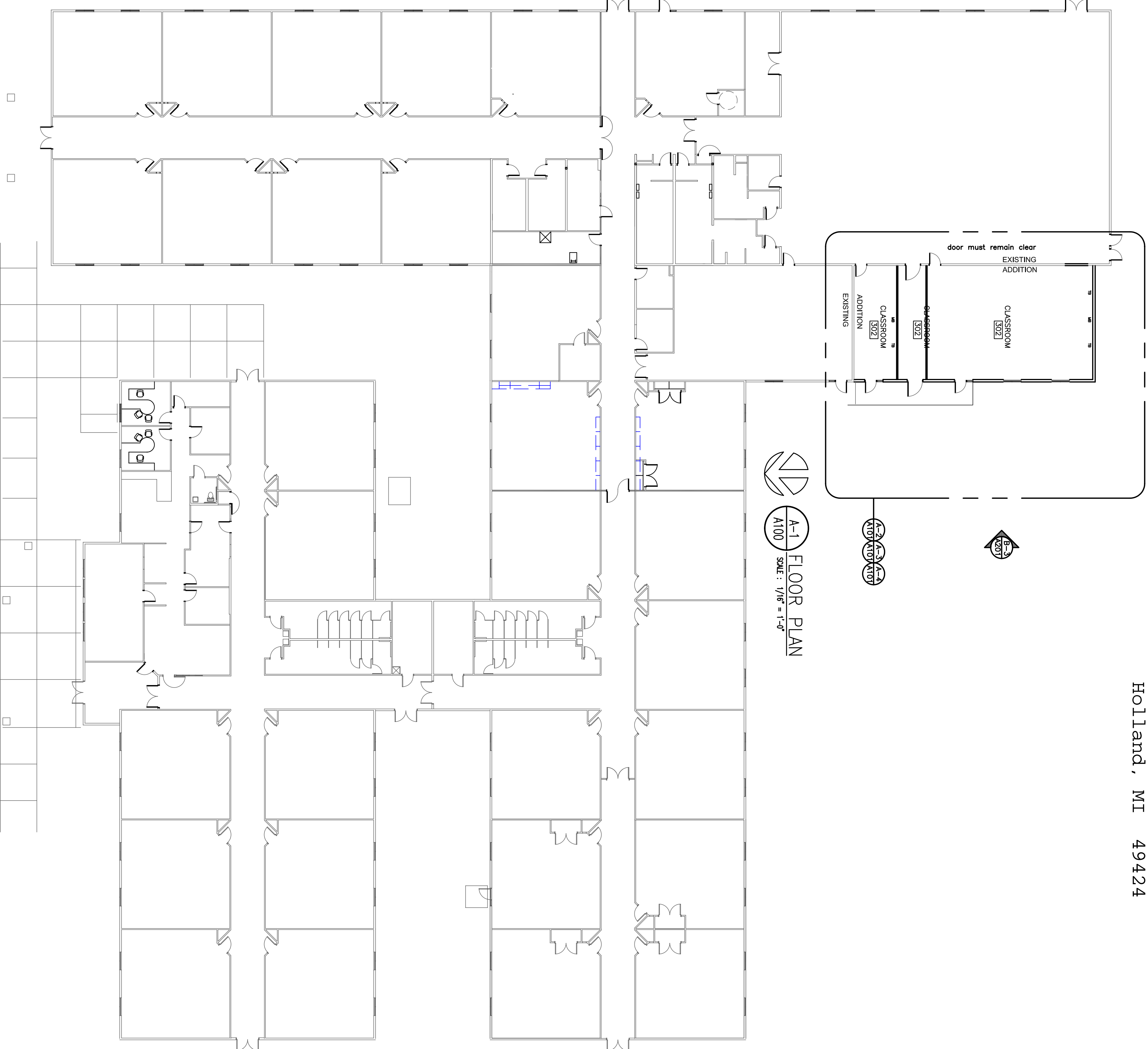
SHEET WHERE
DETAIL IS SHOWN

PLAN NAME

SCALE: 1/8"=1'-0"

PLAN SCALE

OVERALL FLOOR PLAN



AMENDED AND RESTATED LEASE

THIS AMENDED AND RESTATED LEASE ("**Lease**") by and between National Heritage Academies, Inc., a Michigan corporation, of 3850 Broadmoor SE, Ste. 201, Grand Rapids, Michigan 49512 ("**Landlord**"), and Eagle Crest Charter Academy, a school of excellence chartered under the laws of the State of Michigan, having an address of 11950 Riley Street, Holland, Michigan 49424 ("**Tenant**") is effective the 1st day of July 2016, (the "**Effective Date**"). For purposes of this Lease, Landlord and Tenant shall be referred to collectively as the "**Parties**."

RECITALS

A. Landlord (defined in Section 22.5), as tenant, and Charter Development, LLC, as landlord (together with its successors, assigns and successors in interest, the "**Master Landlord**") are party to that certain Master Lease Agreement effective January 1, 1999, as amended (the "**Master Lease**").

B. Landlord and Master Landlord amended the Master Lease to subject the Premises thereto and Landlord has the authority under the Master Lease to sublease the Premises to Tenant.

C. Landlord and Tenant entered into a lease of the Premises dated July 1, 2012 (the "Prior Lease").

D. Pursuant to Article 29, Section 29.5 of the Prior Lease, the Parties with to amend and restate the Prior Lease to read as set forth herein.

E. Tenant desires to sublease the Premises from Landlord, and Landlord desires to so sublease the Premises to Tenant, on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants set forth above and herein, Landlord and Tenant agree as follows:

ARTICLE 1

The Premises and Other Agreements.

1.1 Premises. Landlord hereby leases to Tenant, on the terms and conditions hereinafter set forth, the real estate located in the City of Holland, Ottawa County, Michigan with an address of 11950 Riley Street, Holland, Michigan 49424 and more particularly described on Exhibit "A" attached hereto (the "**Land**"), and all improvements located on the Land (the Land and such improvements as they may exist from time to time, hereinafter referred to as the "**Premises**").

1.2 Master Lease. This Lease is subordinate and subject to the Master Lease. Landlord represents and warrants to Tenant that the terms of this Lease are not inconsistent with the terms of the Master Lease, and Tenant's compliance with the terms of this Lease will not constitute a

breach of the terms of the Master Lease. Landlord hereby indemnifies Tenant against all liability, judgments, damages, claims, costs and expenses, including, without limitation, reasonable attorneys' fees arising out of or relating to Landlord's breach of the covenants, representations or warranties under the Master Lease.

ARTICLE 2

Term.

2.1 Initial Term and Renewals. The "**Initial Term**" of this Lease shall commence on July 1, 2016 and shall terminate effective June 30, 2017 (the "**Initial Term Expiration**"), unless sooner terminated as hereinafter set forth. Provided that (a) Tenant is not then in Default under this Lease, the Services Agreement, or the "**Charter**" (as defined in Section 13.1.E. below), and (b) this Lease, the Services Agreement and the Charter are still in full force and effect, then, unless a Notice of Non-Renewal is sent as provided below, on the Initial Term Expiration (and each anniversary thereof, during the Term of this Lease), this Lease shall be automatically renewed for successive one (1) year terms, upon the same terms and conditions as contained herein. The "**Term**" of this Lease shall mean the Initial Term and every renewal term entered into by Landlord and Tenant. The term "**Upcoming Expiration Date**" shall mean the Initial Term Expiration, or if the Initial Term Expiration has occurred, then the upcoming anniversary of the Initial Term Expiration. If either party, in its sole discretion, does not wish for this Lease to automatically renew, then at least one hundred eighty (180) days prior to the Upcoming Expiration Date, such party must notify the other party in writing that it does not wish the Term to be renewed (a "**Notice of Non-Renewal**"). Upon the timely delivery of a Notice of Non-Renewal, this Lease shall terminate on the Upcoming Expiration Date. If either party defaults under Article 13 of the Lease, the Term shall automatically end at the expiration of the then current one year Term and the Notice of Non-Renewal requirement shall be waived. The Parties acknowledge that the Tenant's Authorizer, as part of any reauthorization or renewal, may require the Tenant to submit a new lease for review by the Authorizer.

ARTICLE 3

Rent.

3.1 Annual Rent. Tenant hereby leases said Premises for the Term above stated and agrees to pay Landlord annual rent of Seven Hundred Thirty-Five Thousand One Hundred Fifty and No/100 Dollars (\$735,150.00), ("**Annual Rent**") in twelve (12) equal monthly installments of Sixty-One Thousand Two Hundred Sixty-Two and 50/100 Dollars (\$61,262.50) (each, a "**Monthly Installment**") each payable to Landlord (or to such other "Person" (defined in Section 22.9) or agent as Landlord may specify by written notice to Tenant) in advance on the first day of each calendar month during the Term. The term "**Lease Year**" is defined to mean any twelve month period from July 1 to June 30 of the following year, during the Term. If the Term ends before the end of a Lease Year, Annual Rent shall be prorated on a daily basis and paid in advance

by Tenant on the first day of the last calendar month during the Term. Annual Rent may be adjusted upon determination of final costs for acquisition and construction of the Premises.

3.2 Additional Rent. Any amounts due from Tenant to Landlord hereunder, other than Annual Rent, shall constitute “**Additional Rent.**” Additional Rent shall, unless expressly provided to the contrary in this Lease, be payable from Tenant to Landlord on the same terms that Annual Rent is payable, with the next payment of the Monthly Installment coming due hereunder. Annual Rent and Additional Rent may be referred to collectively herein as “**Rent**”.

3.3 Payments. All Rent shall be paid to Landlord at Landlord’s address as set forth in the introductory paragraph hereof, or at such other address as Landlord may designate in writing. This Lease is a triple net lease and Rent shall be paid without setoff, counterclaim, recoupment, abatement, suspension, or deduction, except as expressly provided for herein. This Lease shall not terminate, nor shall Tenant have any right to terminate this Lease during the Term (except as otherwise expressly provided herein), nor shall Tenant be entitled to any abatement, deduction, deferment or reduction of Annual Rent hereunder (except as otherwise expressly provided herein), nor shall the obligations of Tenant under this Lease be affected by any interference with Tenant’s use of the Premises unless caused by Landlord or Master Landlord. It is the intention of the Parties hereto that the obligation of Tenant to pay Rent hereunder shall be separate and that the Rent shall continue to be payable in all events and that the obligations of Tenant hereunder shall continue unaffected, unless the requirement to pay or perform the same shall have been terminated pursuant to an express provision of this Lease.

3.4 Landlord’s Right to Increase. In the event Landlord makes future economic investments (a) in capital improvements to the Premises for any of the “Approved Purposes” (defined herein), or (b) in capital improvements (other than Approved Purposes) to the Premises, up to an amount of \$250,000.00 during any July 1 to July 30 period during the Term, or (c) in acquiring additional property for the Premises for the Approved Purposes, then in any such case, Annual Rent shall be adjusted by amendment to this Lease as of the immediately following July 1 in the Term to compensate Landlord for such additional economic investment. “**Approved Purposes**” shall mean any of the following purposes: (i) to comply with “Legal Requirements” (defined in Section 22.6); (ii) to comply with Landlord’s safety and security requirements; (iii) repairs or maintenance to, or replacement of essential building components and systems; and (iv) repairs, maintenance, replacement, or improvements necessary for Landlord to comply with its obligations under the Management Agreement and this Lease.

ARTICLE 4

Use, Occupancy and Purpose.

4.1 Permitted Uses.

A. Tenant shall use the Premises solely for operating a publicly chartered school or academy for grades kindergarten through 8th grade, and for ancillary or directly related uses.

B. Any other use of the Premises must be approved by Landlord in advance in writing.

4.2 Prohibited Uses.

A. Tenant shall not use or allow the use of the Premises for any unlawful purpose, nor shall Tenant allow the Premises to be used in violation of the Charter.

B. Tenant shall not allow the Premises to be used in violation of any public law, ordinance, rule or regulation, or in violation of any certificate of occupancy or certificate of compliance covering or affecting the Premises, or any part thereof. Tenant shall not suffer any act to be done or any condition to exist on the Premises or any part thereof which may in law constitute a nuisance, public or private, or which may make void or voidable, or increase premiums for, any insurance with respect thereto. Tenant shall not commit any waste, damage, or injury of or to the Premises or the fixtures or any part thereof and shall take all reasonable precautions and actions to prevent others from committing any of the foregoing.

C. Tenant covenants unto Landlord that during the Term, no part of the Premises shall be used for: the operation of any (i) private or commercial golf course, (ii) country club, (iii) massage parlor, hot tub facility, or suntan facility (iv) race track or other facility used for gambling, or (v) store the principal business of which is the sale of alcoholic beverages for consumption off premises; or the rental to others of residential property (as defined in Section 168(e)(2)(A) of the Internal Revenue Code).

D. Notwithstanding anything contained in this Lease to the contrary, in the event of a breach of any of the covenants contained in this Section 4.2, Landlord may immediately terminate this Lease by written notice to Tenant.

4.4 Educational Program. Tenant shall neither use the Premises nor allow the Premises to be used at any time during the Term in a manner that interferes with the performance of Landlord's obligations under the Services Agreement, including without limitation, the implementation and delivery of the Educational Program at the Premises. Tenant acknowledges that the terms of the preceding sentence are intended to allow Landlord to restrict access to certain portions of the Premises at certain times provided such access restriction is at all times consistent with the implementation and delivery of the Educational Program.

ARTICLE 5

Utilities.

5.1 Utility Connections; Utility Service. Landlord represents and warrants that construction of the Premises pursuant to Section 9.1 shall include provision of connections for all utility services necessary to the operation of a school at the Premises. Utility services, including without limitation gas, electricity, light, heat, water, sewage and telephone or other communication services, shall be contracted for and paid for by Tenant.

5.2 Disclaimers. Unless due to the gross negligence or willful misconduct of Landlord, Landlord shall not be liable for (i) any failure of water supply or electric current or any service by any utility provider or local government, or (ii) injury to persons, including death, or damage to property resulting from steam, gas, electricity, water, rain or snow which may flow or leak from any part of the Premises or from any pipes, appliances or plumbing works from the street or subsurface or from any other place. Any express or implied rights, easements or licenses for view purposes or for the passage of light and air are hereby expressly disclaimed by Tenant. Except as otherwise expressly provided in this Lease or as may be provided in the Services Agreement, Landlord shall have no obligation to provide any services to Tenant or to the Premises.

5.3 Modifications and Replacements. If the existing services are required to be modified or replaced for any reason by any utility company or authorized agency, governmental or otherwise, then Tenant shall make such modifications or replacements at Tenant's expense and shall save Landlord harmless therefrom.

ARTICLE 6

Taxes.

6.1 Payment by Tenant. Tenant shall pay all (a) taxes levied on or assessed against the Premises during the Term, (b) special assessments levied on or assessed against the Premises during the Term that become due and payable during the term of this Lease, and (c) other similar charges levied on or assessed against the Premises during the Term and that become due and payable during the term of this Lease, except income and other taxes assessed against or by reason of Landlord's reversionary interest in or income from the Premises (the "**Taxes**"), (i) prior to the date on which any penalties, interest or late charges would apply, and to save Landlord harmless from the payment thereof, or (ii) to Landlord, in accordance with the terms of Section 6.4, provided Landlord makes the demand on Tenant required in Section 6.4. Taxes for the first and last year of the Term or any extension or renewal thereof shall be prorated on the basis of the fiscal period for which such tax is assessed.

6.2 Landlord's Option to Pay. If at any time after any tax, assessment or similar charge so charged or assessed against said Premises shall become due or payable and Tenant shall neglect or fail to pay the same, Landlord, without being obligated to do so, may pay the same at any time thereafter, and the amount of any and all such payments so made by Landlord shall be and is hereby declared to be payable as Additional Rent with the next Monthly Installment due hereunder.

6.3 Payment at End of Term. At the termination of this Lease by lapse of time or otherwise, all Taxes payable by Tenant under the provisions of this Article 6 shall be paid by Tenant to Landlord.

6.4 Monthly Installments. Upon demand of Landlord, (i) Tenant shall pay as Additional Rent, in addition to each Monthly Installment due hereunder, a sum equivalent to one-twelfth of the amount estimated by Landlord to be sufficient to enable Landlord to pay at least thirty (30) days before they become due, all such taxes, assessments and other charges, and (ii) Tenant will deliver and pay over to Landlord such additional sums as are necessary to make up any deficiency

in the amount necessary to enable Landlord to fully pay such taxes, assessments and other charges. Any such tax payments from Tenant may be commingled with the general funds of Landlord and no interest shall be payable in respect thereof. If Landlord receives tax payments from Tenant in accordance with this Section, then Landlord shall pay the full amount of taxes, assessments and other charges when due to the appropriate taxing authorities. In the event Tenant's tax payments under this Section are in any way insufficient to pay the full amount of taxes, assessments and other charges when due to the appropriate taxing authorities, then Tenant shall pay to Landlord, as Additional Rent, any shortfall within thirty (30) days of receiving a demand therefor from Landlord.

6.5 Non-Real Property Taxes. In the event that the City, County, State, or any other political subdivision that has taxing authority over the Premises shall, during the Term, impose upon Landlord any tax or other governmental charge in lieu of all or any part of the Taxes (a "**Non-Real Property Tax**"), such Non-Real Property Tax shall, for purposes of this Section, be treated as if it were included in the Taxes. Landlord agrees to furnish to Tenant upon request a separate accounting and supporting documentation of each Non-Real Property Tax.

6.6 Receipts. Upon demand of Landlord within ninety (90) days after the date all or any part of the Taxes are payable by Tenant, Tenant shall provide to Landlord official receipts of the appropriate taxing authority or other proof satisfactory to Landlord of the payment of such Taxes.

ARTICLE 7

Insurance.

7.1 Tenant will cause to be maintained policies of fire and extended coverage insurance on all buildings, structures, fixtures and improvements now or hereafter situated on the Premises and all other property leased hereunder in their full replacement cost. Such policies shall have no greater than eighty (80%) percent co-insurance provision and shall contain the standard "agreed amount" clause for evaluating replacement cost. Such policies shall name Tenant, Landlord, other parties designated by Landlord and the "first mortgagee" (defined in Section 22.3) as their interests may appear as insureds and such insurance shall be carried by an insurance company or companies approved by Landlord and the first mortgagee. Tenant shall make available to Landlord on request copies of said policies. Notwithstanding the aforesaid, in no event shall the manner, forms, companies, sums or length of terms be less than that required by the first mortgagee according to the terms and provisions of the "first mortgage" (defined in Section 22.2).

7.2 Each such policy shall include: (i) a standard mortgagee clause in favor of the first mortgagee; (ii) a provision to the effect that the waiver of subrogation rights by the insured does not void the coverage; (iii) a provision that the policy shall not be changed or canceled without at least thirty (30) days' prior written notice to Landlord and the first mortgagee; and (iv) a provision that any forfeiture of the policy due to an act of Tenant shall not affect the validity insofar as Landlord or the first mortgagee are concerned.

7.3 From time to time as required by Landlord or the first mortgagee, Tenant at its expense, shall obtain from an engineer or appraiser, in the regular employ of the insurer, or an appraiser, engineer, architect or contractor designated by Tenant and approved by Landlord and the insurer, such evidence as may be required by such insurer to maintain the “agreed amount” clause eliminating the possibility of any co-insurance penalty.

7.4 If Tenant shall refuse or fail to so insure and keep insured the Premises and keep such policies in Landlord’s and first mortgagee’s possession, Landlord may at its election procure and from time to time renew such insurance, and the amounts expended therefore shall be Additional Rent due from Tenant with the next installment of Rent accruing hereunder and may be collected in the same manner as though Rent due hereunder.

7.5 Upon demand from Landlord, Tenant shall pay in advance as Additional Rent, a sum equivalent to one-twelfth of the amount estimated by Landlord to be sufficient to enable Landlord to pay at least thirty (30) days before they become due all insurance premiums on all policies of insurance required or allowed to be carried by Tenant hereunder. Such Additional Rent may be commingled with the general funds of Landlord and no interest shall be payable in respect thereof. Upon demand by Landlord, Tenant will pay Landlord, as Additional Rent, such additional sums as are necessary to make any deficiency in the amount necessary to enable Landlord to fully pay such premiums.

7.6 Landlord shall have no liability for damage to or loss of personal property located upon the Premises, unless and to the extent caused by Landlord.

ARTICLE 8

Casualty; Restoration.

8.1 If the Premises are damaged by fire or other casualty (a “**Casualty**”), Tenant shall give immediate written notice thereof to Landlord and the first mortgagee (“**Tenant’s Casualty Notice**”). Landlord shall, within 60 days after receipt of Tenant’s Casualty Notice, deliver to Tenant a good faith estimate (the “**Damage Notice**”) of the time needed to repair the damage caused by such Casualty (“**Restoration**”).

If the Premises is damaged by Casualty such that Tenant is prevented from conducting its business in the Premises in a manner reasonably comparable to that conducted immediately before such Casualty and Landlord estimates that the damage caused thereby cannot be repaired within 210 days after the commencement of repairs (the “**Repair Period**”), then Tenant may terminate this Lease by delivering written notice to Landlord of its election to terminate within 30 days after the Damage Notice has been delivered to Tenant.

If a Casualty occurs and (1) Landlord estimates that the damage cannot be repaired within the Repair Period, (2) regardless of the extent of damage, (a) the damage occurs during the last twelve (12) months of the Term or (b) the damage is not fully covered by Tenant’s insurance policies or any insurance Landlord may carry on the Premises or (c) Landlord makes a good faith determination that restoring the damage would be uneconomical, or (3) Landlord is required to

pay any insurance proceeds arising out of the Casualty to a first mortgagee, then, in any such case, Landlord may terminate this Lease by giving written notice of its election to terminate within 30 days after the Damage Notice has been delivered to Tenant.

If neither party elects to terminate this Lease following a Casualty, then Landlord shall, within a reasonable time after such Casualty, begin to repair the Premises and shall proceed with reasonable diligence to restore the Premises to substantially the same condition as they existed immediately before such Casualty; however, Landlord shall not be required to repair or replace any improvements, alterations or betterments made by Tenant within the Premises (which shall be promptly repaired and restored by Tenant at Tenant's sole cost and expense) or any furniture, equipment, trade fixtures or personal property of Tenant or others in the Premises or the Project, and Landlord's and Tenant's obligations to repair or restore the Premises shall be limited to the extent of the insurance proceeds actually received by Landlord and Tenant respectively for the Casualty in question. If this Lease is terminated under the provisions of this Article 8, Landlord shall be entitled to the full proceeds of the insurance policies providing coverage for all alterations, improvements and betterments in the Premises (and, if Tenant has failed to maintain insurance on such items as required by this Lease, Tenant shall pay Landlord an amount equal to the proceeds Landlord would have received had Tenant maintained insurance on such items as required by this Lease).

8.2 Rent insurance proceeds, if payable, shall be applied by Tenant to the payment of, when and as due and payable, the installments of Rent and other payments due under this Lease until Restoration has been completed or until the Lease is terminated pursuant to any of the terms hereof. The balance, if any, of such proceeds shall be paid to Tenant or as Tenant may direct.

8.3. During any period of Restoration, Rent shall abate in proportion to the portion of the Premises that cannot be used for school purposes in Tenant's reasonable determination.

ARTICLE 9

Care of Premises.

9.1 Landlord shall cause the school building on the Premises to be constructed and maintained in a good and workmanlike manner, and in compliance with all Legal Requirements. Tenant will accept the possession of the Premises and keep the Premises in good condition and repair, and will yield and deliver the same to Landlord at the expiration or termination of the Lease in as good a condition as when taken, reasonable use and wear thereof, and damages thereto by Landlord or its agents or invitees, excepted. Tenant shall also maintain all portions of the Premises and adjoining areas in a clean and orderly condition, free of dirt, rubbish, snow, ice and unlawful obstructions, except for those attributable to Landlord's use or action. Tenant may not make any repairs, alterations, additions, changes or improvements to the Premises, except as described above in Section 5.3, without the written consent of Landlord. All repairs, alterations, changes or improvements shall be completed and maintained by Tenant in good workmanlike condition, free and clear of all liens and encumbrances arising out of such work.

9.2 Without limiting the rights granted to Landlord under Article 4 of this Lease, Landlord shall have the right to enter upon the Premises for the purpose of making any repairs thereto and performing any work thereon which may be necessary by reason of Tenant's failure to make any such repairs or perform any such maintenance work as provided herein. Except in case of emergency, the privilege and right of entry shall be exercised at reasonable times and at reasonable hours. Tenant shall pay the cost of any such repairs and maintenance work to Landlord, upon demand therefor and upon submission of satisfactory evidence of Landlord's payment of such costs which sums shall constitute Additional Rent.

ARTICLE 10

Liability.

10.1 To the extent permitted by law, Tenant agrees to save Landlord and the first mortgagee harmless from any and all liabilities, losses, damages, penalties, costs and expenses arising from any injury or death to any person or damage to any property in, on, or about the Premises which arise out of (i) gross negligence or willful misconduct of Tenant, or (ii) any noncompliance or breach by Tenant of any of the terms, conditions, warranties, representations, or undertakings contained in or made pursuant to this Lease. Tenant agrees to procure at its own expense public liability and property damage, single limit liability insurance for the benefit of Landlord, Tenant and the first mortgagee as their interests may appear, in amount not less than One Million Dollars (\$1,000,000) to keep such insurance in force during the Term hereof, and to deliver certificates of such coverage to Landlord at least annually. In the event Tenant defaults as to any such obligations, Landlord may obtain such insurance and charge the cost thereof to Tenant as Additional Rent, payable with the monthly installment next coming due.

10.2 Landlord agrees to save Tenant harmless from any and all liabilities, losses, damages, penalties, costs and expenses arising from any injury or death to any person or damage to any property in, on, or about the Premises to the extent caused by willful misconduct or negligence by Landlord. Landlord agrees to procure at its own expense public liability and property damage, single limit liability insurance for the benefit of Landlord and Tenant as their interests may appear, in amount not less than One Million Dollars (\$1,000,000) to keep such insurance in force during the Term hereof, and to deliver certificates of such coverage to Tenant; Landlord agrees to furnish to Tenant upon request certificates of insurance evidencing such insurance.

10.3 Each party hereto, for itself and its respective successors and assigns (including any person, firm or corporation which may become subrogated to any of its rights), waives any and all rights and claims for recovery against the other party, and its officers, employees, agents, and assigns, or any of them, on account of any loss or damage to any of its property insured under any valid and collectible insurance policy or policies, to the extent of any recovery collectible under such insurance. Notwithstanding the foregoing, this waiver shall not be applicable if it has the effect of invalidating any insurance coverage of Landlord or Tenant.

ARTICLE 11

Compliance.

11.1 During the Term, Tenant shall assure compliance with all Legal Requirements relating to Tenant, the conduct of Tenant's business or pertaining to or otherwise affecting the use of the Premises; and Tenant shall reimburse Landlord for any damages or penalties suffered because of any such noncompliance. Landlord hereby represents that as of the Effective Date, the Premises is in compliance with all Legal Requirements; and Landlord shall reimburse Tenant for any damages or penalties suffered because of any such noncompliance.

ARTICLE 12

Assignment and Subletting.

12.1 Tenant shall not assign, transfer, sublet or otherwise allow the use by another Person of the Premises or any part thereof or any interest hereunder without first obtaining the written consent of Landlord, which may be withheld by Landlord for any reason. Landlord may, in its sole discretion, assign, transfer, pledge and convey its rights, title and interests in the Premises and/or this Lease, without the consent of or notice to Tenant; provided, however, the terms and conditions of this Lease as set forth herein as of the execution date of this Lease shall have not been modified or amended and shall be subject to Section 23.3 hereof.

ARTICLE 13

Default.

13.1 Tenant shall be in default upon occurrence of any of the following events (any of the following, a "**Default**");

A. Failure by Tenant to pay any portion of Rent for a period of more than ten (10) days after Tenant receives written notice of such failure to pay from Landlord (a "**Monetary Default**"); provided in no case shall Landlord be obligated to send notice of failure to pay more than twice in any twelve (12) month period.

B. Failure by Tenant to comply with any term, provision, condition or covenant of this Lease (other than a Monetary Default or as specified in Subsection F. below), if such failure is not cured by Tenant within a period of thirty (30) days after Tenant receives written notice from Landlord specifying such failure.

C. Tenant's becoming insolvent, as that term is defined by any federal or state law or regulation (the "**Insolvency Laws**"); the appointment of a receiver or custodian for all or a substantial portion of Tenant's property or assets; the institution of a foreclosure action upon all or a substantial portion of Tenant's real or personal property; the filing of a voluntary petition

under the provisions of the Bankruptcy Code or Insolvency Laws; the filing of an involuntary petition against Tenant as the subject debtor under the Bankruptcy Code or Insolvency Laws, which is either not dismissed within sixty (60) days of filing, or results in the issuance of an order for relief against the debtor, whichever is later; or Tenant's making or consenting to an assignment for the benefit of creditors or a common law composition of creditors, or if Tenant's leasehold interest herein shall be levied on execution.

D. Expiration or discontinuance for any reason of the Charter granted to Tenant by its authorizer (the "**Charter**"), other than an expiration or discontinuance which results in a new Charter effective as of termination of the existing Charter and with terms which would not, in Landlord's opinion, substantially alter Tenant's ability to comply with the terms of the Lease, Services Agreement, or Charter.

E. Failure by Tenant to deliver the certificate required by Section 23.2 within the time required by such Section.

13.2 Landlord's Remedies. Upon the occurrence of any Default and the lapse of any grace or cure periods without cure thereof, Landlord shall have the option to pursue any one or more of the following remedies upon notice to Tenant:

13.2.1. *Termination.* Terminate this Lease or terminate Tenant's right to possession, and in either event, accelerate all obligations of Tenant owed to Landlord under the Lease and force Tenant to immediately surrender the Premises to Landlord. Tenant agrees to pay to Landlord on demand the costs which Landlord may suffer by reason of such termination. Immediately upon any termination Landlord shall be entitled to recover from Tenant (i) all outstanding and unpaid Rent as of the date of such termination, (ii) the unamortized cost of any initial work performed according to this Lease by Landlord in anticipation of Tenant's occupancy, (iii) the amount of any Rent that was abated pursuant to this Lease, and (iv) all future Rent due for the remaining balance of the Term, which future Rent shall be discounted to present value using a discount rate equal to the U.S. Treasury Bill or Note rate with the closest maturity to the remaining term of the Lease as selected by Landlord.

13.2.2. *Possession.* Enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be present, without terminating the Lease or being liable for prosecution or any claim for damages, and, if Landlord so elects, relet the Premises on such terms as Landlord may determine.

13.2.3. *Entry.* Enter upon the Premises without being liable for prosecution or any claim for damages, and do whatever Tenant is obligated to do under the terms of this Lease. Tenant agrees to reimburse Landlord on demand for any expenses which Landlord may incur in effecting compliance with Tenant's obligations.

13.2.4. *Mitigation.* Landlord shall have a duty to mitigate damages in the event of a Tenant Default, provided, however, that Landlord shall not be obligated (a) to favor the Premises

for re-letting in comparison to other real property owned or leased by Landlord in the vicinity of the Premises, (b) to discount or disregard any of the following factors regarding a potential new tenant for the Premises: term of proposed lease, proposed rent, proposed use and the creditworthiness and reputation of the proposed tenant, or (c) to spend more toward re-letting the Premises than Landlord would spend in leasing real property in the ordinary course of its business.

13.2.5. *Application of Proceeds.* Any proceeds of re-letting the Premises shall be applied to pay (i) first, all costs of Landlord incurred in connection with such re-letting (including without limitation, all costs and expenses of taking possession of the Premises, securing new tenants, including expenses for redecoration, alterations or other upfit costs), (ii) second, any indebtedness of Tenant other than Rent, (iii) third, all then-outstanding Rent due hereunder, and (iv) fourth, any future obligations of Tenant, including without limitation, Rent. Tenant agrees to pay to Landlord on demand any deficiency that may arise by reason of such re-letting within ten (10) days of notice of the same from Landlord, following a re-letting. In the event Tenant pays to Landlord all accelerated sums due, any amounts applicable to Rent following the date of re-letting shall be reimbursed to Tenant as received.

13.3 No termination of this Lease pursuant to this Section or repossession of the Premises or any part thereof or of any other property leased hereunder shall relieve Tenant of its liabilities and obligations under this Lease that accrue during the Term, all of which shall survive any such termination or repossession and, if the Premises or any part thereof shall not have been relet, Tenant shall pay to Landlord as and for liquidated and agreed current damages the then present value of the Rent and other sums and charges to be paid by Tenant until what would have been the end of the Term in the absence of such termination or repossession. Landlord shall make a good faith effort to relet the Premises and alleviate Tenant of additional damages. Exercise of any remedy hereunder by Landlord shall not exclude the right to exercise any other remedy hereunder. Notwithstanding any of the foregoing obligations of Tenant stated herein to the contrary, upon termination of this Lease or Tenant's dispossession of the Premises, Tenant will automatically be relieved from and after the date of such termination or dispossession of all personal liability for the performance of any covenants or obligations on the part of Tenant contained in this Lease thereafter to be performed except for those liabilities expressly stated to have survived such termination or dispossession as stated herein.

13.4 To the extent applicable, Tenant has been made aware that Master Landlord as landlord under the Master Lease, or National Heritage Academies, Inc., as tenant under the Master Lease or an Affiliate (defined in Section 22.1) of either or any other Person that enjoys an interest in the Premises seeks the benefits offered pursuant to the U.S. Department of Treasury New Markets Tax Credit program and may pursue other federal, state or city funds, subsidies (including any city real estate tax exemptions or abatements) or loans (collectively, the "**Benefits**") in connection with the use of the Premises, and as a result of the grant of the Benefits, the Premises may be subject to certain use restrictions. Tenant shall have no responsibility and bear no liability for any claims, fees, expenses, costs or other impositions arising from or in connection with the Benefits due to the termination of this Lease or Tenant's dispossession of the Premises.

ARTICLE 14

Waiver of Breach.

14.1 No waiver by either party hereto of any breach of any of the terms of this Lease shall be deemed to be a waiver of any other or subsequent breach.

ARTICLE 15

Surrender.

15.1 Upon the expiration or earlier termination of this Lease, Tenant shall (i) surrender the Premises in broom clean, in good condition, free and clear of all lettings and occupancies, (except those previously approved by Landlord), free and clear of all liens and encumbrances, except that part of the Premises which have been taken through eminent domain, if any, after the delivery hereof, and otherwise in the same condition as Tenant received the Premises on the first day of the Initial Term, except for the following (which are allowed to remain at the Premises): any alterations that Landlord has not required to be removed, normal wear and tear and loss by fire or other casualty losses for which insurance proceeds have been received by Landlord; (ii) surrender all keys for the Premises to Landlord and (iii) inform Landlord of all combinations on locks in the Premises. All installations, alterations, additions and improvements, including partitions which may have been installed by either Landlord or Tenant, shall remain upon the Premises and shall become Landlord's property, all without compensation, allowance or credit.

15.2 On or before the scheduled expiration of the Term, Tenant may elect to remove its personal property and any fixtures and equipment. Any of Tenant's items listed in the preceding sentence not removed at the end of the Term shall be considered abandoned, and Landlord may appropriate such items for itself, sell such items or otherwise dispose of the same in such commercially reasonable manner as Landlord deems expedient without any liability to Tenant or any parties claiming by, through or under Tenant. In the event the Term terminates for any reason on other than its scheduled expiration date, then Tenant shall have a period of time in which to re-enter the Premises to retrieve its personal property, beginning on the date the Term terminates and ending fifteen (15) days thereafter. Any damage caused to the Premises by such removal shall be repaired by Tenant no later than fifteen (15) days after the end of the Term, but no Rent shall be payable by Tenant for such period of time (and such continued use of the Premises by Tenant shall not be deemed a holdover or a renewal or as creating a periodic or other similar tenancy that might be implied by law). Tenant shall reimburse Landlord for any damage to any portion of the Premises caused by Tenant during the removal of any items contemplated for potential removal in this Section.

ARTICLE 16

Eminent Domain.

16.1 If all or any part of the Premises shall be taken by any Governmental Authority under power of eminent domain, or by private purchase in lieu thereof, all damages awarded for such taking shall belong to and be the property of Landlord, whether such damages shall be awarded as compensation for the taking of or diminution in value to the leasehold or the fee of the Premises and Tenant hereby irrevocably assigns to Landlord any award or payment to which Tenant may become entitled as a result thereof, provided, however, that Tenant shall be entitled to receive from such Governmental Authority compensation for its personal property so taken.

16.2 In the event that only a part of the Premises are so taken, and the part not so taken cannot be completed as an architectural unit for the use described in Section 4.1 hereof, Tenant shall have the option to terminate this Lease by serving written notice of termination on Landlord within sixty (60) days after the taking.

16.3 If only a part of the Premises shall be so taken such that the part not so taken can be completed as an architectural unit for the use described in Section 4.1 hereof, Landlord (or at Landlord's direction, Tenant) shall, as promptly as practicable, make a complete architectural unit of the remainder of the building on the Premises (but only to the extent of the proceeds received for such taking); and there shall be an abatement of the monthly Rent hereinabove provided for in an amount equal to the percentage of the Premises and the building so taken.

ARTICLE 17

Notices.

17.1 All notices and other communications required by this Agreement shall be in writing and sent to the Parties at the facsimile number or address set forth below. Notice may be given by: (i) facsimile with written evidence of confirmed receipt by the receiving party of the entire notice; (ii) certified or registered mail, postage prepaid, return receipt requested; or (iii) personal delivery. Notice shall be deemed to have been given on the date of transmittal if given by facsimile, upon the date of postmark if sent by certified or registered mail, or upon the date of delivery if given by personal delivery. For purposes of the foregoing, "**personal delivery**" shall include delivery by nationally recognized overnight courier (such as FedEx), if signed for by the recipient or a delegate thereof. Notices to the School shall be sent to the current address of the then current Board President, with a copy to the then current Board attorney. The addresses of the Parties for the purposes aforesaid, including the address of the initial Board President, are as follows:

The School:	Eagle Crest Charter Academy
	Attn: President, Board of Directors
	11950 Riley Street
	Holland, Michigan 49424

Telephone: (616) 786-2400
Facsimile: (616) 786-4692

WITH A COPY TO:

CS3 Law, PLLC
Attn: Candace Sorensen
125 Ottawa NW, Suite 241
Grand Rapids, Michigan 49503
Telephone: (616) 822-7754

NHA:

National Heritage Academies, Inc.
Attn: Chief Financial Officer
3850 Broadmoor, S.E. Ste. 201
Grand Rapids, Michigan 49512
Telephone: (616) 222-1700
Facsimile: (616) 222-1701

WITH A COPY TO:

McShane & Bowie
Attn: John R. Grant
1100 Campau Square Plaza
99 Monroe Ave., NW
Grand Rapids, MI 49501
Telephone: (616) 732-5013
Facsimile: (616) 732-5099

ARTICLE 18

Self Help.

18.1 If Tenant shall at any time fail to make any payment or perform any act on its part to be made or performed hereunder, then Landlord without notice to Tenant, except when other notice is expressly provided for in this Lease and without waiving or releasing Tenant from the obligations of Tenant contained in this Lease, may (but shall be under no obligation to) make such payment or perform such act, and may enter upon the Premises for any such purpose, and take all such actions thereon as may be necessary therefore.

18.2 All sums to be paid by Landlord and all costs and expenses incurred by Landlord in connection with the performance of any such act referenced in Section 18.1, together with any consequential damages Landlord may suffer by reason of the failure of Tenant to make such payment or perform such act, and counsel fees incurred by Landlord in connection therewith or in enforcing its rights hereunder, shall be paid by Tenant to Landlord on demand as Additional Rent.

18.3 Tenant agrees to hold Landlord harmless from any inconvenience or interference with Tenant's operation of its business as a result of Landlord's exercising any rights granted under Section 18.1.

ARTICLE 19

Construction Liens.

19.1 Tenant will not create nor permit to be created or to remain, and will promptly discharge, at its sole cost and expense, any lien, encumbrance or charge upon the Premises or any part thereof, or upon Tenant's leasehold interest therein, except such as are created by Landlord or the first mortgagee.

ARTICLE 20

Environmental Matters.

20.1 Tenant shall not use or store any Hazardous Materials (as defined in Section 20.3) on the Premises, except in compliance with Legal Requirements.

20.2 To the extent directly related to the conduct of Tenant, Tenant's use of the Premises, or the operation of its business thereon, Tenant shall defend, indemnify (limited to the maximum indemnification allowed by Legal Requirements) and hold harmless Landlord, its employees, agents, officers and directors, from and against any claims, demands, penalties, fines, liabilities, settlements, damages, costs or expenses of whatever kind or nature, known or unknown, contingent or otherwise, arising out of, or in any way related to, (1) the presence, disposal or release of any Hazardous Materials by Tenant on, over, under, from or affecting the Premises or the soil, water, vegetation, buildings, personal property, persons thereon by reason of Tenant's action or animals on the Premises; (2) any personal injury (including wrongful death) or property damage (real or personal) arising out of or related to such Hazardous Materials existing on the Premises by reason of Tenant's action; (3) any lawsuit brought or threatened, settlement reached or government order relating to such Hazardous Materials existing on the Premises by reason of Tenant's action; and/or (4) any violation of Legal Requirements based upon or in any way related to such Hazardous Materials existing on the Premises by reason of Tenant's action including, without limitation, reasonable attorney's and consultant's fees, investigation and laboratory fees, court costs and litigation expenses.

To the extent directly related to the conduct of Landlord, Landlord's use of the Premises, or the operation of its business thereon, and to the extent permitted by law, Landlord shall defend, indemnify and hold harmless Tenant, its employees, agents, officers and directors, from and against any claims, demands, penalties, fines, liabilities, settlements, damages, costs or expenses of whatever kind or nature, known or unknown, contingent or otherwise, arising out of, or in any way related to, (1) the presence, disposal or release of any Hazardous Materials by Landlord on, over, under, from or affecting the Premises or the soil, water, vegetation, buildings, personal

property, persons thereon by reason of Landlord's action or animals on the Premises; (2) any personal injury (including wrongful death) or property damage (real or personal) arising out of or related to such Hazardous Materials existing on the Premises by reason of Landlord's action; (3) any lawsuit brought or threatened, settlement reached or government order relating to such Hazardous Materials existing on the Premises by reason of Landlord's action; and/or (4) any violation of Legal Requirements based upon or in any way related to such Hazardous Materials existing on the Premises by reason of Landlord's action including, without limitation, reasonable attorney's and consultant's fees, investigation and laboratory fees, court costs and litigation expenses.

As used herein, "**Hazardous Materials**" means and includes petroleum, petroleum products, asbestos, asbestos-containing materials, radioactive materials, waste oils, solvents and chlorinated oils, polychlorinated biphenyls (PCBs), and any other water, material or substance that is defined as hazardous or toxic under or regulated by any federal, state or local agent, law, rule or regulation (whether now existing or hereafter enacted or promulgated, as they may be amended from time to time) pertaining to environmental conditions, the environment, contamination or clean-up, including, without limitation, federal, state or local solid waste disposal rules, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Hazardous Materials Transportation Act, as amended, the Resource Conservation and Recovery Act, as amended, the Toxic Substances Control Act, as amended, the Water Pollution Control Act, as amended, the Clean Air Act, as amended, or any other applicable federal, state or local laws, regulations, publications of Governmental Authorities, or ordinances pertaining to Hazardous Materials (collectively, "**Environmental Laws**").

20.3 Tenant shall promptly notify Landlord as soon as it knows of or suspects that any Hazardous Materials has been released or that there is a threatened release on the Premises and it shall take such action at its sole expense and with due diligence, as is necessary to insure timely compliance with Legal Requirements unless caused by Landlord. Landlord shall promptly notify Tenant as soon as it knows or suspects any Hazardous Materials has been released or that there is a threatened release on or in the Premises and Landlord shall take such action at its sole expense and with due diligence, as is necessary to ensure timely compliance with Legal Requirements unless caused by Tenant.

20.4 The provisions of this Article 20 shall be in addition to any and all obligations and liabilities of Tenant and Landlord may have to each other under Legal Requirements, and shall survive the expiration and termination of the Lease for any reason.

ARTICLE 21

Late Charges.

21.1 In the event of any failure by Tenant to pay Rent when due, Tenant shall also pay to Landlord, as Additional Rent, a late charge of five percent (5%) of such delinquent payment.

ARTICLE 22

Certain Definitions.

22.1 The term “**Affiliate**” means, with respect to any Person, any other Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such first Person or any of its subsidiaries. As used in this definition, the term “**control**” means (a) the power to vote five percent (5%) or more of the securities or other equity interests of a Person having ordinary voting power, or (b) the possession, directly or indirectly, of any other power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise.

22.2 The term “**first mortgage**” means any mortgage now existing or hereafter becoming a first and paramount lien on the Premises, subject to easements and restrictions of record, and all assignments, modifications, extensions and renewals thereof.

22.3 The term “**first mortgagee**” or “**holder of the first mortgage**” means the Person(s) who is(are) the holder(s) or beneficiary(ies) under the first mortgage from time to time.

22.4 The term “**Governmental Authority**” or “**Governmental Authorities**” means the government of the United States of America or any state or other political subdivision of either thereof, or any entity that exercises executive, legislative, regulatory, administrative, judicial, quasi-governmental or quasi-judicial functions of, or pertaining to, any such government, whether now or hereafter in existence having jurisdiction over the matter or matters in question.

22.5 The term “**Landlord**” is limited to mean and include, so far as covenants, agreements, stipulations or obligations on the part of Landlord are concerned, the tenant under the Master Lease to the Premises or its assignee, at the time in question, and in the event of any transfer or transfers of the title to such fee Landlord herein named (and, in case of any subsequent transfers or conveyances, the then grantor) will automatically be relieved from and after the date of such transfer or conveyance of all personal liability for the performance of any covenants or obligations on the part of Landlord contained in this Lease thereafter to be performed.

22.6 The term “**Legal Requirements**” means (i) all present and future applicable laws, statutes, treaties, rules, orders, ordinances, codes (including, without limitation, building and life-safety codes), regulations, requirements, permits, and interpretations by, and applicable judgments, decrees, injunctions, writs and like action even if unforeseen or extraordinary of any Governmental Authority (including, without limitation, Environmental Laws (defined herein), laws and regulations pertaining to health and safety, Insolvency Laws (defined herein), the Fair Housing Amendments Act of 1988, the Americans with Disabilities Act of 1990, and any other applicable Federal, State or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct relating to barrier-free access or access of the handicapped or disabled to the Premises, and laws and regulations pertaining to the construction, restoration, use and operation of schools); and (ii) any reciprocal easement agreement, agreement, contract, instrument, restriction or similar agreement relating to the use,

occupancy, possession, operation, alterations, repairs or maintenance of the Premises or otherwise affecting the Premises.

22.7 The term “**mortgage**” means any mortgage, deed of trust, deed to secure debt or other security instrument now existing as, or hereafter becoming a lien on the Premises.

22.8 The term “**mortgagee**” means the Person(s) who is(are) the holder(s) or beneficiary(ies) under any mortgage from time to time.

22.9 The term “**Person**” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

ARTICLE 23

Subordination; Estoppel Certificates.

23.1 Tenant agrees that Landlord, or any mortgagee or lessor under any applicable ground or other underlying lease, may choose to make this Lease subordinate or paramount to any mortgages or ground or underlying leases now or hereafter affecting the Premises and to any and all advances to be made thereunder or to be secured thereby, and to the interest and charges thereon, and to all renewals, replacements and extensions thereof, and that upon any taking of possession of the Premises and accession to the interest of Landlord under this Lease by such lessor or mortgagee, Tenant shall attorn to and recognize such Person as landlord hereunder; provided the mortgagee, lessor under any such ground or underlying leases, Landlord or any trustee named in any such mortgages or leases shall agree (i) to recognize the Lease of Tenant in the event of foreclosure if Tenant is not in Default and (ii) that Tenant’s possession of the Premises under this Lease shall not be disturbed by such Person unless there is a Default. Tenant will execute promptly any instrument or certificate that Landlord may request to confirm such subordination.

23.2 Tenant, within ten (10) days after request by Landlord, will execute and deliver to Landlord (and any mortgagee or prospective mortgagee, or any current or prospective ground or underlying lessor, to the extent specified by Landlord) an estoppel certificate as to such reasonable facts and circumstances under this Lease as may be requested, but in any case including the following (i) identifying the commencement date and expiration date of this Lease, (ii) stating that this Lease is unmodified and in full force and effect, or is in full force and effect as modified, and then stating such modifications, (iii) stating that Tenant does not claim that Landlord is in default in any way, or listing any such claimed defaults, (iv) the amount of Monthly Installments then payable hereunder and Additional Rent, if any, as of the date of the certificate, (v) the date to which the Rent has been paid in advance, and (vi) the amount of any security deposit or pre-paid Rent. If Tenant fails to deliver the executed certificate to Landlord within the ten (10) day period, Tenant shall be in Default without benefit of any cure period, and the proposed certificate will be conclusively deemed executed by Tenant.

23.3 Upon the receipt of a notice from Landlord, Tenant agrees to pay all such sums owing under this Lease directly to the account or party specified in such notice.

ARTICLE 24

Quiet Enjoyment.

24.1 All times when Tenant is not in Default, Tenant's quiet and peaceable enjoyment of the Premises will not be disturbed or interfered with by Landlord or any Person claiming by, through or under Landlord.

ARTICLE 25

Holding Over.

25.1 Any holdover by Tenant in the Premises beyond the expiration or termination of the Term, shall not be deemed to be a renewal or extension of this Lease or any extension thereof or the exercise of any option to extend or renew this Lease, but said holding over shall be deemed a tenancy from calendar month to calendar month at a monthly Rent equal to two hundred percent (200%) of the Monthly Installment for the last month paid under the Term. A month-to-month tenancy arising by holding over under this Section may be terminated by either Landlord or Tenant giving written notice to the other party hereto on or before the day any Monthly Installment is due with termination becoming effective on the day the next following Monthly Installment would have otherwise become due.

ARTICLE 26

Remedies Not Exclusive; Waiver.

26.1 Each and every of the rights, remedies and benefits provided by this Lease to Landlord are cumulative, and are not exclusive of any other of said rights, remedies and benefits, or of any other rights, remedies and benefits allowed by law.

26.2 One or more waivers of any covenant or condition by Landlord will not be construed as a waiver of a further or subsequent breach of the same covenant or condition, and the consent or approval by Landlord to or of any act by Tenant requiring Landlord's consent or approval will not be deemed to waive or render unnecessary Landlord's consent to or approval of any subsequent similar act by Tenant.

ARTICLE 27

Right To Show Premises.

27.1 Landlord may show the Premises and may display about the Premises signs advertising the availability of the Premises at any time during the Term of this Lease.

ARTICLE 28

Landlord's Liability.

28.1 If Landlord fails to perform any provision of this Lease upon Landlord's part to be performed, and if as a consequence of such default Tenant recovers a money judgment against Landlord, such judgment may be satisfied only out of the proceeds of sale received upon execution of such judgment (subject to any prior mortgages and ground or underlying leases) and levied thereon against the right, title and interest of Landlord in the Premises and out of rents or other income from such property receivable by Landlord, and Landlord shall not be personally liable for any deficiency.

ARTICLE 29

General.

29.1 References in this Lease to Persons have been generalized for ease of reading. Therefore, references to a single Person will also mean more than one Person whenever such usage is appropriate (for example, "**Tenant**" may include, if appropriate, a group of Persons acting as a single entity, or as tenants-in-common). Similarly, pronouns of any gender should be considered inter-changeable with pronouns of other genders. If a party consists of more than one Person, such Persons shall be jointly and severally liable for the obligations of such party under this Lease.

29.2 Any waiver or waivers by either party of any of the provisions of this Lease will not constitute a waiver of any later breach of that provision, and any consent or approval given by either such party with respect to any act, neglect or default by the other party will not waive or make unnecessary the other party's consent or approval with respect to any later similar act, neglect or default by such other party.

29.3 In the event any provision contained herein shall be held to be invalid or unlawful for any reason, such provision shall be deemed to be stricken from this Lease, with the understanding that the remaining provisions hereof shall continue to be binding on the Parties.

29.4 Topical headings appearing in this Lease are for convenience only. They do not define, limit or construe the contents of any sections, paragraphs or clauses.

29.5 This Lease can be modified or amended only by a written agreement signed by Landlord and Tenant. The Parties further acknowledge and agree that any changes to this Lease other than the length of term due to automatic renewal shall be documented by an amendment to this Lease signed by both Parties and subject to prior review by the Authorizer.

29.6 All provisions of this Lease are and will be binding on the heirs, executors, administrators, personal representatives, successors and assigns of each of Landlord and Tenant.

29.7 The laws of the state in which the Premises are located will control in the construction and enforcement of this Lease, without regard to any laws or policies of such state regarding conflicts of law.

29.8 Time is of the essence of all terms and conditions of this Lease.

29.9. Landlord and Tenant each represent and warrant to the other that neither of them has contacted a broker, finder or similar Person in connection with this Lease, and to the extent permitted by law, each party shall defend, indemnify and hold the other harmless from and against all liability, cost and expense, including reasonable attorneys' fees, incurred as a consequence of any claim asserted by a Person alleging to have dealt with one of the Parties hereto in connection with this Lease.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Parties hereto have executed this Lease as of the day and year first above written.

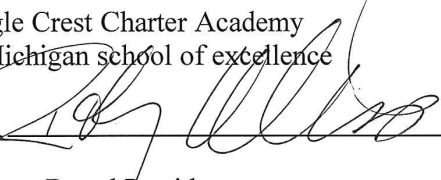
LANDLORD:

National Heritage Academies, Inc.,
a Michigan corporation

By: 
Stephen M. Conley
Its: Chief Financial Officer

TENANT:

Eagle Crest Charter Academy
a Michigan school of excellence

By: 
Its: Board President

Eagle Crest – Amended and Restated Lease (3.3.16)

EXHIBIT "A"

LEGAL DESCRIPTION OF PREMISES

Part of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15, Town 5 North, Range 15 West, Holland Township, Ottawa County, Michigan, described as: Beginning at the Northwest corner of Section 15 and proceeding thence South 89 degrees 28 minutes 51 seconds East 659.98 feet along the North line of Section 15; thence South 00 degrees 39 minutes 53 seconds West 660.02 feet along the East line of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15; thence North 89 degrees 32 minutes 27 seconds West 660.17 feet along the South line of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 15; thence North 00 degrees 40 minutes 53 seconds East 602.63 feet along the West line of Section 15; thence South 89 degrees 28 minutes 51 seconds East 1.00 foot; thence along a curve to the left an arc distance of 154.88 feet; radius of 928.25 feet; chord bears North 85 degrees 41 minutes 53 seconds East 154.70 feet; thence along a curve to the right an arc distance of 144.49 feet; radius of 862.25 feet, chord bears North 85 degrees 43 minutes 07 seconds East 144.32 feet; thence North 89 degrees 28 minutes 51 seconds West 298.90 feet; thence North 00 degrees 40 minutes 53 seconds East 33.00 feet along the West line of Section 15 to the point of beginning.

FIRE SAFETY INSPECTION/CERTIFICATION REPORT

FACILITY NAME EAGLES CREST CHARTER ACADEMY			DATE 11-14-97	COUNTY OTTAWA	PROJECT NUMBER 4-00-0448-97
ADDRESS 11950 RILEY STREET			FACILITY TYPE School	RULES/CODES 89 MI Sch	JOB/LIC/FAC. NO.
CITY HOLLAND	STATE MI	ZIP 49422	FACILITY REP. KEN SKINNER, PROG MGR		INSP. TYPE recheck

DESCRIPTION OF NON-COMPLIANCE

RE: NEW SCHOOL BUILDING

A final fire safety inspection of the above captioned project was completed this date. Deficiencies noted in our prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

Full approval for Phase I of the new building.

cc: Educational Development Corporation, 1007 Parchment Dr., SE, Grand Rapids 49546
 Design Plus Inc., 48 Fountain NW, Grand Rapids 49503
 Ken Skinner, The Bouma Corp., 4101 Roger B. Chaffee Memorial Blvd SE, Grand Rapids 49548
 Gary Cass, Dept. of Ed.
 Riverside Fire & Security

NOV 24 1997

FIRE SAFETY CERTIFICATION Full approval for Phase I			PROJECT STATUS Open		REVIEWED BY <i>[Signature]</i>
DISTRIBUTION	INSPECTING OFFICIAL THOMAS G. SPAMAN		ADDRESS 588 Three Mile Road NW		
	SIGNATURE OF OFFICIAL <i>[Signature]</i>	CITY Grand Rapids	ZIPCODE 49544	TELEPHONE 616-784-4996	

FIRE SAFETY INSPECTION/CERTIFICATION REPORT

FACILITY NAME EAGLES CREST CHARTER ACADEMY			DATE 11-14-97	COUNTY OTTAWA	PROJECT NUMBER 4-00-0448-97
ADDRESS 11950 RILEY STREET			FACILITY TYPE School	RULES/CODES 89 MI Sch	JOB/LIC/FAC. NO.
CITY HOLLAND	STATE MI	ZIP 49422	FACILITY REP. KEN SKINNER, PROG MGR		INSP. TYPE recheck

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 Gary Cass, Dept. of Ed.
 Riverside Fire & Security

NOV 24 1997

FIRE SAFETY CERTIFICATION Full approval for Phase I			PROJECT STATUS Open		REVIEWED BY <i>[Signature]</i>
DISTRIBUTION	INSPECTING OFFICIAL THOMAS G. SPAMAN		ADDRESS 588 Three Mile Road NW		
	SIGNATURE OF OFFICIAL <i>[Signature]</i>	CITY Grand Rapids	ZIPCODE 49544	TELEPHONE 616-784-4996	



State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

Page 1 of 1
OFS-40
Office of Fire Safety
General Office Building
7150 Harris Drive
Lansing, MI 48909-7504

FACILITY NAME EAGLES CREST CHARTER ACADEMY	DATE 2/7/2000	COUNTY OTTAWA	PROJECT 1992-98
ADDRESS 11950 RILEY	FACILITY TYPE SCHOOL	RULES/CODES 89 MI SCH	JOB/LIC/FAC. NO.
CITY, STATE ZIP CODE HOLLAND, MI 49424	FACILITY REPRESENTATIVE	INSPECTION TYPE Final	

AREAS REQUIRING COMPLIANCE:

RE: NEW SCHOOL BUILDING

A final fire safety inspection of the above captioned project was completed this date. Deficiencies noted in our prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

70199298.wpd

CC: Design Plus
Carter Development Company LLC, 989 Spaulding Ave. SE, Grand Rapids, 49546
Joan May
Holland Twp. FD

☐

FIRE SAFETY CERTIFICATION Approved		PROJECT STATUS Closed	REVIEWED BY
DISTRIBUTION Facility File CIS/HQ	INSPECTING OFFICIAL Burton Jones SIGNATURE OF OFFICIAL	ADDRESS 2922 FULLER NE SUITE 114 GRAND RAPIDS, MICHIGAN 49505 616-447-2691 FAX 616-447-2668	
		TELEPHONE	

Handwritten signature/initials



State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

Inspection Report

Page 1 of 1

OFS-40

Office of Fire Safety

General Office Building

7150 Harris Drive

Lansing, MI 48909-7504

Web Site www.cis.state.mi.us/fire

FACILITY NAME Eagles Crest Charter Academy	DATE 9/7/2000	COUNTY Ottawa	PROJECT 0041-00
ADDRESS 11950 Riley	FACILITY TYPE School	RULES/CODES School - 89	JOB/LIC/FAC. NO. 98135A
CITY, STATE ZIP CODE Holland, MI 49424	FACILITY REPRESENTATIVE	INSPECTION TYPE Inspection - Final	

RE: ADDITION

A recheck fire safety inspection was completed this date. Deficiencies noted in prior inspection reports have been satisfactorily corrected. This report may be considered as final approval of this project.

70004100.wpd

cc: Joan May, Dept Ed.
RMD Architects, FAX 616-453-2349
Holland Twp. FD
National Heritage Academics

FIRE SAFETY CERTIFICATION Approved		PROJECT STATUS Closed	REVIEWED BY
DISTRIBUTION		INSPECTING OFFICIAL Burton Jones	ADDRESS 2922 Fuller NE, Suite 114
Facility File	CIS/HQ Local FD	SIGNATURE OF OFFICIAL	TELEPHONE Grand Rapids,, MI 49505
Education Architect			FAX 616-447-2991
			E-MAIL 616-447-2668

CERTIFICATE OF USE AND OCCUPANCY


PERMANENT

Michigan Department of Labor & Economic Growth
Bureau of Construction Codes/Building Division
P. O. Box 30254
Lansing, MI 48909
(517) 241-9317

Building Permit No. B026815
Eagle Crest Charter Academy
11950 Riley St
Holland, MI
Ottawa County

The above named building of Use Group E and Construction Type 5B is approved for use and occupancy.

THIS APPROVAL IS GRANTED UNDER THE AUTHORITY OF SECTIONS 13 OF ACT 230 OF THE PUBLIC ACTS OF 1972, AS AMENDED, BEING §125.1513 OF THE MICHIGAN COMPILED LAWS, AND, IN ACCORDANCE WITH SECTION 110.0 OF THE STATE BUILDING CODE. THIS SHALL SUPERSEDE AND VOID ANY PREVIOUS APPROVAL OF USE AND OCCUPANCY.


Larry Lehman, Chief
Charles E. Curtis, Assistant Chief
Building Division

August 26, 2008

CERTIFICATE OF USE AND OCCUPANCY

PERMANENT

Michigan Department of Licensing and Regulatory Affairs

Bureau of Construction Codes/Building Division

P.O. Box 30254

Lansing, MI 48909

Authority: 1972 PA 230

(517) 241-9317

Building Permit No: BLDG19-00418

11950 RILEY ST

HOLLAND, MI 49424

COUNTY: OTTAWA

The above named building of Use Group E, Education and Construction Type 5B is approved for use and occupancy.

THIS APPROVAL IS GRANTED UNDER THE AUTHORITY OF SECTIONS 13 OF ACT 230 OF THE PUBLIC ACTS OF 1972, AS AMENDED, BEING §125.1513 OF THE MICHIGAN COMPILED LAWS, AND, IN ACCORDANCE WITH SECTION 111.0 OF THE STATE BUILDING CODE. THIS SHALL SUPERSEDE AND VOID ANY PREVIOUS APPROVAL OF USE AND OCCUPANCY.

Print Date: 09/06/2019

CERTIFICATE OF USE AND OCCUPANCY

TEMPORARY

**Michigan Department of Licensing and Regulatory Affairs
Bureau of Construction Codes/Building Division
P. O. Box 30254
Lansing, MI 48909
(517) 241-9317**

**BUILDING PERMIT NO.: BLDG19-00418
11950 RILEY ST
HOLLAND, MICHIGAN
OTTAWA COUNTY**

The above named building of Use Group E, Education and Construction Type 5B - Combustible (All Elements Not Rated) is approved for use and occupancy for a period of three (3) months with an expiration date of December 3, 2019.

Conditions:

THIS APPROVAL IS GRANTED UNDER THE AUTHORITY OF SECTIONS 13 OF ACT 230 OF THE PUBLIC ACTS OF 1972, AS AMENDED, BEING §125.1513 OF THE MICHIGAN COMPILED LAWS, AND, IN ACCORDANCE WITH SECTION 111.0 OF THE STATE BUILDING CODE. THIS SHALL SUPERSEDE AND VOID ANY PREVIOUS APPROVAL OF USE AND OCCUPANCY.

Jon Paradine

**Jon Paradine, Chief
Building & Permits Division**

September 3, 2019

AMENDMENT NO. 7

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

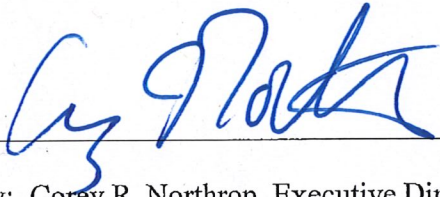
CONTRACT AMENDMENT NO. 7

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend Schedule 5: Description of Staff Responsibilities, by replacing the Amended and Restated Services Agreement contained therein with the Services Agreement, attached as Tab 1.

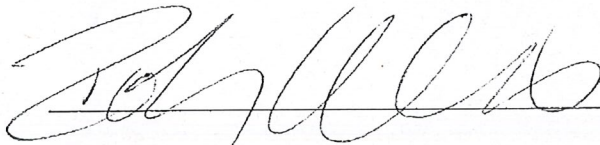
This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2019.



Dated: _____

1-14-20

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: _____

1-7-2020

By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 7

Tab 1

SERVICES AGREEMENT

THIS AMENDED AND RESTATED SERVICES AGREEMENT (“**Agreement**”) by and between National Heritage Academies, Inc., a Michigan corporation (“**NHA**”), and Eagle Crest Charter Academy, a body corporate and Michigan School of Excellence (the “**School**”) is effective the 1st day of July, 2019 (the “**Effective Date**”). For purposes of this Agreement, NHA and the School shall be referred to collectively as the “**Parties**.”

RECITALS

WHEREAS, the School was issued a Charter Contract by the Central Michigan University Board of Trustees (the “**Authorizer**”) to operate a school of excellence pursuant to the Michigan Revised School Code (the “**Code**”); and

WHEREAS, the Parties desire to continue to work together to promote educational excellence and innovation based on NHA’s school design, comprehensive educational program and management principles; and

WHEREAS, the Parties desire to set forth the terms and conditions of such a relationship in this Agreement;

NOW, THEREFORE, for good and valuable consideration, including the mutual promises and benefits contained in this Agreement, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE I

CONTRACTING RELATIONSHIP

A. Services. Subject to the terms and conditions of this Agreement, and as permitted by applicable law, the School hereby contracts with NHA for the provision of certain educational, business administration, facility, and management services, including without limitation, all labor, equipment, and materials necessary for the provision of the same, as set forth herein (collectively, the “**Services**”).

B. Charter. This Agreement shall: (i) be subject to and comply with the terms and conditions of the Charter Contract and the School’s Charter Application (collectively, the “**Charter**”); and (ii) not be construed to interfere with the constitutional, statutory, or fiduciary duties of the School’s Board of Directors (the “**Board**”). NHA agrees to perform its duties and responsibilities under this Agreement in a manner that is consistent with the School’s obligations under the Charter issued by the Authorizer. The provisions of the School’s Charter shall supersede any competing or conflicting provisions contained in this Agreement.

C. Independent Contractor. NHA shall provide the Services as an independent contractor, and not as an employee, partner, agent, or associate of the School. This independent contractor relationship shall extend to the officers, directors, employees, and representatives of

NHA. Consistent with the status of an independent contractor, NHA reserves to itself the right to designate the means and methods of accomplishing the objectives and purposes of this Agreement consistent with Board policy, applicable law and the Charter. NHA shall be solely responsible for its acts and the acts of its agents, employees and subcontractors. The relationship between the Parties is based solely on the terms and conditions of this Agreement, and the terms and conditions of any other written agreement between the Parties.

D. Designations and Appointments.

1. The Board shall by Board resolution appoint the Board Treasurer, or such other officer as determined by the Board, to serve as the chief administrative officer of the School (the “CAO”) under the Uniform Budgeting and Accounting Act, MCL 141.421 *et seq.* (the “**Budgeting and Accounting Act**”) Notwithstanding any other provision of the Agreement to the contrary, the Board resolution shall designate NHA’s chief financial officer, or such other NHA officer or employee as is mutually agreed upon by NHA and the School, as the designated agent of the CAO to assist the CAO with the performance of the CAO’s duties under the Budgeting and Accounting Act.

2. NHA, including its directors, officers, and employees are hereby designated as “School Officials” for purposes of the Family Educational Right and Privacy Act, and its implementing regulations, 20 U.S.C. §1232g *et seq.* (FERPA); 34 CFR § 99.31(a)(1)(i)(B).

3. NHA, its directors, officers, and employees may be designated by the School for other purposes by a written resolution of the Board.

E. Certain Prohibitive Conduct Regarding Personally Identifiable Information. Except as permitted under the Code, NHA shall not sell or otherwise provide to a for-profit business entity any personally identifiable information that is part of an Academy Student’s education records.

F. Certain Prohibitive Conduct Regarding Academy Student Records. If NHA receives information that is part of an Academy Student’s education records, NHA shall not sell or otherwise provide the information to any other person except as permitted under the Code.

For purposes of Paragraphs E and F above, the terms “education records” and “personally identifiable information” shall have the same meaning as those terms in section 1136 of the Code, MCL 380.1136.

ARTICLE II

TERM & TERMINATION

A. Term. This Agreement shall commence on the Effective Date, and unless terminated as set forth herein, shall continue until the revocation, termination or expiration of the Charter currently in effect expiring June 30, 2026 (the “**Term**”). The parties acknowledge that the Authorizer, as part of any reauthorization or renewal, may require that the School and NHA submit

an amended or restated Agreement for review by the Authorizer. The first school year of this Agreement shall commence July 1, 2019 to June 30, 2020, and each school year thereafter shall commence on July 1 and end on June 30 of the following year.

B. Termination.

1. By NHA. NHA may terminate this Agreement prior to the end of the Term if the Board fails to remedy a material breach of this Agreement within thirty (30) days after receiving a notice from NHA of such breach. For purposes of this Subsection, a material breach (which for the sake of clarity is a default hereunder) includes, but is not limited to: (i) NHA's failure to timely receive any compensation or reimbursement required by this Agreement; or (ii) a suspension, termination, reconstitution, revocation, or non-renewal of the Charter.

2. By the School. The School may terminate this Agreement prior to the end of the Term if NHA fails to remedy a material breach of this Agreement within (30) days after receiving notice from the School of such breach. For purposes of this Subsection, a material breach includes, but is not limited to: (i) NHA's failure to account for expenditures or pay operating costs pursuant to the Budget (as defined below); (ii) NHA's failure to follow policies, procedures, rules, regulations or curriculum adopted by the Board, provided they do not violate the Charter, applicable law, or this Agreement; (iii) a receipt by the Board of an unsatisfactory report from NHA or an independent education consultant retained by the Board regarding the Services or the School's performance, provided the unsatisfactory performance cannot be adequately corrected or explained; (iv) a determination that this Agreement or its implementation would serve as grounds for suspension, termination, reconstitution, revocation, or non-renewal of the Charter; (v) a determination that this Agreement or its implementation would jeopardize material tax exemptions of the School or its non-profit status; or (vi) any action or inaction by NHA that places the Charter in jeopardy of termination, suspension, reconstitution or revocation.

3. By Either Party. Either party may terminate this Agreement prior to the end of the Term, with or without cause, by providing the other party with at least ninety (90) days' prior written notice.

4. Revocation or Termination of Charter. If the School's Charter issued by the Authorizer is revoked, terminated or a new Charter is not issued to the School after expiration of the School's Charter, this Agreement shall automatically terminate on the same date as the School's Charter is revoked, terminated or expires without further action of the parties.

5. Amendment Caused By Academy Site Closure or Reconstitution. In the event that the Academy is required (i) to close an Academy site pursuant to a notice issued by the Department under Section 507 of the Code, MCL 380.507; or (ii) to undergo a reconstitution pursuant to Section 507 of the Code, MCL 380.507, and Section 10.7 of the Contract Terms and Conditions, and such closure of an Academy site or reconstitution causes an amendment to or termination of this Agreement, the parties agree that this Agreement shall be amended or terminated to implement the Academy site closure or reconstitution, with no cost or penalty to the Academy, and NHA shall have no recourse against the Academy or the Authorizer for implementing such site closure or reconstitution.

6. If this Agreement is terminated prior to the end of the Term other than as provided for in Article II(B)(4) of this Agreement, and unless otherwise agreed by the Parties, such termination will not become effective until the end of the then-current school year.

C. Effect of Termination. Upon the effective date of termination or expiration of this Agreement:

1. Subject to any provisions contained in a lease between the Parties, the Parties shall have the right to remove from the School any equipment or other assets owned or leased by the respective Party;

2. The School shall pay or reimburse NHA through the Fee (as defined below) for the prepaid portion of any expenses or liabilities incurred by NHA pursuant to the Budget as of the date of such termination or expiration, provided NHA supplies the School with documentation of all such expenses and liabilities;

3. Upon termination or expiration of this Agreement or if this Agreement is terminated due to a Contract revocation, reconstitution, termination or non-renewal, NHA shall, without charge:

- (i) close the financial records on the then-current school fiscal year which includes, but is not limited to, the completion and submission of the annual financial audit, state and federal grant reporting and all other associated reporting within required timelines established by the appropriate local, state or federal authority;
- (ii) organize and prepare student records for transition to the new ESP, self-management or in the case of a school closure, transfer to a student's new school as designated by the student's parent / legal guardian or to a person or entity authorized to hold such records;
- (iii) provide for the orderly transition of employee compensation and benefits to the new ESP or self-management without disruption to staffing, or in the case of school closure, final payment of all employee compensation, benefit and tax obligations related to services provided by the ESP to the Academy;
- (iv) organize and prepare the Academy's records, both electronic and hard-copy, for transition to the new ESP, self-management or dissolution; and
- (v) provide for the orderly transition to the new ESP, self-management or dissolution of all Academy-owned assets including, but not limited to, furniture, fixtures, equipment and real estate. This includes any keys, log-in information and passwords related to any Academy asset.

4. The party to whom Confidential Information (as defined below) has been disclosed shall, upon request and at the direction of the disclosing party: (i) return such Confidential Information within thirty (30) days, including any copies thereof, and cease its use; or (ii) destroy such Confidential Information and certify such destruction to the disclosing party, except for a single copy thereof which may be retained for the sole purpose of determining the scope of any obligations incurred under this Agreement, and except where disclosure or retention is required by applicable law.

ARTICLE III

OBLIGATIONS OF NHA

A. Manager at Risk. NHA shall be responsible and accountable to the Board for providing the Services. During the Term, NHA shall provide the Services regardless of whether actual revenue meets the level projected in the Budget, and NHA hereby assumes the risk of funding shortfalls during the Term. Notwithstanding the foregoing, NHA shall not be required to expend funds on Services in excess of the amount set forth in the Budget.

B. Comprehensive Educational Program. The School has determined to adopt NHA's proprietary educational and academic programs and goals, as set forth in the Charter (the "**Educational Program**"). Subject to the oversight of the Board, NHA shall implement and administer the Educational Program. In the event that NHA reasonably determines that it is necessary or advisable to make material changes to the Educational Program, NHA shall inform the Board of the proposed changes and obtain the Board's approval before making such changes, as well as the Authorizer's approval if required by the Charter or applicable law. The Parties acknowledge and agree that an essential principle of the Educational Program is its flexibility, adaptability and capacity to change in the interest of continuous improvement and efficiency. Not less than annually or as reasonably requested by the Board, NHA shall provide the Board with a report detailing progress made on each of the educational goals set forth in the Educational Program. The school year calendar and the school day schedule shall be approved by the Board as required under the Charter.

C. All Children Welcome. NHA places a high value on diversity, and the School shall welcome students of all races, ethnicity, religion, gender and economic backgrounds.

D. Services to Students with Disabilities. NHA welcomes students with disabilities at the School. NHA shall provide special education and related services, in conformity with the requirements of the Charter and applicable law, to students who attend the School.

E. Educational and Administrative Services. Subject to the oversight of the Board, NHA shall implement operational practices and procedures that are consistent with Board policy, the Charter and applicable law. Such practices and procedures shall include, but are not limited to:

1. Student recruitment and student admissions.
2. Student assessments, including testing, promotion, and retention.
3. The acquisition of instructional materials, equipment and supplies, and the administration of any and all extra-curricular and co-curricular activities and programs approved by the Board and NHA.
4. Employment of personnel assigned to work at the School and management of all personnel functions, as set forth herein.
5. All aspects of the School's business administration.

6. All aspects of the School's accounting operation, including general ledger management, financial reporting, payroll, employee benefits and payroll tax compliance.

7. Food service and transportation approved by the Board and NHA.

8. All aspects of facilities administration and maintenance.

9. Student behavior management and discipline.

F. Location of Services. Other than instruction, and unless prohibited by the Charter or applicable law, NHA may provide the Services, including but not limited to, purchasing, professional development and administrative services, off-site.

G. Subcontracts. NHA reserves the right to subcontract any and all aspects of the Services. NHA agrees that any Services that are included in the Fee (as defined below) that are performed by a subcontractor will not be charged to, reimbursed by, or passed through as an additional cost to the School. NHA shall not subcontract the oversight of the Educational Program, except as specifically permitted in this Agreement or with prior written approval of the Board. Notwithstanding the foregoing, the Board specifically acknowledges and agrees that from time to time NHA may use third parties or independent contractors to assist in the creation and development of Educational Materials (as defined below) that may be used as a part of the Educational Program.

H. Pupil Performance Standards and Evaluation. NHA shall implement pupil performance evaluations that permit evaluation of the academic progress of each School student. NHA shall be responsible and accountable to the Board for the academic performance of students who are enrolled at the School. NHA shall utilize assessment strategies required by the Charter and applicable law. The Board and NHA shall cooperate in good faith to identify academic goals and methods to assess such academic performance. NHA shall provide the Board with timely reports regarding student performance.

I. Unusual Events. NHA shall timely notify the Board and the Administrator (as defined below) of any anticipated or known material: (i) health or safety issues, including all mandatory reporting required by applicable law; (ii) labor, employee or funding issues; or (iii) other issues that may reasonably and adversely impact the School's ability to comply with the Charter, applicable law or this Agreement.

J. School Records. The financial and education records pertaining to the School (collectively, the "**School Records**"), are property of the School. Except as may be prohibited or limited by the Charter or applicable law, the School Records shall be available to the Board and the Authorizer for their review, and are subject to inspection and copying to the same extent that records of public schools are subject to inspection and copying pursuant to applicable law. All School Records shall be physically or electronically available at the School's physical facility upon request made by the Board or the Authorizer. NHA shall provide the Board on a timely basis all information that is required to be disclosed under section 22f of the State School Aid Act of 1979, MCL 388.1622f.

On an annual basis, NHA agrees to provide the Board the same information that a school district is required to disclose under section 18(2) of the State School Aid Act of 1979, MCL 388.1618, for the most recent school fiscal year for which the information is available. Within thirty (30) days of receipt of this information, the Board shall make the information available on the School's website homepage, in a form and manner prescribed by the Michigan Department of Education. The defined terms in section 503c of the Code, MCL 380.503c, whichever is applicable, shall have the same meaning in this Agreement.

NHA shall make information concerning the operation and management of the School, including without limitation the information described in the Charter, available to the School as deemed necessary by the Board in order to enable the School to fully satisfy its obligations under the Charter. Additionally:

(1) NHA agrees that it shall observe Board policies and applicable law regarding the confidentiality of Covered Data and Information. Covered Data and Information ("CDI") includes paper and electronic student education record information and includes, without limitation, "education records" as defined under FERPA, 34 CFR § 99.1. CDI also includes any new records created and maintained by NHA under this Agreement using CDI.

(2) NHA shall not use or disclose CDI received from or on behalf of the School except as permitted or required by this Agreement and/or applicable law.

(3) Upon termination or other conclusion of this Agreement, NHA shall return all CDI to the School.

(4) NHA shall develop, implement, maintain and use appropriate administrative, technical and physical security measures to preserve the confidentiality, integrity and availability of all CDI received from, or on behalf of, the School or its students. These measures will be extended by contract to include subcontractors used by the NHA.

(5) NHA, within two business days of discovery, shall report to the Board any use or disclosure of CDI not authorized by this Agreement. NHA's report shall identify: (i) the nature of the unauthorized use or disclosure, (ii) the CDI used or disclosed, (iii) who made the unauthorized use or received the unauthorized disclosure, (iv) what NHA has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure, and (v) what corrective action NHA has taken or shall take to prevent future similar unauthorized use or disclosure. NHA shall provide such other information, including a written report, as reasonably requested by the Board.

K. Facility. NHA shall use reasonable efforts to secure a facility to be leased or otherwise provided to the School on terms mutually agreeable to NHA and the Board. Obligations of the Board created under the terms of such lease are to be fulfilled by NHA unless otherwise agreed to in writing by NHA and the Board. The facility shall comply with the requirements of the Charter and applicable law. NHA shall also use reasonable efforts to cause the facility to be furnished with equipment and technology as is reasonably necessary to implement the Educational Program.

L. Legal Compliance. NHA will implement and enforce rules, regulations and procedures applicable to the School that are consistent with adopted Board policy, if any, and the Educational Program in accordance with the Charter and applicable law, including without limitation, rules, regulations, and policies regarding non-discrimination, discipline, special education, confidentiality and access to records.

M. Rules and Procedures. NHA will recommend to the Board reasonable rules, regulations, policies and/or procedures applicable to the School. The Board hereby authorizes and directs NHA to enforce such rules, regulations and procedures consistent with Board policy, and make such rules, regulations and procedures available to the Board upon request.

N. Assistance to the Board. NHA shall cooperate with the Board and, to the extent consistent with the Charter and applicable law, timely furnish the Board with all documents and information necessary for the Board to properly perform its responsibilities under this Agreement.

ARTICLE IV

OBLIGATIONS OF THE BOARD

A. Board Policies. The Board shall be responsible for the fiscal and academic policies of the School. The Board shall exercise good faith in considering the recommendations of NHA, including but not limited to, NHA's recommendations regarding policies, rules, regulations and the Budget (as defined below).

B. Academy Budget. The Board is responsible for establishing, approving and amending the Budget in accordance with the Budgeting and Accounting Act.

C. Governance Oversight. The Board shall provide governance level oversight of the School in accordance with the Charter and applicable law. The Board shall cooperate with NHA and, to the extent consistent with applicable law, timely furnish NHA all documents and information necessary for NHA to properly perform its responsibilities under this Agreement.

D. Unusual Events. The Board shall timely notify NHA of any anticipated or known material: (i) health or safety issues; (ii) labor, employee or funding issues; or (iii) other issues that may reasonably and adversely impact NHA's ability to comply with the Charter, applicable law, or this Agreement.

E. Office Space. The Board shall provide NHA with suitable office space at the School, provided the requested space is: (i) available and can be provided without materially prejudicing the Educational Program; and (ii) used only for activities related to the School. The space shall be provided at no cost to NHA.

F. Retained Authority. The Board shall retain the authority to adopt reasonable policies in accordance with applicable law relative to anything necessary for the proper establishment, maintenance, management, and operation of the School.

ARTICLE V

INTELLECTUAL PROPERTY

A. Definitions.

1. “**Educational Materials**” means all curriculum, print and electronic textbooks, instructional materials, lesson plans, teacher guides, workbooks, tests, and other curriculum-related materials licensed, developed or otherwise owned by the School or NHA.

2. “**Confidential Information**” means any confidential and non-public trade, technical or business knowledge, information and materials regarding the School or NHA (or their respective affiliates), which is given by one party to the other, or any of their respective representatives, in any form, whether printed, written, oral, visual, electronic or in any other media or manner. Confidential Information includes, but is not limited to, research, operations and procedures, financial projections, pricing, sales, expansion plans and strategies, services data, trade secrets and other intellectual property, or the results of any mediation or private adjudication, as well as information with respect to each party’s or its affiliates’ plans for market expansion, except for information which a party can show by contemporaneous written records was developed or formulated independently of work or services performed for, or in connection with performance of, this Agreement. Notwithstanding the foregoing, the disclosure of the other party’s Confidential Information as required to be disclosed by law, rule or regulation or by reason of subpoena, court order or government action shall not constitute a breach of this Agreement; however, in such event the party required to disclose such information will reasonably cooperate with the party whose information is required to be disclosed in order to obtain a protective order applicable to such disclosure. All Confidential Information will remain the sole property of the party disclosing such information or data.

B. School Materials. The School shall own all right, title and interest in and to Educational Materials that are: (i) licensed or owned by the School as of the Effective Date; or (ii) licensed, developed, characterized, conceived, derived, generated, identified, or otherwise made by the School during the Term, provided such materials do not reference the NHA Materials (as defined below), or incorporate any Confidential Information of NHA (collectively, the “**School Materials**”). The School Materials shall include all intellectual property rights associated therewith.

C. NHA Materials. NHA shall own all right, title and interest in and to Educational Materials that are: (i) licensed or owned by NHA as of the Effective Date; (ii) licensed, developed, characterized, conceived, derived, generated, identified, or otherwise made by NHA during the Term, provided such materials do not reference School Materials or incorporate any Confidential Information of the School; and (iii) any and all Educational Materials and non-curriculum materials provided to the School by NHA relating to the Educational Program, including all changes and derivatives thereof (collectively, the “**NHA Materials**”).

D. Derivative Works. The Parties acknowledge that to the extent any Educational Materials created by the School are derivative of the NHA Materials, use of such derivative

materials during the Term is subject to the license granted herein, and the license to use such derivative materials shall cease as of the date of expiration or termination of this Agreement.

E. No Transfer or Sale. The School acknowledges and agrees that NHA is not transferring or selling, and the School is not receiving, purchasing or acquiring, any intellectual property or proprietary rights in or to the NHA Materials.

F. Licenses. NHA hereby grants the School a non-exclusive, non-transferable license (without the right to sublicense) to use the NHA Materials, and any Educational Materials created by the School which are derivative of the NHA Materials, solely in furtherance of the Educational Program during the Term, including without limitation, the right to reproduce, publicly display, distribute and create derivative works of the same, in hard copy format or electronically, within the United States. The School represents and warrants that during the Term, and following the expiration or termination of this Agreement, the School will not exploit or assist any third party to exploit any of the NHA Materials for commercial purposes. Subject to applicable law, the School grants NHA a non-exclusive, non-transferable license (without the right to sublicense) to use the School Materials, solely in furtherance of the Educational Program during the Term, including without limitation, the right to reproduce, publicly display, distribute and create derivative works of the same, in hard copy format or electronically, within the United States.

G. NHA Marks. During the Term, NHA grants the School a non-exclusive, revocable, non-transferable license (without the right to sublicense) to use NHA's trade name(s) and NHA's trademark(s) (the "**NHA Marks**") solely for the purposes of promoting and advertising the School. NHA shall have the opportunity to review and approve all artwork, copy or other materials utilizing the NHA Marks prior to any production or distribution thereof. All uses of the NHA Marks require NHA's prior written permission. The School shall acquire no rights in or to the NHA Marks, and all goodwill associated with the NHA Marks shall inure to the benefit of and remain with NHA. Upon expiration or termination of this Agreement, the School shall immediately discontinue use of the NHA Marks and shall remove the NHA Marks from its locations, vehicles, websites, telephone directory listings and all other written or electronic promotional materials.

H. Assignment. Each party shall, and hereby does assign to the other, with full title guarantee and without additional compensation, such right, title and interest in and to any intellectual property as is necessary to fully affect the ownership provisions set out herein, and any accrued rights of action in respect thereof. Each party shall, if so requested by the other, execute all such documents and do all such other acts and things as may be reasonably required to comply with this Agreement to vest in the appropriate party all rights in the relevant intellectual property and shall procure execution by any named inventor of all such documents as may reasonably be required by the other party in connection with any related patent application.

ARTICLE VI

SOLICITATION AND USE OF PRIVATE FUNDS

NHA shall seek the Board's approval prior to soliciting any non-governmental grants, donations or contributions on behalf of the School. Any such funds received shall be used solely

in accordance with the purpose for which they were solicited, applicable donor restrictions, or as otherwise approved by the Board. Subject to applicable donor restrictions, the Board shall determine the allocation of any such funds subject to this Article that remain unexpended following completion of the project or purpose for which they were originally designated.

ARTICLE VII

FINANCIAL ARRANGEMENTS

A. Revenues. Except as provided herein, all monies received by the School shall be deposited in the School's depository account within three (3) business days with a financial institution acceptable to the Board; provided, however, that upon receipt of a notice from NHA, the School shall pay all such funds owing under this Agreement directly to the account or party specified in such notice. The signatories on the School Board's accounts shall solely be Board members or properly designated Board employees (if any). Interest income earned on the School's accounts shall accrue to the School. Except as specifically excluded by this Agreement, the term "**Revenues**" shall include all funds received by or on behalf of the School, including but not limited to:

1. Funding for public school students enrolled at the School.
2. Special education funding provided by the federal and/or state government that is directly allocable to special education students enrolled at the School.
3. Gifted and talented funding provided by the federal and/or state government that is directly allocable to gifted and talented students enrolled at the School.
4. At-risk funding provided by the federal and/or state government that is directly allocable to at-risk students enrolled at the School.
5. Funding provided by the federal and/or state government that is directly allocable to students enrolled at the School with limited English proficiency.
6. All other federal and/or state grant sources, including, but not limited to, Title I funding allocable to the School.
7. Grants and donations received by the School to support or carry out programs at the School (except to the extent NHA is not required or involved in soliciting, administering or managing the contribution and/or donation, in which case such funds shall be deposited in the Board Spending Account (as defined below)).
8. Fees charged to students as permitted by law for extra services provided by NHA as approved by the Board. The expenditure of any Revenues received from governmental entities shall be consistent with all applicable regulations and policies. The expenditure of any

Revenues received from non-governmental grants, contributions and donations shall be made consistent with the provisions of Article VI.

B. Budget. NHA shall provide the Board with an annual proposed Budget prepared and maintained in accordance with the Charter, the Michigan Budgeting and Accounting Act, and applicable law (the “**Budget**”). The Budget shall include all of the School’s projected revenues and expenses at the object level as described in the Michigan Department of Education’s Michigan School Accounting Manual. For the School’s first school year, the Budget shall be submitted prior to the beginning of the school year. Thereafter, the Budget shall be submitted to the Board prior to June 1 for the next school year.

C. Review and Approval of Budget. The Board shall be responsible for reviewing and approving the Budget in accordance with the Charter and applicable law. At the direction of either NHA or the Board, with the approval of the Board, the Budget shall be amended from time to time as necessary.

D. Board Spending Account. Notwithstanding any other provision of this Agreement to the contrary, each school year during the Term, NHA shall allocate to an account controlled by the Board an amount equal to the lesser of: (i) 2% of state per pupil aid reflected in the Budget for that respective school year, or (ii) \$35,000 (the “**Board Spending Account**”). The aforesaid amount shall be deposited by NHA into the Board Spending Account pro-rata during the course of the School’s school year as Revenues are received. All funds in the Board Spending Account are the property of the School and may be used by the School at the discretion of the Board. Funds in the Board Spending Account that are not spent by the School during the school year shall carryover annually. Items purchased by NHA for the School and paid for by the School with funds from the Board Spending Account, such as non-proprietary instructional and/or curriculum materials, books, supplies and equipment, shall be the property of the School. The property of the School excludes items leased, financed or purchased by NHA with the Fee (as defined below). NHA agrees not to add any fees or charges to the cost of equipment, materials or supplies purchased by NHA at the request of or on behalf of the School with funds from the Board Spending Account. NHA, in making such purchases for the School pursuant to this subsection, shall comply with Sections 1267 and 1274 of the Code, as if the School were making such purchases itself from a third party, and shall provide the Board, upon request, available documentation evidencing the costs associated with such purchases. NHA shall maintain a listing of all assets owned by the School and shall provide the list to the Board annually upon request.

E. Fee. NHA shall receive all Revenues as its services fee (the “**Fee**”), from which it shall pay all operating costs of the School as detailed in the Budget. NHA and the Board acknowledge that operating costs includes an administrative fee payable to the Authorizer as set forth in the Charter. Payment of the Fee shall be made on the same frequency that the School receives its Revenues. NHA shall be entitled to retain as compensation for the Services the difference, if any, between the Fee and the amount actually expended by NHA in operation and/or management of the School during the School’s fiscal year. NHA agrees not to add any fees or charges to the cost of equipment, materials or supplies purchased by NHA at the request of or on behalf of the School. No corporate costs of NHA shall be charged to, or reimbursed by the School. The only School expenses that are not covered by the Fee are extra-curricular activities and technology beyond that necessary for the effective delivery of the educational program.

F. No Loans. NHA shall not make or extend loans to the Board.

G. Other Schools. The School acknowledges that NHA has entered into similar services agreements with other schools. NHA shall maintain separate accounts for expenses incurred in the operation of the School and other schools assisted by NHA, and shall reflect in the School's financial records only those expenses incurred in the operation of the School. If NHA incurs expenses that are for both the benefit of the School and other schools assisted by NHA, then NHA shall allocate, to the extent permitted by law, such expenses among all such affected schools, including the School, on a prorated basis based upon the number of enrolled students, the number of classrooms, or the number of teachers at the affected schools, or on such other equitable basis as is reasonably determined by NHA. Marketing and development costs charged to the Academy shall be limited to those costs specific to the Academy program and shall not include any costs for the marketing and development of NHA. Costs shall be allocated to, or reimbursed by, the School and reported by NHA in accordance with applicable law.

H. Financial Reporting. NHA shall provide the Board with:

1. At least annually, the Budget as required by this Agreement.
2. Monthly, financial statements no more than forty-five (45) days in arrears and at least one week prior to each Board meeting. These financial statements will include a Balance Sheet, Statement of Revenues, Expenditures and Changes in Fund Balance at object level detail with a comparison of budget to actual revenue and expenditures and explanations of variances and cash flow statement.
3. Quarterly, or as reasonably requested by the Board, a report on School operations and student performance.
4. As reasonably requested, other information to enable the Board to: (i) evaluate the quality of the Services; and (ii) timely provide all reports and information that are required by the Charter and applicable law.

I. Access to Financial Records. NHA shall keep accurate financial records pertaining to its operation of the School, together with all School financial records prepared by or in possession of NHA, and shall retain all of the aforereferenced records according to the Charter and applicable law to which such books, accounts, and records relate. NHA and the Board shall maintain the proper confidentiality of personnel, students, and other records as required by law. All records shall be kept in accordance with applicable state and federal requirements.

J. Accounting Standards; Annual Audit.

1. The School shall at all times comply with generally accepted public sector accounting principles, accounting system requirements of the State School Aid Act of 1979, as amended, applicable Michigan Department of Education rules, and applicable law.

2. The Board shall select and retain an independent auditor to conduct an annual audit of the School's financial matters in accordance with the Charter and applicable law.

3. Subject to applicable law, all records in the possession or control of NHA that relate to the School, including but not limited to, financial records of the School, shall be made available to the School and the School's independent auditor and Authorizer upon request. The expense of the annual audit shall be included in the Budget.

K. Contributions; Repayment.

1. NHA shall make contributions to the School in the event School expenses for the Services exceed Revenues (the "**Contributions**"). The Contributions, if any, shall be in amounts acceptable to the Parties and, once made, shall be included in the Budget. The School shall not be legally obligated to repay NHA for the Contributions. NHA's agreement to make such Contributions shall not be deemed to negate or mitigate the need for the School to apply for or solicit state or federal start-up funds, grants or sub-grants which the School, as a public school, may be eligible to receive.

ARTICLE VIII

PERSONNEL & TRAINING

A. Qualified Personnel. NHA shall select and hire qualified personnel to perform the Services. NHA shall have the responsibility and authority, subject to this Article, to select, hire, evaluate, assign, discipline, transfer, and terminate personnel consistent with the Budget, the Charter and applicable law. Personnel working at the School shall be employees of NHA unless otherwise expressly agreed by NHA and the Board. NHA and the Board each shall be responsible for their respective employees. However, the compensation of all employees working at the School shall be included in the Budget. Upon Board request, NHA shall disclose to the Board the level of compensation and fringe benefits provided by NHA to NHA employees working at the School. A criminal background check and unprofessional conduct search in compliance with applicable law shall be conditions for the hiring of or services provided by any person assigned by NHA under this Agreement to regularly and continuously work in any of the School's facilities or at program sites where the School delivers Services. NHA shall pay all salaries, wages, benefits, payroll taxes, workers' compensation, unemployment compensation, and liability insurance for its employees assigned to work at the school. The Academy shall not be liable for the payment of any such salaries, wages, benefits, payroll or taxes thereon for or on behalf of any NHA employee, contractor or agent. NHA acknowledges and agrees that it is the sole and exclusive responsibility of NHA to make the requisite tax filings, deductions and payments to the appropriate federal, state and local tax authorities for and on behalf of all persons employed or engaged by NHA to provide Services under this Agreement. As applicable, NHA shall conduct employee evaluations consistent with Section 1249 and 1250 of the Code.

B. School Administrator. The School administrator (the "**Administrator**") shall be an employee of NHA and not the Board. The duties and terms of the Administrator's employment shall be determined by NHA. The Administrator shall work with NHA in the operation and

management of the School. The Administrator shall attend meetings of the Board and shall provide reports to the Board. The accountability of NHA to the School is an essential foundation of this Agreement. NHA shall have the authority, consistent with this Article, to select, hire, evaluate, assign, discipline, transfer and terminate the Administrator, and to hold the Administrator accountable for the performance of the School. Without limiting the foregoing, NHA shall consult with the Board prior to the placement and/or removal of the Administrator. Absent compelling circumstances, the consultation shall commence at least ninety (90) days prior to NHA placing and/or removing the Administrator. NHA shall give due consideration to the input of the Board or the Board's designated representative prior to making a final decision regarding placement and/or removal of the Administrator. NHA shall remove the Administrator if the Board is reasonably dissatisfied with the Administrator's performance. Absent compelling circumstances, however, the Board shall give NHA and the Administrator six (6) months to correct the basis for the Board's reasonable dissatisfaction. The parties agree that the purpose of the above provisions is not to deny the Administrator the opportunity for growth and/or promotion within NHA. Notwithstanding any of the foregoing, the placement of the initial Administrator for the School in its first year of operation shall be made by NHA.

As the employer, NHA shall be solely responsible for the performance evaluation of the Administrator. NHA shall seek feedback from the Board prior to completing an annual Administrator performance evaluation.

C. Teachers. NHA shall, consistent with this Article, assign to perform Services at the School, teachers qualified to teach their assigned subjects and grade level. The curriculum taught by the teachers shall be consistent with the Educational Program. The teachers may, at the discretion of NHA, be assigned to work at the School on a full or part time basis. If assigned to work at the School on a part time basis, the teacher(s) may also be assigned to work at other schools for which NHA provides services. The cost for such teacher(s) shall be shared proportionately among the schools at which NHA has assigned the teacher(s) to work. Each teacher assigned to work at the School shall hold a valid teaching certificate issued by the state board of education or applicable state agency to the extent required by the Code.

D. Support Staff. NHA shall, consistent with this Article, assign to perform Services at the School, qualified support staff as needed for NHA to operate the School in an efficient manner. The support staff may, at the discretion of NHA, be assigned to work at the School on a full or part time basis. If assigned to work at the School on a part time basis, the support staff may be assigned to work at other schools for which NHA provides services. The cost for such support staff shall be shared proportionately among the schools at which NHA has assigned the support staff to work. An individual assigned to work at the School that is not teaching, but for which a license is required under applicable law, shall have the appropriate license.

E. Training. NHA shall provide or procure training in its methods, curriculum, program, and technology to all teaching personnel on a regular basis. Instructional personnel shall be required to obtain at least the minimum hours of professional development as required by applicable law. Non-instructional personnel shall receive training as NHA determines reasonable and necessary under the circumstances.

F. Background Checks and Qualifications. NHA shall comply with applicable law regarding background checks, unprofessional conduct searches and certification/licensure, as applicable, for all persons working in the School, the costs of which shall be included in the Budget.

G. Terms of Employment. No member of the staff at the School shall be subject to any covenant not to compete or other employment restriction as part of the terms of his or her employment with NHA for the Services.

H. Limitations on Discretion. All decisions made by NHA, and any discretion exercised by NHA, in its selection, hiring, evaluation, assignment, discipline, transfer, and termination of personnel, shall be consistent with the Budget, the Charter, the parameters adopted and included in the Educational Program, and applicable law.

ARTICLE IX

INDEMNIFICATION

A. Indemnification of Parties. To the extent not prohibited by the Charter or applicable law, the Parties hereby agree to indemnify, defend, and hold the other (the “**Indemnified Party**”), harmless from and against any and all third-party claims, actions, damages, expenses, losses or awards which arise out of (i) the negligence or intentional misconduct of the indemnifying party, (ii) any action taken or not taken by the indemnifying party, or (iii) any noncompliance or breach by the indemnifying party of any of the terms, conditions, warranties, representations, or undertakings contained in or made pursuant to this Agreement. As used herein, Indemnified Party shall include the party’s trustees, directors, officers, employees, agents, representatives and attorneys. The Parties may purchase general liability, property, or other insurance policies. Notwithstanding anything in this Agreement to the contrary, the Board shall not be precluded by the terms of this Agreement from asserting or declining to assert a claim of governmental immunity.

B. Indemnification of Authorizer. The Parties acknowledge and agree that the Authorizer, its Board of Trustees, and its members, officers, employees, agents or representatives (collectively “**University**”) are deemed to be third party beneficiaries for purposes of this Agreement. As third party beneficiaries, NHA hereby promises to indemnify, defend and hold harmless the University from and against all demands, claims, actions, suits causes of action, losses, judgments, liabilities, damages, fines, penalties, demands, forfeitures, or any other liabilities or losses of any kind whatsoever, including costs and expenses (not limited to reasonable attorney fees, expert and other professional fees) of settlement and prosecution imposed upon or incurred by the University, and not caused by the sole negligence of the University, which arise out of or are in any manner connected with the University Board’s approval of the School’s Charter Application, the University Board’s consideration of or issuance of a Charter, NHA’s preparation for or operation of the School, or which are incurred as a result of the reliance by the University upon information supplied by NHA, or which arise out of NHA’s failure to comply with the Charter or applicable law. The Parties expressly acknowledge and agree that the University may

commence legal action against NHA to enforce its rights as set forth in this section of the Agreement.

ARTICLE X

INSURANCE

A. Insurance Coverage. NHA and the School shall each maintain such policies of insurance as required by the Charter, the Michigan Universities Self-Insurance Corporation ("M.U.S.I.C."), and applicable law. Each party shall, upon request, present evidence to the other and the Authorizer that it maintains the requisite insurance in compliance with the provisions of this Article. In the event that the Authorizer or M.U.S.I.C. requests any change in coverage by NHA, NHA agrees to comply with any change in the type and amount of coverage as requested by the Authorizer's insurance carrier within thirty (30) days after notice of the insurance coverage change is provided to NHA and the School. Each party shall comply with any information or reporting requirements required by the other party's insurer(s), to the extent reasonably practicable.

B. Workers' Compensation Insurance. Each party shall maintain workers' compensation insurance as required by law, covering their respective employees.

ARTICLE XI

REPRESENTATIONS & WARRANTIES

A. Board and School. The Board represents and warrants, for itself and on behalf of the School, that: (i) it is legally vested with all power and authority necessary to operate a charter school under the Code; (ii) it is legally vested with all power and authority necessary to execute, deliver and perform this Agreement, including without limitation, the power and authority to contract with a private entity for the provision of educational, business administration and management services; (iii) its actions have been duly and validly authorized, and it has adopted any and all resolutions or expenditure approvals required for the execution of this Agreement; and (iv) there are no pending actions, claims, suits or proceedings, or, to its knowledge, threatened or reasonably anticipated against or affecting either the Board or the School, which if adversely determined, would have a material adverse effect on its ability to perform under this Agreement.

B. NHA. NHA represents and warrants that: (i) it is a corporation in good standing and is authorized to conduct business in the State of Michigan; (ii) it is legally vested with all power and authority necessary to execute, deliver and perform this Agreement; (iii) there are no pending actions, claims, suits or proceedings, or, to its knowledge, threatened or reasonably anticipated against or affecting NHA, which if adversely determined, would have a material adverse effect on its ability to perform its obligations under this Agreement; and (iv) it will comply with all registration and licensing requirements relating to conducting business under this Agreement, which the Board agrees to assist NHA in applying for such licenses and permits and in obtaining such approvals and consents.

ARTICLE XII

MISCELLANEOUS

A. Entire Agreement. This Agreement and any attachments hereto shall constitute the entire agreement of the Parties on the subject matter set forth herein. This Agreement supersedes and replaces any and all prior agreements and understandings regarding the subject matter set forth herein between the School and NHA.

B. Force Majeure. Except for payment obligations, and notwithstanding any other provisions of this Agreement, neither party shall be liable for any delay in performance or inability to perform due to acts of God, war, riot, embargo, fire, explosion, sabotage, flood, accident, labor strike, or other acts beyond its reasonable control; provided either party may terminate this Agreement in accordance with provisions contained herein if sufficient grounds exist as provided in the Article governing termination.

C. State Governing Law; Waiver of Jury Trial. This Agreement shall be construed, interpreted, governed and enforced pursuant to the laws of the State of Michigan, without regard to its conflict-of-laws principles. The Parties hereby waive the right to a jury trial in any action, proceeding or counterclaim brought by either NHA or the School against the other.

D. Notices. All notices and other communications required by this Agreement shall be in writing and either 1) personally delivered to the other Party or 2) sent to the other Party at the address set forth below by certified or registered mail, postage prepaid, return receipt requested. Notice shall be deemed to have been given on the date of postmark if sent by certified or registered mail, or upon the date of delivery if given by personal delivery. For purposes of the foregoing, “**personal delivery**” shall include delivery by nationally recognized overnight courier (such as FedEx), if signed for by the recipient or a delegate thereof. Notices to the School shall be sent to the current address of the then current Board President, with a copy to the then current Board attorney. The addresses of the Parties for the purposes aforesaid, including the address of the initial Board President, are as follows:

The School:	Eagle Crest Charter Academy Attn: President, Board of Directors 11950 Riley Street Holland, MI 49424 Telephone: (616) 786-2400 Facsimile: (616) 786-4692
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WITH A COPY TO:

CS3 Law PLLC
250 Monroe Ave. NW, Suite 400
Grand Rapids, Michigan 49503
Telephone: (616) 822-7754

WITH A COPY TO:

McShane & Bowie
Attn: John R. Grant
1100 Campau Square Plaza
99 Monroe Ave., NW
Grand Rapids, MI 49501
Telephone: (616) 732-5013
Facsimile: (616) 732-5099

E. Assignment. NHA may assign this Agreement with the prior written approval of the Board and in a manner consistent with the Authorizer's policies. However, this Agreement shall not be assignable without prior written notification to the Authorizer.

F. Amendment. This Agreement shall not be altered, amended, modified or supplemented except by memorandum approved by the Board and signed by both an authorized officer of the School and NHA and in manner consistent with the Authorizer's policies.

G. Waiver. No waiver of any provision of this Agreement shall be deemed or shall constitute a waiver of any other provision. Nor shall such waiver constitute a continuing waiver unless otherwise expressly stated.

H. Costs and Expenses. If any Party commences and action against another Party as a result of a breach or alleged breach of this Agreement, the prevailing Party shall be entitled to have and recover from the losing Party reasonable attorneys' fees and costs of suit.

I. Severability. If any term or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms and provisions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the Parties shall use their best efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term or provision.

J. Delegation of Authority. Nothing in this Agreement shall be construed as delegating to NHA powers or authority of the Board which are not subject to delegation by the Board under the Charter or applicable law.

K. Compliance with Law. Each party will comply with the Charter and laws applicable to the performance of such party's obligations hereunder.

L. Time of Essence. The Parties understand and agree that time is of the essence in performing their respective responsibilities under this Agreement.

[Signatures on Following Page]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the Effective Date.

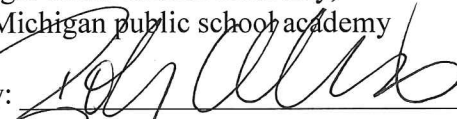
NHA:

National Heritage Academies, Inc.,
a Michigan corporation

By: 
Robert Owen
Its: Chief Financial Officer

SCHOOL:

Eagle Crest Charter Academy,
a Michigan public school academy

By: 
Its: Board President

AMENDMENT NO. 8

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)



April 24, 2020

Ms. Louise Moore
Eagle Crest Charter Academy
11950 Riley Street
Holland, MI 49424

Re: Approval of Continuity of Learning and COVID-19 Response Plan ("Plan")

Dear Ms. Moore:

I am pleased to inform you that the Plan for Eagle Crest Charter Academy ("Academy") has been approved by The Governor John Engler Center for Charter Schools at Central Michigan University and will be transmitted by our office to the State Superintendent of Public Instruction and the State Treasurer. The Plan is effective as of the date indicated in the Plan. You may proceed with Plan implementation for the remainder of the 2019-2020 school year and, if applicable, other elements that affect the 2020-2021 school year.

Please also proceed with the following next steps:

- To fulfill one of the required assurances, immediately add a copy of the approved Plan, assurances document, and budget outline to the Academy's website. An approved copy of the Plan is attached and can be found in Epicenter.
- Present the Plan to the Academy's Board of Directors ("Academy Board") at its next scheduled meeting. At that meeting the Academy Board should approve any necessary amendments to the Academy's 2019-2020 budget or other relevant agreements needed to implement the Plan. In accordance with the Terms and Conditions of the Academy's charter contract ("Contract"), the approved Plan shall constitute a Contract amendment to the Contract upon approval by the Academy Board. This Contract amendment will remain in effect as long as the Plan remains in effect. Attached please find a draft resolution for the Academy Board to use in approving the Plan and Contract amendment.

If the Academy requires an amendment to the Plan, please contact Amy Densmore, Director of Charter Accountability, at (989) 506-0355 or via email at avanatten@thecenterforcharters.org to initiate that process.

Thank you for all your efforts to keep student learning moving forward in these trying times. If you have any further questions or need additional support, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Corey Northrop". The signature is fluid and cursive, with the first name "Corey" and last name "Northrop" clearly legible.

Corey Northrop
Executive Director

cc: Robin Allyson, Board President
Julie Stapleton, Board Corresponding Agent

Attachments:

Approved Continuity of Learning and COVID-19 Response Plan
Academy Board Resolution

**RESOLUTION APPROVING THE CONTINUITY OF LEARNING AND COVID-19
RESPONSE PLAN (“PLAN”), BUDGET AMENDMENT RELATED TO PLAN AND
OTHER AGREEMENTS REFERENCED IN PLAN, AND APPROVAL OF CHARTER
CONTRACT AMENDMENT**

EAGLE CREST CHARTER ACADEMY (the “Academy”)

A regular meeting of the Academy Board of Directors was held on the 5th day of May, 2020, at 4:00 p.m.

The meeting was called to order at 4:01 p.m. by Board Member Robyn Allison:

Present: Robyn Allison, Rhonda Carter, Cynthia Evenhouse

Absent: Gwen Klemm

The following preamble and resolution were offered by Board Member Rhonda Carter and supported by Board Member Cynthia Evenhouse:

BACKGROUND

On April 2, 2020, in response to the novel coronavirus (COVID-19) pandemic affecting our state, Governor Gretchen Whitmer issued Executive Order 2020-35 (the “Order”) that, except as provided in section III of the Order, suspends in-person instruction for pupils in kindergarten through grade 12 (“K-12”) for the remainder of the 2019-2020 school year and requires that school buildings used for the provision of K-12 education remain closed for the purpose of providing K-12 education in person for the remainder of the 2019-2020 school year, unless restrictions on public gatherings and use of school buildings are lifted before the end of the 2019-2020 school year.

In order to receive continued state school aid funding for the remainder of the 2019-2020 school year, the Order suspends certain state law provisions that, as reflected in the Order, are associated with in-person instruction, requires that public school academies continue to provide alternative modes of instructions for all pupils, as reflected in a Plan, for the remainder of the 2019-2020 school year, and requires that each public school academy submit their Plan to their authorizing body for approval.

On April 20, 2020, the Academy submitted its Plan to Central Michigan University (“Authorizer”) for approval.

On April 24, 2020, Authorizer approved the Academy’s Plan as reflected in the attached letter (“Authorizer Approval Letter”). As set forth in the Authorizer Approval Letter, the Academy Board of Directors (“Academy Board”) is required to approve the Academy’s Plan and approve the Academy’s Plan as a charter contract (“Contract”) amendment at its next scheduled board meeting.

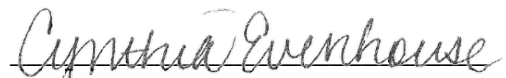
THE ACADEMY BOARD THEREFORE RESOLVES THAT:

1. The actions taken by Academy representatives to prepare and submit the Academy's Plan to Authorizer are ratified.
2. The Academy's Plan approved by Authorizer is approved.
3. The Plan is approved by the Academy Board as the COVID-19 Learning Plan Amendment to the Contract. This Contract amendment shall remain in effect as long as the Plan remains in effect.
4. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.
5. The Academy will deliver from time to time such information regarding the implementation of the Academy's Plan as the Authorizer or Michigan Department of Education may reasonably request.
6. Any Board policies or provision of Board policies that prohibit or impede the Academy's compliance with the Plan or Executive Order 2020-35 are temporarily waived, suspended or altered.
7. Any actions or actions taken by authorized Academy representatives in the development, submission and implementation of the Plan are (to the extent such actions or actions are not inconsistent with the delegation of authority provided under this resolution) ratified and confirmed in all respects.
8. This Resolution shall take immediate effect and continue through the end of the state of emergency and disaster declared in Executive Order 2020-33 or any other state of emergency or disaster declared in response to COVID-19 during the remainder of the 2019-2020 school year.

Ayes: 3

Nays: 0

Resolution declared adopted.



Print Name: Cynthia Evenhouse

Secretary, Academy Board

AMENDMENT NO. 9

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 9

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend the Terms and Conditions of Contract by replacing the language contained within Article III, Section 3.6. Authorization to Employ or Contract; Article IV, Section 4.1. Limitations on Actions in Performance of Governmental Functions, Section 4.3. Academy Board Members Serve In Their Individual Capacity, Section 4.4. Incompatible Public Offices and Conflicts of Interest Statutes, and Section 4.5. Prohibition of Identified Family Relationships; Article VI, Section 6.11. Annual Financial Statement Audit and Section 6.16. Matriculation Agreements; Article X, Section 10.6(i). Disposition of State School Aid Funds, Section 10.8. Conservator; Appointment By University President, and Section 10.9. Academy Dissolution Account, with the corresponding language attached as Tab 1.
- 2.) Further amend the Terms and Conditions of Contract by inserting at the end of Article IV: Requirement That the Academy Act Solely as Governmental Entity and Article XI: Provisions Relating to Schools of Excellence, the corresponding language attached as Tab 2.
- 3.) Amend Schedule 2: Amended Bylaws, by replacing the language contained within Article VIII, Section 6. Contracts Between Corporation and Related Persons, with the language attached as Tab 3.
- 4.) Amend Schedule 3: Fiscal Agent Agreement, by replacing the language contained within Article II, Section 2.04. Academy Board Requests for Direct Intercept of State School Aid Payments, Article III: State Duties, and Article IV, Section 4.05. Repayment of Overpayment, with the corresponding language attached as Tab 4.
- 5.) Amend Schedule 4: Oversight, Compliance and Reporting Agreement, by replacing the language contained within Article II, Section 2.1(n) with the following:

“Initiate action pursuant to the Terms and Conditions of Contract to amend, revoke, reconstitute, terminate or suspend the Contract.”
- 6.) Further amend Schedule 4: Oversight, Compliance and Reporting Agreement, by inserting at the end of Article IV: Miscellaneous, the language attached as Tab 5.
- 7.) Amend Schedule 7, Section f: Application and Enrollment of Students, by replacing the Matriculation Agreement section contained therein with the materials attached as Tab 6.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2020.



Dated: 8/6/2020

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 8/4/2020

By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 1

Section 3.6. Authorization to Employ or Contract. The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. The Academy Board shall prohibit any individual from being employed by the Academy or an Educational Service Provider, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) recruit, select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) evaluate performance; (iv) discipline and dismiss employees; and control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees.

The Academy Board may contract with an Educational Service Provider to provide comprehensive educational, administrative, management, or instructional services or staff to the Academy. Before entering into a Management Agreement with an Educational Service Provider, the Academy Board shall first comply with the Educational Service Provider Policies issued by the Center. Any Management Agreement entered into by the Academy shall also comply with Section 11.2 and 12.10 of these Terms and Conditions. A copy of the Management Agreement between the Academy Board and the Educational Service Provider shall be incorporated into this Contract under Schedule 5. Any changes to the Management Agreement shall be incorporated into this Contract by amendment in accordance with Article IX, as applicable.

Section 4.1. Limitation on Actions in Performance of Governmental Functions. The Academy shall act exclusively as a governmental entity and shall not undertake any action inconsistent with its status as a governmental entity authorized to receive state school aid funds pursuant to Section 11 of Article IX of the State Constitution of 1963.

Section 4.3. Academy Board Members Serve In Their Individual Capacity. All Directors of the Academy Board shall serve in their individual capacity, and not as a representative or designee of any other person or entity. A person who does not serve in their individual capacity, or who serves as a representative or designee of another person or entity, shall be deemed ineligible to continue to serve as a Director of the Academy Board. A Director who violates this section shall be removed from office, in accordance with the removal provisions found in the Method of Selection, Appointment and Removal Resolution and Contract Schedule 2: Amended Bylaws. As set forth in the Resolution, a Director serves at the pleasure of the University Board, and may be removed with or without cause at any time.

Section 4.4. Incompatible Public Offices and Conflicts of Interest Statutes. The Academy shall comply with the Incompatible Public Offices statute, being MCL 15.181 et seq. of the Michigan Compiled Laws, and the Contracts of Public Servants with Public Entities statute, being MCL 15.321 et seq. of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited conflicts of interest for purposes of this Contract:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an Educational Service Provider or an employee leasing company, or a subcontractor to an Educational Service Provider or an employee leasing company that has an ESP Agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school;
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University; and
- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any real or personal property leased or subleased to the Academy.

Section 4.5. Prohibition of Identified Family Relationships. The Academy Board shall prohibit specifically identified family relationships pursuant to applicable law and the Terms and Conditions of this Contract. Language in this Section controls over section 1203 of the Code. Notwithstanding any other provision of this Contract, the following shall be deemed prohibited familial relationships for the purposes of this Contract:

- (a) No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:
 - (i) Is employed by the Academy;
 - (ii) Works at or is assigned to work at the Academy;
 - (iii) Has an ownership, officer, policymaking, managerial, administrative non-clerical, or other significant role with the Academy's Educational Service Provider or employee leasing company;
 - (iv) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy; or
 - (v) Is a current Academy Board member.
- (b) The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this subsection, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner.

Section 6.11. Annual Financial Statement Audit. The Academy shall conduct an annual financial statement audit prepared and reviewed by an independent certified public accountant. The Academy Board shall select, retain and pay the Academy's independent auditor. The Academy Board shall not approve the retention of any independent auditor if that independent auditor or auditor's firm is also performing accounting and/or auditing services for the Academy's Educational Service Provider, if applicable. The Academy shall submit the annual financial statement audit and auditor's management letter to the Center in accordance with the Master Calendar. The Academy Board shall provide to the Center a copy of any responses to the auditor's management letter in accordance with the Master Calendar.

Section 6.16. Matriculation Agreements. Before the Academy Board approves a matriculation agreement with another public school, the Academy shall provide a draft copy of the agreement to the Center for review. Any matriculation agreement entered into by the Academy shall be added to Schedule 7f through a contract amendment approved in accordance with the Contract.

Section 10.6. University Board Procedures for Revoking Contract.

- (i) Disposition of State School Aid Funds. Notwithstanding any other provision of the Contract, any state school aid funds received by the University Board after a recommendation is made by the Hearing Panel to revoke the Contract, or a decision by the University Board to revoke the Contract, may be withheld by the University Board or returned to the Michigan Department of Treasury upon request. The University Board may also direct that a portion of the Academy's state school aid funds be directed to fund the Academy's Dissolution account established under Section 10.9 of these Terms and Conditions.

Section 10.8. Conservator; Appointment By University President. Notwithstanding any other provision of the Contract, in the event that the University President, in his or her sole discretion, determines that the health, safety and welfare of Academy students, property or funds are at risk, the University President, after consulting with the University Board Chairperson, may appoint a person to serve as the Conservator of the Academy. Upon appointment, the Conservator shall have all the powers and authority of the Academy Board under this Contract and Applicable Law and shall act in the place and stead of the Academy Board. The University President shall appoint the Conservator for a definite term which may be extended in writing at his or her sole discretion. During the appointment, the Academy Board members and their terms in office are suspended and all powers of the Academy Board are suspended. All appointments made under this provision must be presented to the University Board for final determination at its next regularly scheduled meeting. During their appointment, the Conservator shall have the following powers:

- (a) take into his or her possession all Academy property and records, including financial, board, employment and student records;
- (b) institute and defend actions by or on behalf of the Academy;
- (c) continue the business of the Academy including entering into contracts, borrowing money, and pledging, mortgaging, or otherwise encumbering the property of the Academy as security for the repayment of loans. However, the power shall be subject to any provisions and restrictions in any existing credit documents;
- (d) hire, fire, evaluate and discipline employees of the Academy;
- (e) settle or compromise with any debtor or creditor of the Academy, including any governmental or taxing authority;
- (f) review all outstanding agreements to which the Academy is a party and to take those actions which the Academy Board may have exercised to pay, extend, rescind, renegotiate or settle such agreements as needed; and
- (g) perform all acts necessary and appropriate to fulfill the Academy's purposes as set forth under this Contract or Applicable Law.

Section 10.9. Academy Dissolution Account. If the University Board terminates, revokes or fails to issue a new Contract to the Academy, the Center Director shall notify the Academy that, beginning thirty (30) days after notification of the University Board's decision, the University Board may direct up to \$10,000 from each subsequent State School Aid Fund payment, not to exceed a combined total of \$30,000, to a separate Academy account ("Academy Dissolution Account") to be used exclusively to pay the costs

associated with the wind-up and dissolution responsibilities of the Academy. Within five (5) business days of the Center Director's notice, the Academy Board Treasurer shall provide the Center Director, in a form and manner determined by the Center, with account detail information and authorization to direct such funds to the Academy Dissolution Account. The Academy Dissolution Account shall be under the sole care, custody and control of the Academy Board, and such funds shall not be used by the Academy to pay any other Academy debt or obligation until such time as all the wind-up and dissolution expenses have been satisfied. An intercept agreement entered into by the Academy and a third-party lender or trustee shall include language that the third party lender or trustee acknowledges and consents to the funding of the Academy's dissolution account in accordance with this Contract. Any unspent funds remaining in the Academy's dissolution account after payment of all wind-up and dissolution expenses shall be returned to the Academy.

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 2

Section 4.7. Academy Counsel. The Academy Board shall select, retain and pay legal counsel to represent the Academy. The Academy shall not retain any attorney to represent the Academy if the attorney or the attorney's law firm also represents the Academy's Educational Service Provider or any person or entity leasing real property to the Academy, if any.

Section 11.11. Nonessential Elective Course. If the Academy Board elects to provide nonessential elective courses to part-time pupils at a nonpublic school building, the Academy shall comply with Section 166b of the State School Aid Act of 1979, as amended, MCL 388.166b. Prior to providing instruction, the Academy Board shall ensure that the Academy has sufficient documentation to qualify for part-time pupil funding under the State School Aid Act. The provision of nonessential elective courses by the Academy shall be incorporated into Schedule 7c of this Contract by amendment pursuant to Article IX of these Terms and Conditions.

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 3

Section 6. Contracts Between Corporation and Related Persons. As required by Applicable Law, any Director, officer or employee of the Academy, who enters into a contract with the Academy, that meets the definition of contract under the statute on Contracts of Public Servants with Public Entities, Act No. 317 of the Public Acts of 1968, being sections 15.321 to 15.330 of the Michigan Compiled Laws, shall comply with the public disclosure requirements set forth in Section 3 of the statute.

The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. However, the Academy Board shall prohibit any individual from being employed by the Academy, an educational service provider or an employee leasing company involved in the operation of the Academy, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees. The Academy Board may contract with an educational service provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy. Before entering into an agreement with an educational service provider or an employee leasing company to perform services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by the Center. A copy of the agreement between the Academy Board and the educational service provider or employee leasing company shall be included as part of Schedule 5.

The Academy shall comply with the Incompatible Public Offices statute, Act No. 566 of the Public Acts of 1978, of the Michigan Compiled Laws, and the Contracts of Public Servants With Public Entities statute, Act No. 371 of the Public Acts of 1968, of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Language in this Section controls over section 1203 of the Code. The following shall be deemed prohibited conflicts of interest:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an educational service provider or an employee leasing company, or a subcontractor to an Educational Service Provider or an employee leasing company that has an ESP Agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school;
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University; and
- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any real or personal property leased or subleased to the Academy.

No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner:

- (a) Is employed by the Academy;
- (b) Works at or is assigned to work at the Academy;
- (c) Has an ownership, officer, policymaking, managerial, administrative non-clerical or other significant role with the Academy's educational service provider or employee leasing company; and
- (d) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy.

The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or same-sex domestic partner.

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 4

Section 2.04. Academy Board Requests for Direct Intercept of State School Aid Payments. If the Academy Board (i) authorizes a direct intercept of a portion of its State School Aid Payments from the State to a third party account for the payment of Academy debts and liabilities; or (ii) assigns or directs that a portion of its State School Aid Payments be forwarded by the Fiscal Agent to a third party account for the payment of Academy debts and liabilities, then Academy shall submit to The Governor John Engler Center for Charter Schools at Central Michigan University for review and consideration: (i) a copy of the Academy Board's resolution authorizing the direct intercept or the assignment or direction of State School Aid Payments; (ii) a State School Aid Payment Agreement and Direction document that is in a form and content acceptable to the Fiscal Agent; and (iii) other documents as required. The Center reserves the right to not acknowledge in writing any State School Aid Payment Agreement and Direction that is not in a form and content acceptable to the Fiscal Agent. The State School Aid Payment and Direction document shall include language that the third party lender or trustee acknowledges and consents to the transfer of State School Aid Payments into the Academy's dissolution account, as set forth in Article X of the Terms and Conditions. Any unspent funds remaining in the Academy dissolution account after payment of all wind-up and dissolution expenses shall be returned to the Academy.

ARTICLE III

STATE DUTIES

Section 3.01 Eligibility for State School Aid Payments. The State, through its Department of Education, has sole responsibility for determining the eligibility of the Academy to receive State School Aid Payments. The State, through its Department of Education, has sole responsibility for determining the amount of State School Aid Payments, if any, the Academy shall be entitled to receive.

Section 3.02. State School Aid Payment Overpayments and Penalties. The State, through its Department of Education, has sole responsibility for determining State School Aid Payment overpayments to the Academy and the method and time period for repayment by the Academy. The State, through its Department of Education, has sole responsibility for assessing State School Aid penalties against the Academy for noncompliance with the Code and the State School Aid Act of 1979, as amended.

Section 3.03. Method of Payment. Each State School Aid Payment for the Academy will be made to the Fiscal Agent by the State Treasurer by issuing a warrant and delivering the warrant to the Fiscal Agent by electronic funds transfer into an account specified by the Fiscal Agent, or by such other means deemed acceptable to the Fiscal Agent. The State shall make State School Aid Payments at the times specified in the State School Aid Act of 1979, as amended.

Section 4.05. Repayment of Overpayment. The Academy shall be directly responsible for reimbursing the State for any overpayment of State School Aid Payments or any State School Aid penalties. At its option, the State may reduce subsequent State School Aid Payments by the amount of the overpayment or penalty or seek collection of the overpayment or penalty from the Academy.

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 5

Section 4.3. Audit and Evaluation. The Academy:

- a. Hereby authorizes the Center to perform audit and evaluation studies using Academy data including, but not limited to, personally identifiable information about the Academy's students and staff submitted by the Academy to agencies including, but not limited to, Center for Educational Performance and Information ("CEPI"), Office of Educational Assessment and Accountability ("OEAA") and the Michigan Department of Education ("MDE"). Pursuant to this authorization, the Center shall abide by regulations that govern the use of student data within the Family Educational Rights and Privacy Act ("FERPA"), the Michigan Identity Theft Protection Act of 2004 and the Privacy Act of 1974.
- b. Shall upon request, provide the Center with copies or view access to data, documents or information submitted to the Michigan Department of Education, the Superintendent of Public Instruction, the State Board of Education, the Center for Educational Performance and Information, the Michigan DataHub or any other state or federal agency.

Section 4.4. Fiscal Stress Notification from State Treasurer. If the State Treasurer notifies the Academy that the State Treasurer has declared the potential for Academy financial stress exists, the Academy shall provide a copy of the notice to the Center. Within fifteen (15) days of receipt of the notification from the Academy, the Center Director shall notify the Academy whether the Center is interested in entering into a contract to perform an administrative review for the Academy. The parties shall consult with the Department of Treasury on the development of the contract and the contract for administrative review shall comply with the Code. If the Center is not interested in performing an administrative review or if the parties are unable to reach agreement on an administrative review, the Academy shall consider entering into a contract for an administrative review with an intermediate school district. Nothing in this Section 4.4 shall prohibit the Academy for electing to enter into a contract for an administrative review with an intermediate school district. Nothing in this Section 4.4 shall require the Academy to elect to enter or not enter into a contract for an administrative review with the Center or an intermediate school district.

Eagle Crest Charter Academy

Contract Amendment No. 9

Tab 6

Matriculation Agreement

- The Academy Board may enter into a matriculation agreement with another public school pursuant to section 504(4) of the Code.
- However, before the Academy Board approves a matriculation agreement, the Academy shall provide a draft copy of the agreement to the Center for review.
- Any matriculation agreement entered into by the Academy shall be added to this Schedule 7f through a contract amendment approved in accordance with Article IX in the Terms and Conditions of this Contract.

AMENDMENT NO. 10

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 10

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

- 1.) The Preparedness Plan, approved by the Academy Board, is incorporated into the Contract by reference.
- 2.) Any updates to the Preparedness Plan, approved by the Academy Board, shall automatically be incorporated into the Contract and shall be exempt from the amendment procedures under Article IX of the Terms and Conditions of Contract.
- 3.) This Contract amendment shall remain in effect until the earlier of (i) the end of the 2020-2021 school fiscal year or (ii) the rescission of Executive Order 2020-142, including any successor executive order authorizing a Preparedness Plan.

This Contract amendment is hereby approved by the University Board and the Academy Board through their authorized designees and shall have an effective date of August 17, 2020.



Eagle Crest Charter Academy

COVID-19 Preparedness and Response Plan

Address of School District: 11950 Riley Street, Holland, MI 49424

District Code Number: 70906

Building Code Number(s): 08516

District Contact Person: Louise Moore

District Contact Person Email Address: 8.lmoore@nhaschools.com

Local Public Health Department: Ottawa County Health Department

Local Public Health Department Contact Person Email Address: lstefanovsky@miottawa.org

Name of Intermediate School District: Ottawa

Name of Authorizing Body: Central Michigan University

Date of Adoption by Board of Directors: 8/4/2020



August 5, 2020 [via email]

Ms. Louise Moore
Eagle Crest Charter Academy

Re: Approval of COVID-19 Preparedness and Response Plan ("Plan")

Dear Ms. Moore:

I am pleased to inform you that the Plan for Eagle Crest Charter Academy ("Academy") has been approved by The Governor John Engler Center for Charter Schools at Central Michigan University and has been transmitted by our office to the State Superintendent of Public Instruction and the State Treasurer. The Plan is effective as of the date indicated in the Plan.

To fulfill one of the required assurances, immediately add a copy of the approved Plan to the Academy's Home Page of its website. An approved copy of the Plan is attached and can be found in Epicenter. The approved Plan constitutes a Charter Contract amendment and remains in effect as long as the Plan remains in effect.

If the Academy requires an amendment to the Plan, please contact Amy Densmore, Director of Charter Accountability, at (989) 506-0355 or via email at avanatten@thecenterforcharters.org to initiate that process. Thank you for all your efforts to keep student learning moving forward in these trying times. If you have any further questions or need additional support, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Corey Northrop". The signature is fluid and cursive, with the first name "Corey" and last name "Northrop" clearly distinguishable.

Corey Northrop
Executive Director

cc: Robyn Allison, Board President
Julie Stapleton, Board Corresponding Agent
Candace Sorensen, Board Corresponding Agent

Attachment:
Approved COVID-19 Preparedness and Response Plan

**RESOLUTION APPROVING THE COVID-19 PREPAREDNESS AND RESPONSE
PLAN (“PREPAREDNESS PLAN”) AND APPROVAL OF CHARTER CONTRACT
AMENDMENT**

EAGLE CREST CHARTER ACADEMY (the “Academy”)

A regular meeting of the Academy Board of Directors was held on the 4th day of August, 2020, at 4:00 p.m.

The meeting was called to order at 4:03 p.m. by Board Member Robyn Allison:

Present: Robyn Allison, Rhonda Carter, Gwen Klemm

Absent: Cynthia Evenhouse

The following preamble and resolution were offered by Board Member Rhonda Carter and supported by Board Member Gwen Klemm:

BACKGROUND

On June 30, 2020, in response to the novel coronavirus (COVID-19) pandemic affecting our state, Governor Gretchen Whitmer issued Executive Order 2020-142 (the “Order”) that, provides a structure to support all schools in Michigan as they plan for a return of preK-12 education in the fall. Under the order, all schools must adopt a COVID-19 Preparedness and Response Plan (“Preparedness Plan”) laying out how they will cope with the disease across the various phases of the Michigan Safe Start Plan. Under the Order and the Michigan Safe Schools: Michigan’s 2020-2021 Return to School Roadmap developed by the COVID-19 Task Force on Education Return to School Advisory Council (“Return to School Roadmap”), Schools retain flexibility to tailor their instruction to their particular needs and to the disease conditions present in their regions.

Acting under the Michigan Constitution of 1963 and Michigan law, the Order and the Return to School Roadmap state:

1. Coronavirus relief funds under the Coronavirus Aid, Relief, and Economic Security Act will be provided and may be used to aid in developing, adopting, and following a COVID-19 Preparedness Plan under section 2 of the Order.
2. Every school must develop and adopt a Preparedness Plan that is informed by the Return to School Roadmap.
3. By August 15, 2020 or seven days before the start of the school year for students, whichever comes first: the Academy Board must approve its Preparedness Plan.
4. By August 17, 2020, the Academy’s authorizing body, Central Michigan University, must collect the Preparedness Plan and transmit such plan to the Superintendent and to the State Treasurer.
5. By August 17, 2020, the Academy must prominently post its approved Preparedness Plan on the Academy’s website home page.

The Academy submitted its Preparedness Plan to Central Michigan University ("Authorizer") for review and approval.

The Academy Board of Directors ("Academy Board") is required to approve the Academy's Preparedness Plan by August 15, 2020 or seven days before the start of the school year for students, whichever comes first, and is required to approve the Academy's Preparedness Plan as a charter contract ("Contract") amendment.


THE ACADEMY BOARD THEREFORE RESOLVES THAT:

1. The actions taken by Academy representatives to prepare and submit the Academy's Preparedness Plan to Authorizer are ratified.
2. The Preparedness Plan, as approved by the Authorizer, is approved by the Academy Board as the COVID-19 Preparedness Plan and as the COVID-19 Preparedness Plan Amendment to the Contract. This Contract Amendment shall remain in effect as long as The Preparedness Plan remains in effect. The Board President is authorized to sign and submit the Contract amendment to the Authorizer for approval.
3. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.
4. The Academy will deliver from time to time such information regarding the implementation of the Academy's Preparedness Plan as the Authorizer or Michigan Department of Education may reasonably request.
5. Any Board policies or provision of Board policies that prohibit or impede the Academy's compliance with The Preparedness Plan or Executive Order 2020-142 are temporarily waived, suspended or altered.
6. Any actions or actions taken by authorized Academy representatives in the development, submission and implementation of The Preparedness Plan are (to the extent such actions or actions are not inconsistent with the delegation of authority provided under this resolution) ratified and confirmed in all respects.
7. This Resolution shall take immediate effect and continue through the end of the state of emergency and disaster declared in Executive Order 2020-127 and any subsequent executive order declaring a state of emergency or disaster in response to COVID-19 or the end of the 2020-2021 school year, whichever is sooner.

Ayes: 3

Nays: 0

Resolution declared adopted.



Print Name: Robyn Allison

~~Secretary~~, Academy Board
President

AMENDMENT NO. 11

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 11

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

- 1.) The Extended COVID-19 Learning Plan (“ECLP”), approved by the Academy Board, is incorporated into the Contract by reference. The parties agree to suspend the following Contract provisions for the 2020-2021 school year:

Schedule 7, Section b: Educational Goal and Related Measures

Schedule 7, Section c: Educational Programs

Schedule 7, Section d: Curriculum

Schedule 7, Section e: Methods of Pupil Assessment

- 2.) Any revisions or changes to the ECLP, approved by the Academy Board, shall automatically be incorporated into the Contract by reference and shall be exempt from the amendment procedures under Article IX of the Terms and Conditions of Contract.
- 3.) This Contract amendment shall remain in effect until the end of the 2020-2021 school fiscal year.
- 4.) In the event there is a perceived conflict between the ECLP and the Academy’s Preparedness Plan, prepared in compliance with Executive Order 2020-142, the parties agree to discuss implementation of both the ECLP and the Preparedness Plan to ensure that the Academy will meet all of its obligations under applicable law.

This Contract amendment is hereby approved by the University Board and the Academy Board through their authorized designees and shall have an effective date of the Academy’s first day of school for the 2020-2021 school year.



Eagle Crest Charter Academy Extended COVID-19 Learning Plan

Address of School District: 11950 Riley Street, Holland, MI 49424

District Code Number: 70906

Building Code Number(s): 08516

District Contact Person: Louise Moore

District Contact Person Email Address: 8.lmoore@nhaschools.com

Local Public Health Department: Ottawa County Health Department

Local Public Health Department Contact Person Email Address: lstefanovsky@miottawa.org

Name of Intermediate School District: Ottawa

Name of Authorizing Body: Central Michigan University

Date of Adoption by Board of Directors: 09/22/2020



October 01, 2020 [via email]

Ms. Louise Moore
Eagle Crest Charter Academy

Re: Approval of Extended COVID-19 Learning Plan ("Extended Learning Plan")

Dear Ms. Moore

I am pleased to inform you that the Extended Learning Plan for Eagle Crest Charter Academy ("Academy") has been approved by The Governor John Engler Center for Charter Schools at Central Michigan University. The Center will transmit the Extended Learning Plan to the State as soon as an appropriate mechanism to do so is made available. The Extended Learning Plan is effective as of the date indicated in the document.

To fulfill one of the required assurances, immediately add a copy of the approved Extended Learning Plan to the Academy's Transparency Page of its website. An approved copy of the Extended Learning Plan is attached and can be found in Epicenter. The approved Extended Learning Plan constitutes a Charter Contract amendment and remains in effect as long as the Extended Learning Plan remains in effect.

Thank you for all your efforts to keep student learning moving forward in these trying times. If you have any further questions or need additional support, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Corey Northrop". The signature is fluid and cursive, with the first name "Corey" and last name "Northrop" clearly legible.

Corey Northrop
Executive Director

cc: Robyn Allison, Board President
Julie Stapleton, Board Corresponding Agent

Attachment:
Approved Extended COVID-19 Learning Plan

RESOLUTION APPROVING THE EXTENDED COVID-19 LEARNING PLANS ("ECLP") AND APPROVAL OF CHARTER CONTRACT AMENDMENT

EAGLE CREST CHARTER ACADEMY (the "Academy")

A regular meeting of the Academy Board of Directors was held on the 22nd day of September, 2020, at 4:00 p.m.

The meeting was called to order at 4:01 p.m. by Board Member Robyn Allison :

Present: Robyn Allison, Rhonda Carter, Cynthia Evenhouse, Gwen Klemm

Absent: None

The following preamble and resolution were offered by Board Member Cynthia Evenhouse and supported by Board Member Rhonda Carter :

BACKGROUND

On August 20, 2020, in response to the novel coronavirus (COVID-19) pandemic affecting our state, Governor Whitmer signed into law certain amendments to the State School Aid Act of 1979, as amended, MCL 388.1601 et seq. ("Back to School Laws"). The Back to School Laws include additional requirements for all Michigan schools as they plan for a return of preK-12 education for the 2020-2021 school year. Under the Back to School Laws, a public school academy must provide for instruction under an extended COVID-19 learning plan ("ECLP") that is approved by its authorizing body ("Authorizer"). ECLPs includes many of the same subject matters addressed in a public school academy's charter contract, including measurable educational goals to be achieved by all subgroups in the school, measurement of those educational goals by one or more benchmark assessments, a description of how the educational program, including instruction, will be delivered, a description of the school's curricula and specific reporting requirements for the 2020-2021 school year. Under the Back to School Laws, schools retain the flexibility to tailor and adjust their ECLPs to meet the needs of their students and the community they serve.

The Back to School Laws require, among other things, that each public school academy do the following:

- (1) Establish educational goals required to be included in the ECLP no later than September 15, 2020.
- (2) Approve an ECLP and submit it to their respective authorizing body ("Authorizer") for approval by October 1, 2020. If approved by the Authorizer, the ECLP is transmitted by the Authorizer to the Superintendent of Public Instruction and the State Treasurer.
- (3) Make an ECLP accessible through the transparency reporting link on the school's website by October 1, 2020.
- (4) Within the first nine weeks of the 2020-2021 school year, administer 1 or more benchmark assessments from the list approved by the Michigan Department of Education (MDE)¹, a benchmark assessment provided by MDE, or local benchmark assessments, or a combination of the above, to pupils in grades K-8 to measure math and reading proficiency. In addition, by the last day of the 2020-2021 school year, administer another benchmark assessment to pupils in K-8 to measure proficiency in the same subject matter. The Back to School Laws require schools to use the same benchmark assessment(s) used in the 2019-2020 school year, if applicable.
- (5) Provide each pupil's data from the benchmark assessment or benchmark assessments, as available, to the pupil's parent or legal guardian within 30 days of administering the benchmark assessment(s).

¹ MDE has approved four providers of benchmark assessments and continues to assess additional providers. See [https://www.michigan.gov/documents/mde/Benchmark assessments 700077 7.pdf](https://www.michigan.gov/documents/mde/Benchmark_assessments_700077_7.pdf)

(6) Not later than February 1, 2021, create a report that addresses the progress made in meeting the educational goals in the ECLP that the academy expected would be achieved by the middle of the school year and make the report available on the transparency reporting link on a public school academy's website.

(7) Not later than the last day of the 2020-2021 school year, create a report concerning progress made in meeting the educational goals in the ECLP and make the report available on the transparency reporting link on a public school academy's website.

(8) No later than June 30, 2021, send the aggregate academy-level data from a benchmark assessment(s), excluding data from a local benchmark assessment or local benchmark assessments, to a regional data hub that is part of the Michigan data hub network that shall compile the data and send it to the Center for Educational Performance and Information (CEPI).

(9) Thirty days after approval of the ECLP, the Board shall meet monthly to re-confirm how pupil instruction is being delivered at the school and whether it is consistent with the ECLP and to ensure that 2 2-way interaction, as defined in the Act, is occurring between students and teachers each week of the school year for at least 75% of students enrolled in the school. At each meeting, the Board shall: (a) publicly announce its weekly interaction rates of 2 2-way interaction since its last meeting; (b) allow for public comment on the ECLP; and (c) discuss whether changes to the method of delivery for pupil instruction under the ECLP are necessary.

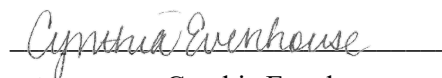
THE ACADEMY BOARD THEREFORE RESOLVES THAT:

1. The actions taken by Academy representatives to prepare and submit the Academy's ECLP to Authorizer are ratified.
2. The ECLP, as approved by the Authorizer, is approved by the Academy Board as the ECLP and as the ECLP Amendment to the Contract.
3. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.
4. The Academy will deliver from time to time such information regarding the implementation of the Academy's ECLP as the Authorizer or Michigan Department of Education may reasonably request.
5. Any Board policies or provision of Board policies that prohibit or impede the Academy's compliance with ECLP are temporarily waived, suspended or altered.
6. This Resolution shall take immediate effect and continue through the end of the 2020-2021 school year. If the Back to School Laws are amended, and such amendments requires additional Board action relative to the ECLP, the Board may take such action to comply with existing law.

Ayes: 4

Nays: 0

Resolution declared adopted.



Print Name: Cynthia Evenhouse

Secretary, Academy Board

AMENDMENT NO. 12

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 12

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

- 1.) Amend Schedule 7, Section b: Educational Goal and Related Measures, by replacing the materials contained therein with the materials attached as Tab 1.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2021.



Dated: 08/09/2021

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: 8/3/21

By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 12

Tab 1

EDUCATIONAL GOAL AND RELATED MEASURES

Pursuant to Applicable Law and the Terms and Conditions of this Contract, including Article VI, Section 6.2, the Academy shall achieve or demonstrate measurable progress for all groups of pupils toward the achievement of the educational goal identified in this schedule. Although an increase in academic achievement for all groups of pupils as measured by assessments and other objective criteria is the most important factor in determining the Academy's progress toward the achievement of the educational goal, the Center also considers other factors. Upon request, the Academy shall provide the Center with a written report, along with supporting data, assessing the Academy's progress toward achieving this goal. In addition, the University expects the Academy will meet the State of Michigan's accreditation standards pursuant to state and federal law.

Educational Goal to be Achieved

Prepare students academically for success in college, work and life.

Measures to Assist In Determining Measurable Progress Toward Goal Achievement

To assist in determining whether the Academy is achieving measurable progress toward the achievement of this goal, the Center will annually assess the Academy's performance using the following measures.

Measure 1: Student Achievement

The academic achievement of **all students who have been at the academy for one or more years¹** in grades 3-8 will be assessed using the following measures and targets:

Sub Indicator	Measure	Metric	Target
Against a Standard:	The percentage of students meeting or surpassing the current, spring, grade-level national norms ² on the NWEA Growth reading and math tests administered in the spring.	Distribution (which will be in the form of percentages): Exceeds $\geq 70.0\%$ Meets $\geq 50.0\%$ Approaching $\geq 30.0\%$ Does not meet $< 30.0\%$	50%
In the event that performance against the standard falls below these required expectations, "measurable progress towards the achievement of this goal" will be defined using the following measures and targets:			
Over Time:	The percentage of students meeting or surpassing spring grade-level national norms over time (CY-AVG(PY1+PY2+PY3)).	Trend score (which will be in the form of $-x$ to $+x$): Exceeds $\geq 6.0\%$ Meets $\geq 3.0\%$ Approaching $\geq 1.0\%$ Does not meet $< 1.0\%$	3.0%
Comparison Measure:	The percentage of students categorized as proficient or advanced on the most recent state assessment will surpass the school's Composite Resident District (CRD) percentage.	Portfolio Distribution (which will be in the form of $-x$ to $+x$): Exceeds $\geq 10.0\%$ Meets $\geq 5.0\%$ Approaching $\geq 0.0\%$ Does not meet $< 0.0\%$	5.0%

¹ One or more years students (also called 1+ students) are students who are enrolled in the academy on or before count day and are still enrolled at the end of a given academic year.

² Grade level national norms are updated periodically by NWEA following comprehensive norming studies. The Center will use the most updated national norms published by NWEA and will inform the Academy when they are updated and how the updated norms may impact analysis and performance reporting.

Measure 2: Student Growth

The academic growth of all students in grades 3-8 at the Academy will be assessed using the following measures and targets:

Sub Indicator	Measure	Metric	Target
Against a Standard:	The median of student growth percentiles (MGP) reflecting fall-to-spring scaled score growth on the reading and math NWEA Growth tests.	MGP: Exceeds ≥ 65 th Meets ≥ 50 th Approaching ≥ 45 th Does not meet < 45 th	Reading: 50 Math: 50
In the event that performance against the standard falls below these required expectations, “measurable progress towards the achievement of this goal” will be defined using the following measures and targets:			
Over Time:	The percentage of students making at least one year’s growth over time (CY-AVG(PY1+PY2+PY3)).	Trend score (which will be in the form of $-x$ to $+x$): Exceeds $\geq 6.0\%$ Meets $\geq 3.0\%$ Approaching $\geq 1.0\%$ Does not meet $< 1.0\%$	3.0%
Comparison Measure:	The mean student growth percentile reflecting growth on the two most recent state assessments will surpass the school’s Composite Resident District.	Portfolio Distribution (which will be in the form of $-x$ to $+x$): Exceeds $\geq 10.0\%$ Meets $\geq 5.0\%$ Approaching $\geq 0.0\%$ Does not meet $< 0.0\%$	5.0%

AMENDMENT NO. 13

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)


CONTRACT AMENDMENT NO. 13

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the “Contract”), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the “University Board”) to EAGLE CREST CHARTER ACADEMY (the “Academy”), as amended, the parties agree to further amend the Contract as follows:

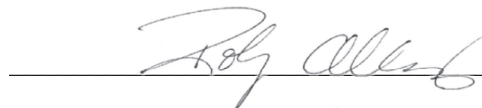
- 1.) Amend the Terms and Conditions of Contract by replacing the language contained within Article X, Section 10.4. Grounds and Procedures for Academy Termination of Contract and Section 10.5. Grounds and Procedures for University Termination of Contract, with the corresponding language attached as Tab 1.
- 2.) Amend Schedule 2: Amended Bylaws, by replacing the language contained within Article XIII, Section 6. Contracts Between Corporation and Related Persons, with the language attached as Tab 2.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall have an effective date of July 1, 2024.



Dated: 09/30/2024

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: September 17, 2024

By: Robyn Allison, Board President
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 13

Tab 1

Section 10.4. Grounds and Procedures for Academy Termination of Contract. The Academy Board, by majority vote of its Directors, may, at any time and for any reason, request termination of this Contract. The Academy Board's request for termination shall be made to the Center Director not less than six (6) calendar months in advance of the Academy's proposed effective date of termination. Upon receipt of an Academy request for termination, the Center Director shall present the Academy Board's request for termination to the University Board. A copy of the Academy Board's resolution approving of the Contract termination, including a summary of the reasons for terminating the Contract, shall be included with the Academy Board's request for termination. After receipt of the Academy Board's request for termination, the University Board shall consider the Academy's request no later than its next regularly scheduled meeting. The University Board shall make a final determination and vote on the proposed termination request within 90 days of receipt of the request from the Academy. The University Board may, in its sole discretion, waive the six (6) month advance notice requirement for terminating this Contract.

Section 10.5. Grounds and Procedures for University Termination of Contract. The University Board, in its sole discretion, reserves the right to terminate the Contract (i) for any reason or for no reason provided that such termination shall not take place less than six (6) months from the date of the University Board's action; (ii) if there is a change in Applicable Law that the University Board, in its sole discretion, determines impairs its rights and obligations under the Contract or requires the University Board to make changes in the Contract that are not in the best interest of the University Board or the University; or (iii) if exigent circumstances exist that the University Board determines, in its sole discretion, that termination of this Contract is required to protect the health, safety, or welfare of the Academy students, property, or funds that cannot be cured in a reasonable period as determined solely by the University Board, then such termination shall take effect at the end of the current Academy fiscal year. Following University Board approval, the Center Director shall provide notice of the termination to the Academy. If during the period between the University Board action to terminate and the effective date of termination, the Academy has violated the Contract or Applicable Law, the Contract may be revoked or suspended sooner pursuant to this Article X. If this Contract is terminated pursuant to this Section 10.5, the revocation procedures in Section 10.6 shall not apply.

Eagle Crest Charter Academy

Contract Amendment No. 13

Tab 2

Section 6. Contracts Between Corporation and Related Persons. As required by Applicable Law, any Director, officer or employee of the Academy, who enters into a contract with the Academy, that meets the definition of contract under the statute on Contracts of Public Servants with Public Entities, Act No. 317 of the Public Acts of 1968, being sections 15.321 to 15.330 of the Michigan Compiled Laws, shall comply with the public disclosure requirements set forth in Section 3 of the statute.

The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. However, the Academy Board shall prohibit any individual from being employed by the Academy, an Educational Service Provider or an employee leasing company involved in the operation of the Academy, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy Board shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy Board employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees. The Academy Board may contract with an Educational Service Provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy. Before entering into an agreement with an Educational Service Provider or an employee leasing company to perform services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by the Center. A copy of the agreement between the Academy Board and the Educational Service Provider or employee leasing company shall be included as part of Schedule 5.

The Academy shall comply with the Incompatible Public Offices statute, Act No. 566 of the Public Acts of 1978, of the Michigan Compiled Laws, and the Contracts of Public Servants With Public Entities statute, Act No. 371 of the Public Acts of 1968, of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Language in this Section controls over section 1203 of the Code. The following shall be deemed prohibited conflicts of interest:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an Educational Service Provider or an employee leasing company, or a subcontractor to an Educational Service Provider or an employee leasing company that has an ESP Agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy Board employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school;
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University; and
- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any real or personal property leased or subleased to the Academy.

No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or domestic partner:

- (a) Is employed by the Academy Board;
- (b) Works at or is assigned to work at the Academy;
- (c) Has an ownership, officer, policymaking, managerial, administrative non-clerical or other significant role with the Academy's Educational Service Provider or employee leasing company; and
- (d) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy.
- (e) Is a current Academy Board member.

The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or domestic partner.

AMENDMENT NO. 14

to the
July 1, 2016 Contract to Charter
A School of Excellence and Related Documents

Issued To

EAGLE CREST CHARTER ACADEMY
(A SCHOOL OF EXCELLENCE)

By

THE CENTRAL MICHIGAN UNIVERSITY
BOARD OF TRUSTEES
(AUTHORIZING BODY)

CONTRACT AMENDMENT NO. 14

EAGLE CREST CHARTER ACADEMY

In accordance with Article IX of the Terms and Conditions of the Contract (the "Contract"), dated July 1, 2016, issued by the CENTRAL MICHIGAN UNIVERSITY BOARD OF TRUSTEES (the "University Board") to EAGLE CREST CHARTER ACADEMY (the "Academy"), as amended, the parties agree to further amend the Contract as follows:

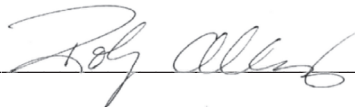
- 1.) Amend the Terms and Conditions of Contract by replacing the language contained within Article IV, Section 4.5. Prohibition of Identified Family Relationships, subsection (b), with the language attached as Tab 1.
- 2.) Further amend the Terms and Conditions of Contract by inserting at the end of Article XII: General Terms, the language attached as Tab 2.
- 3.) Amend Schedule 2: Amended Bylaws, by replacing the language contained within Article XIII, Section 6. Contracts Between Corporation and Related Persons and Article IX: Indemnification, with the corresponding language attached as Tab 3.
- 4.) Amend Schedule 4: Oversight, Compliance and Reporting Agreement, by inserting at the end of Article II, Section 2.2. Compliance and Reporting Duties, the language attached as Tab 4.

This entire amendment is hereby approved by the University Board and the Academy Board through their authorized designees, and shall become effective upon execution by the Designee of the University Board.



Dated: 05/14/2025

By: Corey R. Northrop, Executive Director
The Governor John Engler Center for Charter Schools
Designee of the University Board



Dated: May 6, 2025

By: Robyn Allison
Eagle Crest Charter Academy
Designee of the Academy Board

Eagle Crest Charter Academy

Contract Amendment No. 14

Tab 1

Terms and Conditions: Article IV, Section 4.5(b)

- (b) The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. If an Academy Board member discloses any prohibited familial relationships in the annual disclosure, or if the University finds that an Academy Board member has failed to disclose a prohibited familial relationship, that Academy Board member shall be removed from office, in accordance with the removal provisions found in the Resolution or Schedule 2: Amended Bylaws. For purposes of this subsection, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or domestic partner.

Eagle Crest Charter Academy

Contract Amendment No. 14

Tab 2

Terms and Conditions: Article XII, Section 12.24

Section 12.24. Required Statutory Disclosures. The Academy shall ensure that the names of Central Michigan University Board of Trustees and the primary educational management organization, if applicable, must appear and be verbally provided, as applicable, on all of the following:

- (a) Unless prohibited by a local ordinance or local zoning authority, signage that is on the Academy's property and is erected, repaired, or installed on or after April 2, 2025;
- (b) Promotional material that is created, modified, or distributed on or after April 2, 2025;
- (c) The footer of the Academy's website pages; and
- (d) The student application that is required to be enrolled in the Academy.

For purposes of this section, "primary educational management organization" shall have the same meaning as defined in MCL 380.553.

Eagle Crest Charter Academy

Contract Amendment No. 14

Tab 3

Amended Bylaws: Article VIII, Section 6

Section 6. Contracts Between Corporation and Related Persons. As required by Applicable Law, any Director, officer or employee of the Academy, who enters into a contract with the Academy, that meets the definition of contract under the statute on Contracts of Public Servants with Public Entities, Act No. 317 of the Public Acts of 1968, being sections 15.321 to 15.330 of the Michigan Compiled Laws, shall comply with the public disclosure requirements set forth in Section 3 of the statute.

The University Board authorizes the Academy Board to employ or contract for personnel according to the position information outlined in Schedule 5. However, the Academy Board shall prohibit any individual from being employed by the Academy, an Educational Service Provider or an employee leasing company involved in the operation of the Academy, in more than one (1) full-time position and simultaneously being compensated at a full-time rate for each of these positions. An employee hired by the Academy Board shall be an employee of the Academy for all purposes and not an employee of the University for any purpose. With respect to Academy Board employees, the Academy shall have the power and responsibility to (i) select and engage employees; (ii) pay their wages, benefits, and applicable taxes; (iii) dismiss employees; and (iv) control the employees' conduct, including the method by which the employee carries out his or her work. The Academy Board shall be responsible for carrying workers' compensation insurance and unemployment insurance for its employees. The Academy Board may contract with an Educational Service Provider or an employee leasing company to provide services or to provide personnel to perform services or work at the Academy. Before entering into an agreement with an Educational Service Provider or an employee leasing company to perform services or to provide personnel to perform services or work at the Academy, the Academy Board must first comply with the Educational Service Provider Policies issued by the Center. A copy of the agreement between the Academy Board and the Educational Service Provider or employee leasing company shall be included as part of Schedule 5.

The Academy shall comply with the Incompatible Public Offices statute, Act No. 566 of the Public Acts of 1978, of the Michigan Compiled Laws, and the Contracts of Public Servants With Public Entities statute, Act No. 371 of the Public Acts of 1968, of the Michigan Compiled Laws. The Academy Board shall ensure compliance with Applicable Law relating to conflicts of interest. Language in this Section controls over section 1203 of the Code. The following shall be deemed prohibited conflicts of interest:

- (a) An individual simultaneously serving as an Academy Board member and an owner, officer, director, employee or consultant of an Educational Service Provider or an employee leasing company, or a subcontractor to an Educational Service Provider or an employee leasing company that has an ESP Agreement with the Academy;
- (b) An individual simultaneously serving as an Academy Board member and an Academy Board employee;
- (c) An individual simultaneously serving as an Academy Board member and an independent contractor to the Academy;
- (d) An individual simultaneously serving as an Academy Board member and a member of the governing board of another public school;
- (e) An individual simultaneously serving as an Academy Board member and a University official, employee, or paid consultant, as a representative of the University; and

- (f) An individual simultaneously serving as an Academy Board member and having an ownership or financial interest in any real or personal property leased or subleased to the Academy.

No person shall be appointed or reappointed to serve as an Academy Board member if the person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or domestic partner:

- (a) Is employed by the Academy Board;
- (b) Works at or is assigned to work at the Academy;
- (c) Has an ownership, officer, policymaking, managerial, administrative non-clerical or other significant role with the Academy's Educational Service Provider or employee leasing company; and
- (d) Has an ownership or financial interest in any school building lease or sublease agreement with the Academy.
- (e) Is a current Academy Board member.

The Academy Board shall require each individual who works at the Academy to annually disclose any familial relationship with any other individual who works at, or provides services to, the Academy. If an Academy Board member discloses any prohibited familial relationships in the annual disclosure, or if the University finds that an Academy Board member has failed to disclose a prohibited familial relationship, that Academy Board member shall be removed from office, in accordance with the removal provisions found in the Resolution or these Amended Bylaws. For purposes of this sub-section, familial relationship means a person's mother, mother-in-law, father, father-in-law, son, son-in-law, daughter, daughter-in-law, sister, sister-in-law, brother, brother-in-law, spouse or domestic partner.

Amended Bylaws: Article IX

ARTICLE IX INDEMNIFICATION

To the extent permitted by Applicable Law, each person who is or was a Director, officer or member of a committee of the Academy and each person who serves or has served at the request of the Academy as a trustee, director, officer, partner, employee or agent of any other corporation, partnership, joint venture, trust or other enterprise, may be indemnified by the Academy. The corporation may purchase and maintain insurance on behalf of any such person against any liability asserted against and incurred by such person in any such capacity or arising out of his status as such, whether or not the corporation would have power to indemnify such person against such liability under the preceding sentence. The corporation may, to the extent authorized from time to time by the Academy Board, grant rights to indemnification to any employee or agent of the corporation. The indemnification shall not include any circumstances in which a person who is or was a director, officer or member of a committee of the Academy and each person who serves or has served at the request of the Academy as a trustee, director, officer, partner, employee or agent of any other corporation, partnership, joint venture, trust or other enterprise is grossly negligent or criminally liable for the indemnified act.

Eagle Crest Charter Academy

Contract Amendment No. 14

Tab 4

Oversight, Compliance and Reporting Agreement: Section 2.2(m)

- m. The Academy shall ensure that the names of Central Michigan University Board of Trustees and the primary educational management organization, if applicable, must appear and be verbally provided, as applicable, on all of the following:
 - i. Unless prohibited by a local ordinance or local zoning authority, signage that is on the Academy's property and is erected, repaired, or installed on or after April 2, 2025;
 - ii. Promotional material that is created, modified, or distributed on or after April 2, 2025;
 - iii. The footer of the Academy's website pages; and
 - iv. The school application that a student must submit to enroll in the Academy.

For purposes of this section, "primary educational management organization" shall have the same meaning as defined in MCL 380.553.