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Strand:

**E1 Reading**

Reading is a process which includes demonstrating comprehension and showing evidence of a warranted and responsible interpretation of the text. "Comprehension" means getting the gist of a text. It is most frequently illustrated by demonstrating an understanding of the text as a whole; identifying complexities presented in the structure of the text; and extracting salient information from the text. In providing evidence of a responsible interpretation, students may make connections between parts of a text, among several texts, and between texts and other experiences; make extensions and applications of a text; and examine texts critically and evaluatively.

Standard:

**E1a:** The student reads at least twenty-five books or book equivalents each year. The quality and complexity of materials to be read is based on the lexile level for grade seven (850L-1100L). The materials should include traditional and contemporary literature (both fiction and non-fiction) as well as magazines, newspapers, textbooks, and on-line material. Such reading should represent a diverse collection of material from at least three different literary forms and from at least five different writers.

Examples:

*Examples of activities through which students might produce evidence of reading twenty-five books include:*

- *Maintain an annotated list of works read.*
- *Generate a reading log or journal.*
- *Participate in formal and informal book talks.*

Standard:

**E1b:** The student reads and comprehends at least four books (or book equivalents) about one issue or subject, or four books by a single writer, or four books in one genre, and produces evidence of reading that:

Components:

- E1b.1:** makes and supports warranted and responsible assertions about the texts;
- E1b.2:** supports assertions with elaborated and convincing evidence;
- E1b.3:** draws the text together to compare and contrast themes, characters, and ideas;
- E1b.4:** makes perceptive and well developed connections;
- E1b.5:** evaluates writing strategies and elements of the author's craft.

Examples:

*Examples of activities through which students might produce evidence of reading comprehension include:*

- *Construct a book review.*
- *Participate in formal or informal book talk.*
- *Produce a written document (e.g. literary response paper, research report).*
- *Create an annotated book list organized according to author, theme, or genre.*
- *Make relevant, logical, coherent contributions to a discussion (e.g. book talk, literature circle).*
- *Create a personal response to a selection or experience.*
- *Debate or hold a panel discussion regarding the perspectives in various genres.*
- *Select literature from a variety of genres or authors.*

Standard:	<b>E1c:</b> The student reads and comprehends informational materials to develop understanding and expertise and produces written or oral work that:
Components:	<b>E1c.1:</b> restates or summarizes information; <b>E1c.2:</b> relates new information to prior knowledge and experience; <b>E1c.3:</b> extends ideas; <b>E1c.4:</b> makes connections to related topics or information.
Examples:	<i>Examples of activities through which students might produce evidence of reading informational materials include:</i> <ul style="list-style-type: none"><li>• Summarize text by restating and paraphrasing.</li><li>• Incorporate expert opinions into a speech or position paper.</li><li>• Develop a proposal based on data obtained from reading informational texts.</li><li>• Summarize and expand oral and written presentation using specific/technical vocabulary.</li><li>• Use multi-media tools to present information and enhance a project.</li><li>• Write a report of information that draws from multiple sources.</li><li>• Write a report that analyzes several historical records of a single event and attempts to understand the reasons for the similarities and differences.</li></ul>
Standard:	<b>E1d:</b> The student demonstrates familiarity with a variety of public documents (i.e., documents that focus on civic issues or matters of public policy at the community level and beyond) and produces written or oral work that does one or more of the following:
Components:	<b>E1d.1:</b> identifies the social context of the document; <b>E1d.2:</b> identifies the author’s purpose and stance; <b>E1d.3:</b> analyzes the arguments and positions advanced and the evidence offered in support of them, or formulates an argument and offers evidence to support it; <b>E1d.4:</b> examines or makes use of the appeal of a document to audiences both friendly and hostile to the position presented; <b>E1d.5:</b> identifies or uses commonly used persuasive techniques.
Examples:	<i>Examples of activities through which students might produce evidence of familiarity with public documents include:</i> <ul style="list-style-type: none"><li>• Summarize and critique two or more local newspaper articles related to the same topic or issue.</li><li>• Respond to a public address made by an adult, e.g., the principal, a PTA/PTO officer, a visiting author.</li><li>• Write a letter to the editor in response to an editorial or to an article of local or national importance.</li><li>• Explain a local document to someone who has never heard of it (e.g., a school related directive, a community related brochure, or an informational pamphlet).</li><li>• Make judgments about the clarity, power, and authenticity of a document.</li><li>• Compare the effectiveness of one selection in relation to others, and personal experiences.</li><li>• Evaluate the use of language patterns and literary devices such as, figurative language, dialogue, and symbolism.</li></ul>

Standard:	<b>E1e:</b> The student demonstrates familiarity with a variety of functional documents (i.e. documents that exist in order to get things done) and produces written or oral work that does one or more of the following:
Components:	<b>E1e.1:</b> identifies the institutional context of the document; <b>E1e.2:</b> identifies the sequence of activities needed to carry out a procedure; <b>E1e.3:</b> analyzes or uses the formatting techniques used to make a document user-friendly; <b>E1e.4:</b> identifies any information that is either extraneous or missing in terms of audience and purpose or makes effective use of relevant information.
Examples:	<i>Examples of activities through which students might produce evidence of familiarity with functional documents include:</i> <ul style="list-style-type: none"><li>• <i>Write a memo or conduct a briefing on procedures to be followed in a given situation.</i></li><li>• <i>Produce a manual setting out school rules.</i></li><li>• <i>Revise a set of instructions to improve their clarity.</i></li><li>• <i>Use technology to enhance the layout and design of a document.</i></li><li>• <i>Identify and list the details of each day of a planned school-wide event.</i></li><li>• <i>Review and update a section of the student handbook.</i></li><li>• <i>Prepare a brief that succinctly communicates the roles and responsibilities of each member of a student committee.</i></li></ul>

Strand:

**E2 Writing**

Writing is a process through which a writer shapes language to communicate effectively. Writing often develops through a series of initial plans and multiple drafts and through access to informed feedback and response. Purpose, audience, and context contribute to the form and substance of writing as well as to its style, tone, and stance.

Standard:	<b>E2a:</b> The student produces a report that:
Components:	<b>E2a.1:</b> engages the reader by establishing a context, creating a persona, and otherwise developing reader interest; <b>E2a.2:</b> develops a controlling idea that conveys a perspective on the subject; <b>E2a.3:</b> creates an organizing structure appropriate to a specific purpose, audience and context; <b>E2a.4:</b> includes appropriate facts and details; <b>E2a.5:</b> excludes extraneous and inappropriate information; <b>E2a.6:</b> uses a range of appropriate strategies, such as providing facts and details, describing or analyzing the subject, narrating a relevant anecdote, comparing and contrasting, naming, and explaining benefits or limitations; <b>E2a.7:</b> provides a sense of closure to the writing.
Examples:	<i>Examples of reports include:</i> <ul style="list-style-type: none"><li>• <i>An informative report (comparing and contrasting attributes, e.g., comparing and contrasting the attributes of two or more countries).</i></li><li>• <i>A saturation report (a report that recounts substantial information on a topic gathered by a student over a period of time).</i></li><li>• <i>A chapter book.</i></li><li>• <i>A multimedia presentation using research gained from print and other media sources.</i></li></ul>

	<ul style="list-style-type: none"><li>• <i>A report produced as part of studies in subjects such as science, social studies, and mathematics.</i></li><li>• <i>A report of information on an item of personal interest or experience.</i></li></ul>
Standard:	<b>E2b:</b> The student produces a response to literature that:
Components:	<b>E2b.1:</b> engages the reader by establishing a context, creating a persona, and otherwise developing reader interest; <b>E2b.2:</b> advances a judgment that is interpretive, analytic, evaluative, or reflective; <b>E2b.3:</b> supports judgment through references to the text, references to other works, authors, or non-print media, or references to personal knowledge; <b>E2b.4:</b> demonstrates an understanding of the literary work; <b>E2b.5:</b> anticipates and answers a reader's questions; <b>E2b.6:</b> provides a sense of closure to the writing.
Examples:	<i>Examples of responses to literature include:</i> <ul style="list-style-type: none"><li>• <i>A literary response paper.</i></li><li>• <i>A book or movie review.</i></li><li>• <i>A literary analysis paper.</i></li><li>• <i>A comparison of a piece of literature with its media presentation.</i></li><li>• <i>An interpretation of a narrative poem.</i></li><li>• <i>A pamphlet.</i></li><li>• <i>A diary.</i></li><li>• <i>A newspaper or magazine article.</i></li></ul>
Standard:	<b>E2c:</b> The student produces a narrative account (fictional or autobiographical) that:
Components:	<b>E2c.1:</b> engages the reader by establishing a context, creating a point of view, and otherwise developing reader interest; <b>E2c.2:</b> establishes a situation, plot, point of view, setting, and conflict (and for autobiography, the significance of events and of conclusions that can be drawn from those events); <b>E2c.3:</b> creates an organizing structure; <b>E2c.4:</b> includes sensory details and concrete language to develop plot and character; <b>E2c.5:</b> excludes extraneous details and inconsistencies; <b>E2c.6:</b> develops complex characters; <b>E2c.7:</b> uses a range of appropriate strategies, such as dialogue, tension or suspense, naming, and specific narrative action, e.g., movement, gestures, expressions; <b>E2c.8:</b> provides a sense of closure to the writing.
Examples:	<i>Examples of narrative accounts include:</i> <ul style="list-style-type: none"><li>• <i>A biographical account.</i></li><li>• <i>A problem-solution essay.</i></li><li>• <i>A fiction or non-fiction story.</i></li><li>• <i>A personal narrative.</i></li><li>• <i>A historical account.</i></li><li>• <i>A news account of an event, fiction or non-fiction.</i></li><li>• <i>A summary of text read.</i></li><li>• <i>An observational writing.</i></li></ul>

Standard:	<b>E2d:</b> The student produces a narrative procedure that:
Components:	<b>E2d.1:</b> engages the reader by establishing a context, creating a persona, and otherwise developing reader interest; <b>E2d.2:</b> provides a guide to action for a relatively complicated procedure in order to anticipate a reader's needs; creates expectations through predictable structures, e.g., headings; and provides transitions between steps; <b>E2d.3:</b> makes use of appropriate writing strategies such as creating a visual hierarchy and using white space and graphics as appropriate; <b>E2d.4:</b> includes relevant information; <b>E2d.5:</b> excludes extraneous information; <b>E2d.6:</b> anticipates problems, mistakes, and misunderstandings that might arise for the reader; <b>E2d.7:</b> provides a sense of closure to the writing.
Examples:	<i>Examples of narrative procedures include:</i> <ul style="list-style-type: none"><li>• <i>A set of rules for organizing a class meeting.</i></li><li>• <i>A set of instructions for playing computer games.</i></li><li>• <i>A set of instructions for using media technology.</i></li><li>• <i>An explanation of a mathematical procedure.</i></li><li>• <i>A report of information explaining steps and/or procedures for a familiar activity.</i></li><li>• <i>A storyboard.</i></li></ul>
Standard:	<b>E2e:</b> The student produces a persuasive essay that:
Components:	<b>E2e.1:</b> engages the reader by establishing a context, creating a persona, and otherwise developing reader interest; <b>E2e.2:</b> develops a controlling idea that makes a clear and knowledgeable judgment; <b>E2e.3:</b> creates and organizes a structure that is appropriate to the needs, values, and interests of a specified audience and arranges details, reasons, examples, and anecdotes effectively and persuasively; <b>E2e.4:</b> includes appropriate information and arguments; <b>E2e.5:</b> excludes information and arguments that are irrelevant; <b>E2e.6:</b> anticipates and addresses reader concerns and counter-arguments; <b>E2e.7:</b> supports arguments with detailed evidence, citing sources of information as appropriate; <b>E2e.8:</b> provides a sense of closure to the writing.
Examples:	<i>Examples of persuasive essays include:</i> <ul style="list-style-type: none"><li>• <i>A position paper.</i></li><li>• <i>An evaluation of a product or policy.</i></li><li>• <i>An editorial on a current issue that uses reasoned arguments to support an opinion.</i></li><li>• <i>A speech for a candidate for school or public office</i></li><li>• <i>A multimedia presentation based on a text read.</i></li><li>• <i>An informational web site.</i></li><li>• <i>A commercial script</i></li></ul>

Strand:

**E3 Speaking,  
Listening, and  
Viewing**

Speaking, listening, and viewing are fundamental processes which people use to express, explore, and learn about ideas. The functions of speaking, listening, and viewing include gathering and sharing information; persuading others; expressing and understanding ideas; coordinating activities with others; and selecting and critically analyzing messages. The contexts of these communication functions include one-to-one conferences, small group interactions, large audiences and meetings, and interactions with broadcast media.

Standard:

**E3a:** The student participates in one-to-one conferences with a teacher, paraprofessional, or adult volunteer, in which the student:

Components:

- E3a.1:** initiates new topics in addition to responding to adult-initiated topics;
- E3a.2:** asks relevant questions;
- E3a.3:** responds to questions with appropriate elaboration;
- E3a.4:** uses language cues to indicate different levels of certainty or hypothesizing, e.g., “what if...,” “very likely...,” “I’m unsure whether...”;
- E3a.5:** confirms understanding by paraphrasing the adult’s directions or suggestions.

Examples:

*Examples of one-to-one interactions include:*

- *Book Talks with a teacher or parent;*
- *Analytical discussions of a movie or television program with a teacher or parent.*
- *Interviews with teachers or other adults with discussion.*
- *Interviews with multiple teachers or adults about their opinions of a major international news event.*
- *Interviews with adults from at least two community service agencies to determine the kinds of support they provide to others.*
- *Interviews conducted with a journalist.*
- *Interviews with other adults to gather their thoughts as to what makes videos entertaining.*
- *Interviews with a variety of people to determine concepts and messages they remember from a well-known piece of literature.*
- *Dialogue with a teacher, parent or adult about a reflection on a collection of the student’s work.*
- *Discussion with a teacher or parent about portfolio work.*

Standard:

**E3b:** The student participates in group meetings, in which the student:

Components:

- E3b.1:** displays appropriate turn-taking behaviors;
- E3b.2:** solicits another person’s comment or opinion;
- E3b.3:** offers own opinion forcefully without dominating;
- E3b.4:** responds appropriately to comments and questions;
- E3b.5:** volunteers contributions and responds when directly solicited by teacher or discussion leader;
- E3b.6:** gives reasons in support of opinions expressed;
- E3b.7:** clarifies, illustrates, or expands on a response when asked to do so; asks group for similar expansions;
- E3b.8:** employs a group decision-making technique such as a problem-solving sequence (e.g., recognize problem, define problem, identify possible solutions, select optimal solution, implement solution, evaluate solution).

Examples:

*Examples of activities involving group meetings include:*

- *Create a plan for a group project (e.g., organize a presentation to be made to the class; plan a science project.)*
- *Develop and negotiate meaningful class rubrics for group and self-assessment purposes with opportunities to revise and refine the rubric.*
- *Engage in a meaningful class town meeting where students articulate concerns, problems, etc., concerning their constituency in the school environment. Students, plan, conduct, and orchestrate follow-up for problem solving or enactment of the results of the town meeting.*
- *Take part in book talks with other students. Students plan, conduct, and strategize for the book talks.*
- *Work as part of a group to solve a complex mathematical task as related to something meaningful in their lives. Presentation of this solution in a public format to adults, community and peers.*
- *Role-play to better understand a certain historical event.*
- *Participate in peer writing response groups.*
- *Read favorite pieces of writing to their partners, and tell the writers what elements have an effective impact upon the audience and dialogue about the impact this feedback has upon the writer for revision purposes.*
- *Choose a story to dramatize, including characters, dialogue, and simple stage directions; perform assigned roles for the class.*

Standard:

**E3c:** The student prepares and delivers an individual presentation in which the student:

Components:

- E3c.1:** shapes information to achieve a particular purpose and to appeal to the interests and background knowledge of audience members;
- E3c.2:** shapes content and organization according to criteria for importance and impact rather than according to availability of information in resource materials;
- E3c.3:** uses notes or other memory aids to structure the presentation;
- E3c.4:** develops several main points relating to a single thesis;
- E3c.5:** engages the audience with appropriate verbal cues and eye contact;
- E3c.6:** projects a sense of individuality and personality in selecting and organizing content, and in delivery.

Examples:

*Examples of presentations include:*

- *A presentation of project plans or a report for an Applied Learning project.*
- *A report that analyzes several historical records of a single event and attempts to understand the reasons for the similarities and differences.*
- *A report that presents data collected to prove/disprove a particular hypothesis, along with an appropriate conclusion.*
- *A role play of mythological figures who debate a current issue.*
- *A multimedia presentation exhibiting visual and performing artists and how they communicate with their audiences.*
- *A presentation that compares and contrasts characters in literature with people you actually know.*
- *A summary of a piece of significant non-fiction writing that communicates the essential points to classmates*
- *Produce a radio play with sound effects, background music, etc., and tape that program for your class.*
- *A videotape designed to persuade and capture the interest of the class.*
- *A production of an orientation video for new students.*

Standard: **E3d:** The student makes informed judgments about television, radio, and film productions; that is, the student:

Components: **E3d.1:** demonstrates an awareness of the presence of the media in the daily lives of most people;

**E3d.2:** evaluates the role of the media in focusing attention and in forming opinion;

**E3d.3:** judges the extent to which the media are a source of entertainment as well as a source of information;

**E3d.4:** defines the role of advertising as part of media presentation.

Examples: *Examples of activities through which students might produce evidence of making informed judgments about television, radio, and film productions include:*

- *Present a paper or report on reasons for selecting one media choice over another.*
- *Prepare a multimedia report on the benefits obtained (including information learned) from media exposure.*
- *Summarize patterns of media exposure in writing or in oral reports.,*
- *Analyze the appeal of popular television shows and films for particular audiences while providing an analysis on how the show or film could have been changed for greater or lesser impact.*
- *Describe the appeal of particularly memorable commercials.*
- *Explain the use of “propaganda techniques” (e.g., bandwagon, glittering generalities, celebrity) in television commercials.*
- *Create a multimedia presentation that compares television news and commentaries and incorporates sound, photos or video, and animation.*
- *Analyze how different forms of media address the same topic and evaluate each for their effectiveness.*

Strand:  
**E4 Conventions,  
Grammar and  
Usage of the  
English Language**

Having control of the conventions and grammar of the English language means having the ability to represent oneself appropriately with regard to current standards of correctness (e.g., spelling, punctuation, paragraphing, capitalization, subject-verb agreement). Usage involves the appropriate application of conventions and grammar in both written and spoken formats

Standard: **E4a:** The student demonstrates an understanding of the rules of the English language in written and oral work, and selects the structures and features of language appropriate to the purpose, audience and context of the work. The student demonstrates control of:

Components: **E4a.1:** grammar;  
**E4a.2:** paragraph structure;  
**E4a.3:** punctuation;  
**E4a.4:** sentence construction;  
**E4a.5:** spelling;  
**E4a.6:** usage.

Examples: *Examples of activities through which students might demonstrate an understanding of the rules of the English language include:*

- *Demonstrate in a piece of writing the ability to manage the conventions, grammar, and usage of English so that they aid rather than interfere with reading.*

	<ul style="list-style-type: none"><li>• <i>Proofread own writing or the writing of others, using dictionaries and other resources, including the teacher or peers as appropriate.</i></li><li>• <i>Observe conventions of language during formal oral presentations.</i></li><li>• <i>Revise a piece of writing by combining sentences.</i></li></ul>
Standard:	<b>E4b:</b> The student analyzes and subsequently revises work to clarify it or make it more effective in communicating the intended message or thought. The student's revisions should be made in light of the purposes, audiences, and contexts that apply to the work. Strategies for revising include:
Components:	<b>E4b.1:</b> adding or deleting details; <b>E4b.2:</b> adding or deleting explanations; <b>E4b.3:</b> clarifying difficult passages; <b>E4b.4:</b> rearranging words, sentences, and paragraphs to improve or clarify meaning; <b>E4b.5:</b> sharpening the focus; <b>E4b.6:</b> reconsidering the organizational structure.
Examples:	<i>Examples of activities through which students might produce evidence of analyzing and revising work include:</i> <ul style="list-style-type: none"><li>• <i>Incorporate into revised drafts, as appropriate, suggestions taken from critiques made by peers and teachers.</i></li><li>• <i>Produce a series of distinctly different drafts that result in a polished piece of writing or a presentation.</i></li><li>• <i>Describe the reasons for stylistic choices made as a writer or presenter.</i></li><li>• <i>Critique the writing or oral presentation of a peer.</i></li><li>• <i>Use Lotus Notes or similar technology to allow students to read and edit each other's writing</i></li></ul>
Strand:	<b>E5 Literature</b>
	Literature consists of poetry, fiction, non-fiction, and essays as distinguished from instructional expository, or journalistic writing.
Standard:	<b>E5a:</b> The student responds to non-fiction, fiction, poetry, and drama using interpretive, critical, and evaluative processes; that is, the student:
Components:	<b>E5a.1:</b> identifies recurring themes across works; <b>E5a.2:</b> interprets the impact of author's decisions regarding work choice and content, and literary elements; <b>E5a.3:</b> identifies the characteristics of literary forms and genres; <b>E5a.4:</b> evaluates literary merit; <b>E5a.5:</b> identifies the effect of point of view; <b>E5a.6:</b> analyses the reasons for a character's actions, taking into account the situation and basic motivation of the character; <b>E5a.7:</b> identifies stereotypical characters as opposed to fully developed characters; <b>E5a.8:</b> identifies the effect of literary devices such as figurative language, allusion, diction, dialogue, and description; <b>E5a.9:</b> makes inferences and draws conclusions about fictional and non-fictional contexts, events, characters, settings and themes.

Examples:

*Examples of activities through which students might produce evidence of responding to literature include:*

- *Analyze stereotypical characters in a popular television production.*
- *Examine themes in the work (fiction or non-fiction) of one popular young-adult author.*
- *Compare the literary merits of two or more short stories, biographies of one individual, novels, or plays.*
- *Evaluate the effect of literary devices in a number of poems by one author or poems on a common topic.*
- *Participate in formal or informal book talks.*
- *Write or perform a skit based on a story read in class.*
- *Write a parody based on a story read in class.*
- *Speculate about point of view in a work read by the class.*

Standard:

**E5b:** The student produces work in at least one literary genre that follows the conventions of the genre.

Examples:

*Examples of literary genres include:*

- *A personal essay.*
- *A short story.*
- *A short play.*
- *A poem.*
- *A vignette*

The process standards of **problem solving, reasoning and proof, connections communication, and representation** are interwoven and independent with the content standards and are necessary for the comprehensive understanding of mathematics.

Strand: **M1 Numbers and Operations**

Pre-Kindergarten through Grade 12 instructional programs should enable all students to:

- understand numbers, ways of representing numbers, relationships among numbers, and number systems;
- understand meanings of operations and how they relate to none another;
- understand how to compute fluently and make reasonable estimates.

In Grade 7, all students should:

- Standards:
- M1a:** use, interpret and compare numbers in several equivalent forms such as integers, fractions, decimals, and percents;
  - M1b:** develop meaning of percent greater than 100 or less than 1;
  - M1c:** understand and use ratio and proportion to represent quantitative relationships;
  - M1d:** describe the differences between rational and irrational numbers;
  - M1e:** explain the relationship, meaning and effects of arithmetic operations with the set of integers;
  - M1f:** use order of operations and properties to simplify numerical expressions involving integers, fractions, decimals and exponents;
  - M1g:** simplify numerical expressions and solve real-life problems using the set of integers;
  - M1h:** estimate and solve problems including ratios, proportions and percents, and justify reasoning.

Essential To Know: Students analyze and explain methods for solving problems involving fractions, decimals, percents, proportions and ratios.

Strand: **M2 Algebra**

Pre-Kindergarten through Grade 12 instructional programs should enable all students to:

- understand patterns, relations, and functions;
- represent and analyze mathematical situations and structures using algebraic symbols;
- use mathematical models to represent and understand quantitative relationships;
- analyze change in various contexts.

In Grade 7, all students should:

- Standards:
- M2a:** represent, analyze, and generalize relations and functions with tables, graphs, words, and when possible, algebraic expressions and equations;
  - M2b:** explain relationships between graphs of lines and their equations;
  - M2c:** generate equivalent forms of algebraic expressions by combining like terms;
  - M2d:** use variables and appropriate operations to write an expression, equation, or inequality that represents a verbal description;
  - M2e:** model and solve equations using inverse operations;

- M2f:** represent linear equations and inequalities by plotting points;
- M2g:** analyze functional relationships to explain how a change in one quantity results in a change in the other;
- M2h:** recognize a variety of uses for variables.

Essential To Know: Students represent, analyze, and generalize relations and functions with tables, graphs, words, and when possible, algebraic expressions and equations.

Strand: **M3 Geometry**

Pre-Kindergarten through Grade 12 instructional programs should enable all students to:

- analyze characteristics and properties of two- and three- dimensional geometric shapes and develop mathematical arguments about geometric relationships;
- specify locations and describe spatial relationships using coordinate geometry and other representational systems;
- apply transformations and use symmetry to analyze mathematical situations;
- use visualization, spatial reasoning, and geometric modeling to solve problems.

In Grade 7, all students should:

- Standards:
- M3a:** demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures;
  - M3b:** use proportional reasoning to describe and express relationships between similar and congruent figures;
  - M3c:** classify and identify triangles by side and angle measurement and polygons as regular or irregular and/or by the number of sides;
  - M3d:** recognize and explain the following attributes of a circle, i.e., radius, diameter, arc, chord, semicircle, and central angle;
  - M3d:** use coordinate geometry to examine special geometric shapes, such as regular polygons and polygons with pairs of parallel or perpendicular sides;
  - M3e:** determine the length of a side of a figure drawn on a coordinate plane with vertices having the same x or y coordinates;
  - M3f:** examine congruence, similarity, and line or rotational symmetry of an object using transformations.

Essential To Know: Students describe and apply the properties of similarity and congruent figures and justify conjectures involving similarity and congruence. Students graph points and identify coordinates of points in the coordinate plane.

Strand: **M4 Measurement**

Pre-Kindergarten through Grade 12 instructional programs should enable all students to:

- understand measurable attributes of objects and the units, systems, and processes of measurement;
- apply appropriate techniques and tools.

In Grade 7, all students should:

- Standards:
- M4a:** select and use appropriate tools and units of measure when measuring and calculating angles, surface areas, and volumes of rectangular prisms;
  - M4b:** Analyze the structure and uniformity of the metric system and contrast with the customary system;

- M4c:** Develop strategies to determine the surface area and volume of rectangular prisms using geometric models and materials;
- M4e:** Understand the difference between surface area and volume, and demonstrate that two objects may have the same surface area, but different volumes—or may have the same volume, but different surface areas;
- M4f:** use ratios and proportions to solve problems involving scale factors.

Essential To Know: Students use investigation to determine how geometric formulas were derived. Students understand the characteristics of a system of measurements.

Strand: **M5 Data Analysis and Probability**

Pre-Kindergarten through Grade 12 instructional programs should enable all students to:

- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them;
- select and use appropriate statistical methods to analyze data;
- develop and evaluate inferences and predictions that are based on data;
- understand and apply basic concepts of probability.

In Grade 7, all students should:

- Standards:
- M5a:** Read, create and interpret box and whisker plots, stem and leaf plots, scatter plots, and other appropriate types of graphs;
  - M5b:** Analyze the effect of graphing decisions on graphical representation, e.g., scaling, types of graphs, etc.;
  - M5c:** Find, interpret, and appropriately use quartile, interquartile range, and outliers;
  - M5d:** Explain how measures of central tendency are affected by extremes;
  - M5e:** Find and make predictions based on the line of best fit;
  - M5f:** Identify possible misuses of measures of central tendency;
  - M5g:** Use proportionality and probability to make and test conjectures about the results of experiments and simulations;
  - M5h:** Describe multiple outcomes of compound independent events, i.e., using tree diagrams and organized lists.

Essential To Know: Students understand and apply the fundamental concepts of measures of central tendency. Students represent probabilities as ratios, proportions, decimals between 0 and 1 and percentages between 0 and 100.

Strand: **M6 Problem Solving**

- Standard:
- M6a:** Pre-Kindergarten through Grade 12 instructional programs should enable all students to:
    - build new mathematical knowledge through problem solving;
    - solve problems that arise in mathematics and in other contexts;
    - apply and adapt a variety of appropriate strategies to solve problems;
    - monitor and reflect on the process of mathematical problem solving.

Strand: **M7 Reasoning and Proof**

- Standard: **M7a:** Pre-Kindergarten through Grade 12 instructional programs should enable all students to:
- recognize reasoning and proof as fundamental aspects of mathematics;
  - make and investigate mathematical conjectures;
  - develop and evaluate mathematical arguments and proofs;
  - select and use various types of reasoning and methods of proof.

Strand: **M8 Communication**

- Standard: **M8a:** Pre-Kindergarten through Grade 12 instructional programs should enable all students to:
- organize and consolidate their mathematical thinking through communication;
  - communicate their mathematical thinking coherently and clearly to peers, teachers, and others;
  - analyze and evaluate the mathematical thinking and strategies of others;
  - use the language of mathematics to express mathematical ideas precisely.

Strand: **M9 Connections**

- Standard: **M9a:** Pre-Kindergarten through Grade 12 instructional programs should enable all students to:
- recognize and use connections among mathematical ideas;
  - understand how mathematical ideas interconnect and build on one another to produce a coherent whole;
  - recognize and apply mathematics in contexts outside of mathematics.

Strand: **M10 Representation**

- Standard: **M10a:** Pre-Kindergarten through Grade 12 instructional programs should enable all students to:
- create and use representations to organize, record, and communicate mathematical ideas;
  - select, apply, and translate among mathematical representations to solve problems;
  - use representations to model and interpret physical, social, and mathematical phenomena.

## Science Grade 7

Strand:

**S1 Scientific Inquiry** The student demonstrates abilities necessary to do scientific inquiry and an understanding about scientific inquiry; that is, the student:

Standards:

- S1a:** develops research questions that can be answered through scientific investigations.
- S1b:** accesses, evaluates and uses information from a variety of reliable scientific sources.
- S1c:** designs, conducts and records scientific investigations following the general procedures of scientific inquiry.
- S1d:** applies appropriate tools and techniques to systematically collect, record, analyze, and interpret data.
- S1e:** develops logical descriptions, explanations, predictions, and models using evidence.
- S1f:** recognizes and analyzes interpretations, conclusions, and predictions based upon alternative evidence and explanations.
- S1g:** communicates scientific procedures, explanations, and conclusions using appropriate scientific language and writing, and mathematics.

Strand:

**S2 History and Nature of Science** The student demonstrates an understanding of science as a human endeavor, and the history and nature of science; that is, the student:

Standards:

- S2a:** recognizes that scientists are from diverse backgrounds, but that all use scientific habits of mind (such as: reasoning, insight, skill, creativity, intellectual honesty, tolerance for ambiguity, skepticisms, and openness to new ideas) in their work.
- S2b:** explains how scientists formulate and test their explanations, revising when necessary.
- S2c:** investigates and identifies how scientists communicate their results and ideas, and describes and identifies situations in which scientists disagree about interpretation of evidence.
- S2d:** examines the effects of science on cultural development and the relationship between scientific innovation and human history.

Strand:

**S3 Science in Personal and Social Perspectives** The student demonstrates an understanding of safety, natural and human hazards, and their risks and benefits; that is, the student:

Standards:

- S3a:** demonstrates personal and group safety and resource conservation.
- S3b:** thinks critically about risks and benefits of natural, chemical, biological, and personal hazards.
- S3c:** explains environmental degradation on a global scale.

Strand:

**S4 Science and Technology**

The student demonstrates an understanding about science and technology and the nature of technological design; that is, the student:

Standards:

- S4a:** explains how societal challenges may impact scientific research.
- S4b:** tests a design or invention and evaluates its effectiveness.
- S4c:** compares the intended benefits and unintended consequences of technology and how it impacts society.
- S4d:** describes how technology responds to societal needs.

Strand:

**S5 Physical Science**

The student demonstrates a conceptual understanding of matter, motions and forces, and transfer of energy; that is, the student:

Standard:

**S5a:** compares and contrasts chemical and physical properties of matter and groups materials according to those properties and their changes.

Components:

**S5a.1:** Atoms and molecules are perpetually in motion. Increased temperature means greater average energy, so most substances expand when heated. In solids, the atoms are closely locked in position and can only vibrate. In liquids, the atoms or molecules have higher energy, are more loosely connected, and can slide past one another; some molecules may get enough energy to escape into a gas. In gases, the atoms or molecules have still more energy and are free of one another except during occasional collisions.

**S5a.2:** Matter reacts chemically with other matter to form compounds with different chemical and physical properties. In chemical reactions, the total mass is conserved.

**S5a.3:** Substances often are placed in categories or groups if they react in similar ways; metals are an example of such a group.

Standard:

**S5b:** designs and conducts investigations to calculate the speed of moving objects and determine the forces acting on the object.

Components:

**S5b.1:** The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.

**S5b.2:** Forces cause objects to speed up or slow down. Frictional force always works against the direction of motion and speed.

**S5b.3:** Every object exerts gravitational force on every other object. The force depends on how much mass the objects have and on how far apart they are. The force is hard to detect unless at least one of the objects has a lot of mass.

**S5b.4:** The sun's gravitational pull holds the Earth and other planets in their orbits, just as the planets' gravitational pull keeps their moons in orbit around them.

Standard:

**S5c:** compares types of energy and explains how energy is transformed.

Components:

**S5c.1:** Energy appears in different forms. Heat energy is in the disorderly motion of molecules; chemical energy is in the arrangement of atoms; mechanical energy is in moving bodies; gravitational energy is in the separation of mutually attracting masses.

- S5c.2:** When an object has potential energy because of its position, potential energy is transformed to kinetic energy when the object moves.
- S5c.3:** Most of what goes on in the universe—from exploding stars and biological growth to the operation of machines and the motion of people—involves some form of energy being transformed into another. Energy in the form of heat is almost always one of the products of an energy transformation.

Strand:

**S6 Life Science**

The student demonstrates a conceptual understanding of the structure and function of living systems, populations and ecosystems, that is, the student:

Standard:

**S6a:** communicates an understanding of the specialized structures and functions found in humans (multicellular organisms).

Components:

- S6a.1:** All organisms are composed of cells. Most organisms are single cells while others, including humans, are multicellular.
- S6a.2:** Multicellular organisms have specialized cells that perform specialized functions.
- S6a.3:** The human organism has specialized structures (i.e., tissues and organs) that perform specialized functions.
- S6a.4:** The human organism has systems for digestion, respiration, reproduction, circulation, excretion, movement, control, coordination, and protection from disease. These systems interact with one another.

Standard:

**S6b:** examines the influence of genes and the environment on trait expression in organisms.

Components:

- S6b.1:** Genes contain the genetic information for expressing traits.
- S6b.2:** Individual organisms with certain traits are more likely than others to survive and have offspring.
- S6b.3:** New varieties of cultivated plants and domestic animals have resulted from selective breeding for particular traits.
- S6b.4:** Characteristics of organisms can be described in terms of a combination of traits. Some traits are inherited while others result from interactions with the environment.

Standard:

**S6c:** predicts how environmental changes may impact the survival of organisms.

Components:

- S6c.1:** In all environments—freshwater, marine, forest, desert, grassland, mountain, and others—organisms with similar needs may compete with one another for resources, including food, space, water, air, and shelter. The growth and survival of organisms depend on the physical conditions of both the organism and the environment.
- S6c.2:** Changes in environmental conditions can affect the survival of individual organisms and entire species.
- S6c.3:** Extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow it survival.

Strand:

**S7 Earth and Space Sciences**

The student demonstrates a conceptual understanding of Earth's systems, history, and place in the solar system; that is, the student:

- Standard: **S7a:** compares constructive and destructive forces (e.g., plate tectonics, volcanoes, earthquakes) that cause rapid changes on the Earth's surface.
- Components: **S7a.1:** Lithospheric plates on the scales of continents and oceans constantly move at very small rates per year in response to movements in the mantle. Rapid geological events (e.g., earthquakes, volcanic eruptions) result from these plate motions.
- S7a.2:** The interior of the Earth is hot. Heat flow and movement of material within the Earth result in earthquakes and volcanic eruptions.
- Standard: **S7b:** analyzes the four major interacting components (i.e., geosphere, hydrosphere, atmosphere, and biosphere) of the Earth's system.
- Components: **S7b.1:** Scientists study the geosphere, the Earth's core, mantle, and crust; the hydrosphere, its water; the atmosphere, the gases surrounding the Earth; and the biosphere, all life on Earth and the physical environment that supports it.
- S7b.2:** Fresh water, limited in supply, is essential for life and also for most industrial processes. Rivers, lakes, and groundwater can be depleted or polluted, becoming unavailable or unsuitable for life.
- S7b.2:** Changes in environmental conditions can affect the survival of individual organisms and entire species.
- Standard: **S7c:** describes and illustrates the features and structure of the sun and moon.
- Components: **S7c.1:** The Sun and the Moon have distinctive features.
- S7c.2:** The Sun is the major source of energy for phenomena on the Earth's surface.
- S7c.3:** The Sun, like all stars, is composed of gases.
- S7c.4:** The Moon is the Earth's single, natural satellite with no atmosphere, less gravitational force than Earth, no weather, and a surface that's consistent with frequent impact from space objects.

## Social Studies: Grade 7 - World Geography

Standards Introduction: The standards for seventh grade students cover the geography of the world and human interaction with the environment. Students use data resources, geographic tools, map projections, and satellite images to generate, manipulate and interpret information. Atlases, data bases, grid systems, charts, graphs, and maps are used to explore geographic relationships. Students explore the causes, consequences, and possible solutions to global issues, such as health, security, resource allocation and environmental quality.

### SK – Skills

The Social Studies program promotes essential skills to increase the students ability to acquire information and manipulate data, develop and present policies and debates, construct new knowledge, and participate in groups. Each skill is dependent upon and enriched by all other skills, so that the learner can:

- Skills:
- SK1a:** interpret political and world maps.
  - SK1b:** interpret data and create graphic displays (charts, graphs, diagrams, graphic organizers, and time lines) using technology.
  - SK1c:** infer information from advertisements, news articles, cartoons, captions, photographs, etc.
  - SK1d:** use primary sources (biographies, journals, interviews, letters) to collect, analyze and synthesize information.
  - SK1e:** correlate and cross reference social studies materials (index, appendix, glossary).
  - SK1f:** create a multimedia report using text, color, and importing graphics, sound, special effects and/or animation.
  - SK1g:** research information using text based databases.

Strand/Theme

### SS1 Citizenship

Social studies programs should include experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic republic, so that the learner can:

- Standards:
- SS1a:** apply methods of geographical inquiry to make an informed decision about an issue.
  - SS1b:** demonstrate tolerance for other people and cultures.
  - SS1c:** identify sources and examples of citizens' rights and responsibilities in different cultures.
  - SS1d:** define and demonstrate the attributes of a global citizen.

Strand/Theme

### SS2 Culture

Social studies programs should include experiences that provide for the study of culture and cultural diversity, so that the learner can:

- Standards:
- SS2a:** describe the concept of civilization and its key components.
  - SS2b:** explain and describe how language, literature, the arts, and artifacts demonstrate beliefs, values, and contributions to the transmission of culture.
  - SS2c:** identify commonalities and differences among cultures.

Strand/Theme

**SS3 Time, Continuity, and Change**

Social studies programs should include experiences that provide for the study of the way human beings view themselves in and over time, so that the learner can:

Standard:

**SS3a:** use key concepts to explain, analyze, and show connections among patterns of historical change.

Strand/Theme

**SS4 Space and Place**

Social studies programs should include experiences that provide for the study of space and place, so that the learner can:

Standards:

**SS4a:** use geographic tools to collect, analyze, and interpret data and locate geographic sites.

**SS4b:** describe adaptation as necessary for living in a specific geographic region.

**SS4c:** develop and apply an understanding of the physical world through aesthetic modes of literary expression.

**SS4d:** analyze the distribution and migration of populations.

Strand/Theme

**SS5 Individual Development and Identity**

Social studies programs should include experiences that provide for the study of individual development and identity, so that the learner can:

Standards:

**SS5a:** identify ways regional, ethnic, and national cultures influence individuals' daily lives.

**SS5b:** explain the ways family, gender, ethnic, national, and institutional affiliations influence personal identity.

**SS5c:** describe an individual's connections to various places, based on personal experiences.

Strand/Theme

**SS6 Individuals, Groups, and Institutions**

Social studies programs should provide for the study of the interaction among individuals, groups, and institutions, so that the learner can:

Standards:

**SS6a:** demonstrate an understanding of concepts such as role, status, and social class.

**SS6b:** relate how groups and institutions form, influence, and perpetuate values, beliefs, and attitudes.

**SS6c:** describe the roles of international and multinational organizations.

Strand/Theme

**SS7 Production, Distribution, and Consumption**

Social studies programs should include experiences that provide for the study of how people organize for the production, distribution, and consumption of goods and services, so that the learner can:

Standards:

**SS7:** identify the major factors that have contributed to the economic development of a given nation.

**SS7b:** use appropriate economic terminology in problem solving.

**SS7c:** analyze the impact of unequal distribution of wealth on nations.

Strand/Theme

**SS8 Power, Authority, and Governance**

Social studies programs should include experiences that provide for the study of how people create and change structures of power, authority, and governance, so that the learner can:

Standards:

- SS8a:** know the roles and functions of basic political systems and organizations.
- SS8b:** evaluate ways that nations and organizations respond to economic instability and political problems.
- SS8c:** compare how dissent and related forms of citizen actions influence public policy.
- SS8d:** develop an awareness of current information about community, national, and world events.

Strand/Theme

**SS9 Science, Technology, and Society**

Social studies programs should include experiences that provide for the study of the relationships among science, technology, and society, so that the learner can:

Standards:

- SS9a:** describe the influence of culture on scientific and technological advancements.
- SS9b:** understand how changes in values, beliefs, attitudes, and choices have resulted from new scientific knowledge.
- SS9c:** use appropriate software for researching geographic data, constructing maps, and conducting computer simulations.

Strand/Theme

**SS10 Global Connections**

Social studies programs should include experiences that provide for the study of global connections and interdependence, so that the learner can:

Standards:

- SS10a:** identify behaviors which foster global cooperation among individuals, communities, and nations.
- SS10b:** describe how cultural elements such as language, art, music, and belief systems can both connect people and cause misunderstanding.
- SS10c:** show how technology affects global interdependence.
- SS10d:** evaluate the concept of universal human rights and its effects on countries.
- SS10e:** explore the causes and consequences of global issues such as resource allocation, pollution, environmental quality, security, and economic development.

## Health Education: Grade 7

In addition to the content standards, Health Education teachers must instill health literacy skills (HESK) into classroom activities. The six HESK have a two-fold benefit. First, they promote personal, family, and community health. Second, they teach essential and transferable skills that include accessing data, analyzing information, setting goals, and communicating ideas.

Strand:

### **HESK Health Literacy Skills**

The student applies health literacy skills in concert with health concepts to enhance personal, family and community health; that is, the student will:

Standards:

- HESK1:** access valid health information;
- HESK2:** practice health-enhancing behavior;
- HESK3:** analyze influences on health;
- HESK4:** use interpersonal communications skills to enhance health;
- HESK5:** use goal setting and decision making skills to enhance health; and
- HESK6:** advocate for health.

Strand:

### **HE1 Personal and Community Health**

The student understands the basic concepts of hygiene, health habits, and health promotion; that is, the student will:

Standards:

- HE1a:** classify potential environmental risks to health;
- HE1b:** analyze the impact of internal and external factors on the incidence and prevalence of noncommunicable diseases;
- HE1c:** explain the components of wellness and their relationship to total health;
- HE1d:** describe how physical, social, and emotional environments influence personal health and wellness;
- HE1e:** analyze how lifestyle and family history are related to the causes or prevention of disease; and
- HE1f:** compare various personal and community health-related careers.

Strand:

### **HE2 Safety and Injury Prevention**

The student demonstrates understanding of basic concepts related to safety, injury prevention or sudden illness, and prevention of child abuse and child neglect; that is, the student will:

Standards:

- HE2a:** identify ways to address safety risks present in school and in the community;
- HE2b:** predict outcomes of risk taking behaviors for the student's age group;
- HE2c:** demonstrate strategies for preventing and responding to personal injuries; and
- HE2d:** examine careers related to safety and injury prevention.

Strand:

### **HE3 Nutrition and Physical Activity**

The student understands how healthful nutrition and physical activity contribute to growth and energy and help prevent chronic diseases such as heart disease, cancer, and diabetes; that is, the student will:

Standards:

- HE3a:** identify the relationship between food intake and chronic disease;

**HE3b:** analyze a personal nutritional assessment to determine health protections and risks;

**HE3c:** formulate a plan for daily physical activity; and

**HE3d:** examine careers related to nutrition and physical activity.

Strand

**HE4 Mental Health**

The student understands how mental health contributes to general well-being; that is, the student will:

Standards:

**HE4a:** describe healthful ways to express and manage strong emotions;

**HE4b:** demonstrate healthful strategies for diminishing bullying behaviors;

**HE4c:** describe the characteristics of good mental health;

**HE4d:** describe situations requiring professional health services; and

**HE4e:** compare and contrast careers related to mental health.

Strand

**HE5 Alcohol, Tobacco, and Other Drugs**

The student understands licit and illicit drugs and how to prevent abuse and access intervention and treatment resources; that is, the student will:

Standard:

**HE5a:** recognize warning signs of drug dependence;

**HE5b:** describe intervention and treatment services related to drug dependency and abuse; and

**HE5c:** identify careers related to pharmaceutical fields and the prevention, intervention, and treatment of chemical dependency.

Strand

**HE6 Family Life and Human Sexuality**

The student understands the developmental changes that occur as he or she grows and matures through childhood to young adulthood and how these changes prepare one for adult roles in the family and society; that is, the student will:

Standard:

**HE6a:** apply information about the structure and function of the human reproductive system to varied rates and stages of adolescent development;

**HE6b:** analyze how family values, culture, religious views, and other factors influence decisions about family planning;

**HE6c:** analyze routes of transmission and strategies for prevention of HIV/AIDS and other sexually transmitted diseases (STDs); and

**HE6d:** examine careers related to family life and human sexuality.

## Physical Education: Grade 7

To a greater extent than in the core academic subjects, Physical Education teachers must infuse personal and social skill development in helping students meet and exceed the content standards. Consequently, the presentation of the Physical Education Standards is preceded by a list of complementary Personal and Social Development Skills (PESK). Including the PESK components in teaching the Physical Education standards is critical in promoting lifelong, healthy physical activity and in realizing the wide range of benefits associated with participation in dance, sports, games, and other physical activities.

Strand:

**PESK Personal and Social Development Skills** The student applies responsible personal and social development skills in a physical activity setting. In Grade 7 all students will:

Standards:

- PESK1:** participate fully and communicate cooperatively with others;
- PESK2:** perform activities safely and follow rules of etiquette and ethical behavior;
- PESK3:** display age appropriate self-control and discipline;
- PESK4:** display a willingness to receive and use feedback to improve performance;
- PESK5:** accept the decisions of and respond positively to teachers/officials in charge of games/activities;
- PESL6:** choose healthful physical activities to experience fun, challenge, self-expression and/or social interaction;
- PESK7:** display an interest in and assist and encourage others' efforts;
- PESK8:** display behaviors that are supportive and inclusive;
- PESK9:** self-initiate behaviors that contribute to personal and partner/group effort;
- PESK10:** adjust behavior to prevent/reconcile conflicts.

Strand:

**PE1 Motor Skills and Movement Patterns** Competency in motor skills and movement patterns is needed to perform a variety of physical activities. In Grade 7 all students will:

Standards:

- PE1a:** apply combinations of specialized motor skills and patterns with basic strategic and tactical skills in a variety of modified sports and other activities;
- PE1b:** demonstrate critical elements in specialized skills related to sports (e.g., overhand throw for distance/force, serving and bumping a volleyball, shooting a basketball, shooting a lay-up, forehand and backhand striking with a racquet or club, batting);
- PE1c:** perform selected folk, country, square, line, creative, rhythmic gymnastics, and/or aerobic dances;
- PE1d:** use correct terminology associated with modified sports and cooperative/challenge activities;
- PE1e:** monitor change in the development of movement skills in order to improve performance;
- PE1f:** take responsibility for monitoring practice and progress;
- PE1g:** demonstrate and articulate the importance of following rules and safety procedures; and

**PE1h:** select and use appropriate protective equipment for preventing injuries (e.g., helmets, elbow/kneepads, wrist guards, proper shoes, and clothing).

Strand:

**PE2 Physical Activity and Fitness**

A physically active lifestyle is essential to maintain a health-enhancing level of physical fitness. In Grade 7 all students will:

Standards:

**PE2a:** analyze personal data on moderate-to-vigorous physical activity performed at school, at home, and in the community gathered using a pedometer;

**PE2b:** participate regularly in physical activity opportunities in school, at home, and/or in the community;

**PE2c:** analyze personal health-related fitness based on results of participation in DoDEA Physical Fitness Assessment Program;

**PE2d:** set personal health-related fitness goals based on assessment results and periodically monitor progress;

**PE2e:** monitor heart rate during aerobic activities for time below, above, and in the target heart-rate zone using a heart-rate monitor; and

**PE2f:** demonstrate appropriate individual stretching techniques as part of warm-up and cool-down for specified sports and physical activities.

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Visual Arts: Grade 7

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Strand:

**VA1 Media, Techniques, and Processes**

Demonstrates understanding and can apply media, techniques, and processes.

Standards:

**VA1a:** The student creates works of art that demonstrate knowledge of media, computer technology, techniques and processes.

**VA1b:** The student creates two-and three-dimensional works of art that reflect competency and craftsmanship.

**VA1c:** The student creates works of art that express experiences and ideas and reflect craftsmanship and competency.

**VA1d:** The student uses art materials and tools, including technology, in a safe and responsible manner.

Strand:

**VA2 Structures and Functions**

Demonstrates knowledge of structures and functions.

Standards:

**VA2a:** The student demonstrates an understanding how elements of art and principles of design organize art and explains how each fulfills a particular role or purpose.

**VA2b:** The student applies the elements of art and principles of design to produce works of art.

**VA2c:** The student selects and applies the elements of art and principles of design to communicate ideas.

Strand:

**VA3 Subject Matter Symbols, and Ideas**

Chooses and evaluates a range of subject matter, symbols, and ideas.

Standards:

**VA3a:** The student integrates a wide variety of subjects, symbols and ideas that communicate intended meaning in works of art.

**VA3b:** The student examines art work in progress and revise for clarity of expression.

**VA3c:** The student uses a variety of sources for subject matter, symbols and ideas in personal work.

Strand:

**VA4 History and Culture**

Demonstrates understanding of the visual arts in relation to history and cultures.

Standards:

**VA4a:** The student compares and contrasts aspects of social, culture, ecological, religious and political conditions in the execution of art.

**VA4b:** The student describes the function and meaning of art objects within a cultural and historical contexts.

**VA4c:** The student describes how of time and place influence visual art.

**VA4d:** The student recognizes significant aspects of the artistic heritage of the host nation and other cultures.

Strand:

**VA5 Characteristics and Merits of Work**

Reflects upon and assesses the characteristics and merits of their work and the work of others.

Standards:

**VA5a:** The student uses art terminology in describing works of art.

**VA5b:** The student responds to and interprets identified works of art.

**VA5c:** The student evaluates works of art using a formal system.

Strand:

**VA6 Connections to Other Disciplines**

Makes connections between the visual arts and the other disciplines.

Standards:

**VA6a:** The student describes ways the visual arts relate to other disciplines.

**VA6b:** The student identifies potential career and leisure pursuits in the arts.

**VA6c:** The student explores the idea that art and other disciplines use problem-solving techniques.

**VA6d:** The student identifies and integrates similar subject matter, themes, purposes, historical periods or technology.

Strand:

**VA7 Technology Integration**

Understands and creates art through technology.

Standards:

**VA7a:** The student creates original works of art by using a variety of technological tools.

**VA7b:** The student uses technological tools to access a variety of information and resource materials relating to the visual arts.

**VA7c:** The student integrates traditional art production techniques with new technology to create art.

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Music: Grade 7

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Strand:

**MU1**

Performs alone and/or with others a varied repertoire of music

Standards:

**MU1a:** The student performs Level 2 (refer to Glossary) music demonstrating correct posture, playing position, breath, bow, or stick control.

**MU1b:** The student performs with technical accuracy in tone quality, articulation/diction, pitch, phrasing, and rhythm.

**MU1c:** The student demonstrates expression and interpretation in various styles.

Strand:

**MU2**

Reads and notates music

Standards:

**MU2a:** The student reads and notates music with changes of simple meters using whole, half, quarter, eighth and dotted notes/rests.

**MU2b:** The student identifies tonal centers; reads and notates music in at least 5 keys.

**MU2c:** The student defines and uses standard symbols and terms for tempo, articulation, and expression.

Strand:

**MU3**

Listens to, responds to, and describes music

Standards:

**MU3a:** The student listens to performances of musical genres including pop, folk, classical and jazz.

**MU3b:** The student responds to musical events (i.e. changes in instrumentation, form and tempo) occurring in musical performances.

**MU3c:** The student describes musical events occurring in musical performances.

**MU3d:** The student explores simple improvisation.

Strand:

**MU4 History and Culture**

Demonstrates understanding of music in relation to history and culture.

Standards:

**MU4a:** The student describes distinguishing historical or cultural characteristics of listening examples.

**MU4b:** The student compares distinguishing historical or cultural characteristics of listening examples, to include the host nation.

**MU4c:** The student performs music of different cultures and historical periods.

Strand:

**MU5 Characteristics and Merits of Works and Performances**

Reflects upon and assesses the characteristics and merits in performances in their music and the music of others.

Standards:

**MU5a:** The student explores criteria for evaluating the quality and effectiveness of musical performances and works.

**MU5b:** The student applies criteria to personal listening preferences and performances.

**MU5c:** The student evaluates the quality and effectiveness of performances.

Strand:

**MU6 Connections to Other Disciplines** Makes connections between music and the other disciplines.

Standards:

**MU6a:** The student integrates music with other disciplines.

**MU6b:** The student links music and one other discipline in a multi-disciplinary project or performance.

**MU6c:** The student identifies and explores music career opportunities.

Strand:

**MU7 Technology Integration** The student understands and creates music through technology.

Standards:

**MU7a:** The student uses a variety of technological tools to access information and resource materials relating to music.

**MU7b:** The student explores creating an original work of music by using a variety of technological tools.

**MU7c:** The student explores musical styles and sound quality using technology.

**MU7d:** The student develops an awareness of music career opportunities in new technologies.

## Foreign Language: Level I

Performance Descriptions:	In Level I, students develop speaking, listening, and understanding skills that will enable them to function in everyday situations. The student also develops reading and writing skills appropriate to the level of study. The student demonstrates an appreciation of the culture and people of the target language.
Strand: <b>FL1 Speaking, Listening, and Understanding</b>	Speaking, listening, and understanding are fundamental processes which people use to express, explore, and learn about ideas. The student speaks and understands the target language as a result of various instructional strategies focusing on oral proficiency. These include use of the target language in familiar situations to enhance vocabulary development and oral proficiency skills.
Standard:	<b>FL1a:</b> The student understands and interprets spoken expression in the target language on a variety of topics. The student:
Components:	<b>FL1a.1:</b> builds and expands a basic vocabulary in the target language; <b>FL1a.2:</b> understands the sound systems of the target language, discriminates individual sounds and intonation of the target language; <b>FL1a.3:</b> understands basic idiomatic expressions and cognates; <b>FL1a.4:</b> responds appropriately to spoken commands; and <b>FL1a.5:</b> comprehends the main ideas in simple spoken presentations.
Examples:	<i>Examples of activities through which students provide evidence of listening and understanding include:</i> <ul style="list-style-type: none"><li>• Understand and respond to instructions and TPR exercises.</li><li>• Listen to simple songs or nursery rhymes.</li><li>• Answer simple questions about a listening activity with graphic fill-ins.</li><li>• Listen for useful expressions in an oral presentation with visuals.</li></ul>
Standard:	<b>FL1b:</b> The student engages in conversations; provides and obtains information, expresses feelings and emotions, and exchanges opinions in the target language. The student:
Components:	<b>FL1b.1:</b> engages in basic classroom interactions; <b>FL1b.2:</b> uses basic idiomatic expressions and expressions of courtesy; and <b>FL1b.3:</b> uses the target language in everyday situations.
Examples:	<i>Examples of activities which provide evidence of speaking include:</i> <ul style="list-style-type: none"><li>• Make introductions.</li><li>• Respond to simple questions on basic topics.</li><li>• Answer affirmatively or negatively.</li><li>• Express likes and dislikes.</li><li>• Identify classroom objects.</li></ul>
Strand: <b>FL2 Reading and Writing</b>	Reading is a process of understanding the written target language. It requires students to recognize the printed word, interpret the text, and demonstrates comprehension of the text in the target language. Writing is a process through which the writer shapes the target language to communicate effectively.
Standard:	<b>FL2a:</b> The student reads material in the target language. The student:
Component:	<b>FL2a.1:</b> reads and comprehends simple written directions;

**FL2a.2:** reads a passage;  
**FL2a.3:** recognizes cognates and words in context; and  
**FL2a.4:** reads aloud using correct pronunciation, inflection, and intonation.

Examples:

*Examples of activities which provide evidence of speaking include:*

- *Read basic forms of communications, such as lists, post cards, messages, and environmental print.*
- *Read simple dialogues on topics such as greetings and introductions, restaurants, school, shopping and family. Read simple biographies including descriptions of physical traits, personality, place of residence and pastimes.*
- *Read descriptions of friends and family members..*
- *Read shopping lists, to do lists and other interactions.*

Standard:

**FL2b:** The student comprehends and interprets the main idea of a variety of written materials in the target language. The student:

Components:

**FL2b.1:** expands reading vocabulary; and  
**FL2b.2:** predicts meaning of key words in a simple selection;

Examples:

*Examples of activities through which students provide evidence of reading material in the target language include:*

- *Use contextual clues in cultural readings to acquire new vocabulary and recognize cognates.*
- *Read simple children stories, myths, and legends.*
- *Write interview questions seeking biographical data.*
- *Read notes, post cards, and pen pal letters.*
- *Read simple restaurant and movie reviews.*

Standard:

**FL2c:** The student writes words and simple expressions in the target language. The student:

Components:

**FL2c.1:** writes forms of familiar spoken language.  
**FL2c.2:** presents a simple written report on familiar topics;  
**FL2c.3:** writes descriptions of familiar topics; and  
**FL2c.4:** uses impersonal expressions.

Examples:

*Examples of activities through which students provide evidence of writing in the target language include:*

- *Collaborate in groups to create simple dialogues on topics such as greetings and introductions.*
- *Write simple biographies including descriptions of physical traits, personality, place of residence, and pastimes.*
- *Describe friends and family members for a photo album or family tree*
- *Write shopping lists, "to do" lists, and other interactions.*

Standard:

**FL2d:** The student demonstrates written communication in the target language for a variety of needs. The student:

Components:

**FL2d.1:** writes questions to obtain information;  
**FL2d.2:** writes appropriate answers to questions or familiar topics; and  
**FL2d.3:** creates a writing sample with point of view and purpose.

Examples:	<p><i>Examples of activities through which students provide evidence of writing in the target language include:</i></p> <ul style="list-style-type: none"><li>• <i>Compose interview questions seeking biographical data.</i></li><li>• <i>Write a note inviting a friend to dinner, a movie or sporting event.</i></li><li>• <i>Write postcards and pen-pal letters.</i></li><li>• <i>Review a restaurant expressing likes and dislikes.</i></li><li>• <i>Make inquiries seeking geographical locations.</i></li></ul>
Standard:	<b>FL2e:</b> The student demonstrates communicative and interpretative skills in both reading and writing in the target language. The student:
Component:	<b>FL2e.1:</b> reads and comprehends material, and produces written work that reflects understanding of text.
Examples:	<p><i>Examples of activities through which students provide evidence of reading material and writing in the target language include:</i></p> <ul style="list-style-type: none"><li>• <i>Read a short letter and respond.</i></li><li>• <i>Read a cultural passage and summarize with a graph, comic strip or other written expression.</i></li><li>• <i>Read a passage and answer questions pertaining to the passage.</i></li></ul>
Strand: <b>FL3 Cultures</b>	<p>The understanding of another culture includes the relationships among the perspectives (attitudes, values), the practices (patterns of social interactions), and the products (foods, book, games, etc.) of a society.</p>
Standard:	<b>FL3a:</b> The student demonstrates an understanding of the different aspects of the culture studied. The student:
Components:	<p><b>FL3a.1:</b> recognizes attitudes, values and beliefs; <b>FL3a.2:</b> explores formal social, political and economic institutions; <b>FL3a.3:</b> examines celebrations, holidays, traditions, folk stories, legends; <b>FL3a.4:</b> discovers foods; and <b>FL3a.5:</b> explores fine arts, literature and entertainment.</p>
Examples:	<p><i>Examples of activities through which students provide evidence of cultural understanding and sensitivity of the target language include:</i></p> <ul style="list-style-type: none"><li>• <i>Study appropriate gestures in the culture studied.</i></li><li>• <i>Greet strangers with appropriate forms of address.</i></li><li>• <i>Learn and identify the main street signs and facilities in the country of the culture studied.</i></li><li>• <i>Learn about the form of government in the country of the culture studied.</i></li><li>• <i>Learn about general economy of the country of the culture studied.</i></li><li>• <i>Learn about the main holidays in the culture studied.</i></li><li>• <i>Learn a few proverbs in the target language.</i></li><li>• <i>Learn a tongue twister in the target language.</i></li><li>• <i>Make a dish based on a recipe of the culture studied.</i></li><li>• <i>Learn and sing a popular nursery rhyme in the target language.</i></li><li>• <i>Play a simple game from the culture studied.</i></li><li>• <i>Identify from flashcards or photos the most famous people in the history of the culture studied.</i></li></ul>

Standard:	<b>FL3b:</b> The student reinforces and expands their knowledge of other disciplines through the culture studied, and vice versa. The student:
Components:	<b>FL3b.1:</b> connects information studied in other subjects to their learning of the culture studied and vice versa; and <b>FL3b.2:</b> applies the concepts acquired in the culture studied in other curricular areas.
Examples:	<i>Examples of activities through which students provide evidence of cultural understanding and sensitivity of the target language include:</i> <ul style="list-style-type: none"><li>• <i>Draw a map of the country studied and show and describe it to the geography class.</i></li><li>• <i>Learn the units of measurement in the culture studied and change them into his/her metrical system, using math concepts.</i></li><li>• <i>Identify the major types of flowers and animals, learned in science class, in the culture studied.</i></li></ul>
Standard:	<b>FL3c:</b> The student expands his/her views of the world through the exploration of the culture studied by making parallels between the culture studied and his/her own. The student:
Components:	<b>FL3c.1:</b> discovers and compares similarities and differences between the two cultures; <b>FL3c.2:</b> develops an awareness and understanding of alternative views. <b>FL3c.3:</b> analyzes and evaluates similarities and differences between the two cultures; and <b>FL3c.4:</b> develops the ability to hypothesize about cultural systems in general.
Examples:	<i>Examples of activities through which students provide evidence of cultural understanding and sensitivity of the target language include:</i> <ul style="list-style-type: none"><li>• <i>Learn and compare appropriate simple patterns of social behavior in public.</i></li><li>• <i>Study and identify a list of borrowings and cognates.</i></li><li>• <i>Guess names of cities based on similarities in the spelling (For Romance languages, teacher writes in the target language on the board a list of names of important cities in the culture studied).</i></li><li>• <i>Learn about the differences between the different ways to behave when introduced to new acquaintances and compare these ways to his/her own culture.</i></li><li>• <i>Guess which products belong to the culture studied and explain the reasons after being shown a picture representing many products.</i></li></ul>
Standard:	<b>FL3d:</b> The student demonstrates cultural understandings by interacting in real-life situations, applying appropriate social protocols and language. The student:
Components:	<b>FL3d.1:</b> communicates on a personal level with target language speakers; <b>FL3d.2:</b> participates in community celebrations in the target culture; and <b>FL3d.3:</b> involves him/herself in local community events and activities or simulated real-life situations.

Examples:

*Examples of activities through which students provide evidence of cultural understanding and sensitivity of the target language include:*

- *Write a postcard to a native speaker in the community of the culture studied.*
- *Write a short note to the florist shop, requiring a bouquet or a plant to give as a gift to a native speaker in order to celebrate his/her birthday.*
- *Prepare food from the culture studied in order to celebrate a holiday and tell the class about that specific holiday.*
- *Write a shopping list of food items to order at a local restaurant in the culture studied.*