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Description of the Adaptations to the New Standards® Performance Standards and New Standards® Primary Literary Standards by DoDEA

NCEE and the University of Pittsburgh collaborated in developing the New Standards® Performance Standards, which are curriculum standards for English and Language Arts (ELA), mathematics, science, and applied learning for grades 4, 8 and 10, and the New Standards® Primary Literary Standards, which are standards for reading and writing for grades K through 3. DoDEA has developed content standards for grades Pre-K, 5, 6, 7, 9, 11 and 12 based on New Standards® Performance Standards and the New Standards® Primary Literary Standards. DoDEA will use its NCEE-based content standards as a basis for conducting subsequent curriculum and standards work, to include a collection of student work for use as exemplars of performance benchmarks, and the description of how such student work meets DoDEA content standards. It will also continue to refine existing NCEE-based standards solely for its own internal applications.

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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 of grade 5 (700L-1000L). 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; and
- 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:

- *Make connections between literary works according to a common theme.*
- *Participate in formal or informal book talk.*
- *Produce a literary response paper.*
- *Create an annotated book list organized according to author, theme, or genre.*
- *Recognize and compare cultural differences within text.*
- *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.*
- *Relate personal experiences to materials read using a graphic organizer.*

Standard:	E1c: The student reads and comprehends informational materials to develop understanding and expertise and produces written or oral work that:
Components:	E1c.1: restates or summarizes information; E1c.2: relates new information to prior knowledge and experience; E1c.3: extends ideas; and E1c.4: 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">• <i>Present information to an audience of peers.</i>• <i>Produce a chapter book on a factual topic using more than one source.</i>• <i>Rewrite video game instructions for a younger reader.</i>• <i>Summarize and expand oral and written presentation using content specific/ technical vocabulary.</i>• <i>Retell an informational selection to demonstrate understanding.</i>• <i>Organizes key information read using a graphic format.</i>
Standard:	E1d: 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:	E1d.1: identifies the social context of the document; E1d.2: identifies the author’s purpose; E1d.3: formulates an argument and offers evidence to support it; E1d.4: examines or makes use of the appeal of a document to audiences both friendly and hostile; and E1d.5: 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">• <i>Summarize and critique two or more local newspaper articles related to the same topic or issue.</i>• <i>Respond to a public address made by an adult, e.g., the principal, a PTA/PTO officer, a visiting author.</i>• <i>Write a letter to the editor in response to an editorial or to an article of local or national importance.</i>• <i>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).</i>• <i>Evaluate the use of language patterns and literary devices such as, figurative language and dialogue.</i>

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:

E2a: The student produces a report that:

Components:

E2a.1: engages the reader by establishing a context, creating a persona, and otherwise developing reader interest;

- E2a.2:** develops a controlling idea that conveys a perspective on the subject;
- E2a.3:** creates an organizing structure appropriate to a specific purpose, audience and context;
- E2a.4:** includes appropriate facts and details;
- E2a.5:** excludes extraneous and inappropriate information;
- E2a.6:** uses a range of appropriate strategies, such as providing facts and details, describing or analyzing the subject, and narrating a relevant anecdote; and
- E2a.7:** provides a sense of closure to the writing.

Examples:

Examples of reports include:

- *An informative report (comparing and contrasting attributes, e.g., comparing and contrasting the attributes of two civilizations).*
- *A chapter book.*
- *An attribute book (a book on a single subject not necessarily developed by chapters sometimes called and “all-about,” e.g. “all about whales” “all about earthquakes”).*

Standard:

E2b: The student produces a response to literature that:

Components:

- E2b.1:** engages the reader by establishing a context, creating a persona, and otherwise developing reader interest;
- E2b.2:** advances a judgment that is interpretive, analytic, evaluative, or reflective;
- E2b.3:** supports judgment through references to the text, references to other works, authors, or non-print media, or references to personal knowledge;
- E2b.4:** demonstrates an understanding of the literary work;
- E2b.5:** provides a sense of closure to the writing.
- E2b.6:** anticipates and answers a reader’s questions;

Examples:

Examples of responses to literature include:

- *A literary response paper.*
- *A book review.*
- *A parody.*
- *A literary analysis paper.*
- *A comparison of a children’s literary classic with a televised version of the same work.*
- *A brochure.*
- *A journal*
- *A newspaper or magazine article.*

Standard:

E2c: The student produces a narrative account (fictional or autobiographical) that:

Components:

- E2c.1:** engages the reader by establishing a context, creating a point of view, and otherwise developing reader interest;
- E2c.2:** establishes a situation, plot, point of view, setting, and conflict (and for autobiography, the significance of events);
- E2c.3:** creates an organizing structure;
- E2c.4:** includes sensory details and concrete language to develop plot and character;
- E2c.5:** excludes extraneous details and inconsistencies;
- E2c.6:** develops complex characters;

E2c.7: uses a range of appropriate strategies, such as dialogue and tension or suspense; and

E2c.8: provides a sense of closure to the writing.

Examples:

Examples of narrative accounts include:

- *An autobiographical account.*
- *An imaginative story.*
- *A fiction or non-fiction story.*
- *A narrative picture book.*
- *A retelling of a traditional story from an alternative point of view, e.g., a tall tale.*

Standard:

E2d: The student produces a narrative procedure that:

Components:

E2d.1: engages the reader by establishing a context, creating a persona, and otherwise developing reader interest;

E2d.2: provides a guide to action that anticipates a reader's needs; creates expectations through predictable structures, e.g., headings; and provides transitions between steps;

E2d.3: makes use of appropriate writing strategies such as creating a visual hierarchy and using white space and graphics as appropriate;

E2d.4: includes relevant information;

E2d.5: excludes extraneous information;

E2d.6: anticipates problems, mistakes, and misunderstandings that might arise for the reader.

E2d.7: provides a sense of closure to the writing.

Examples:

Examples of narrative procedures include:

- *A set of rules for organizing a class meeting.*
- *A chapter book developed around procedures, e.g., how to have a safe vacation, with chapters on safe swimming, safe games, and other issues of safety.*
- *A how to report to accompany aboard game.*
- *A set of procedures for accessing information in the library.*
- *A rewrite of video game instructions for a younger reader.*

Standard:

E2e: The student produces a persuasive essay that:

Components:

E2e.1: engages the reader by establishing a context, creating a persona, and otherwise developing reader interest;

E2e.2: develops a controlling idea;

E2e.3: 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;

E2e.4: includes appropriate information and arguments;

E2e.5: excludes information and arguments that are irrelevant;

E2e.6: anticipates reader concerns and counter-arguments;

E2e.7: provides a sense of closure to the writing.

Examples:

Examples of persuasive essays include:

- *A position paper.*
- *An account of a rating given to a product or policy.*
- *A letter to an official that uses arguments to support an opinion.*

- *A speech for a candidate for school or public office.*
- *A Power Point presentation based on a text read.*
- *An advertisement.*
- *A commercial script.*

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...”; and

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.*
- *Dialogue with a teacher, parent or adult about a reflection on a collection of the student’s work.*

Standard:

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

Components:

E3b.1: displays appropriate turn-taking behaviors;

E3b.2: actively 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, co-plan, co-conduct, form coalitions 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 co-plan, co-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 other than just for classmates.*
- *Role-play to better understand a certain historical event.*
- *Participate in peer writing response groups*
- *Read aloud in turn, then explain why they like or dislike a work and offer sufficient support for their reasons.*
- *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.*
- *Dramatize a story, including characters, dialogue, and simple stage directions; perform assigned roles for the class.*
- *Listen to introductory pages of literary pieces and make predictions.*
- *Retell a familiar story that everyone knows. Take turns telling parts of the story. One person tells the first sentence then the next person tells the next sentence, etc. One person tells the entire story. Tell how it changed when it was retold.*

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:** engages the audience with appropriate verbal cues and eye contact; and
- E3c.5:** projects a sense of individuality and personality in selecting and organizing content, and in delivery.
- E3c.6:** develops several main points relating to a single thesis;

Examples:

Examples of presentations include:

- *A presentation of project plans or a report for an Applied Learning project.*
- *A recounting of various anecdotes in an attempt to persuade the class to change a class policy by exemplifying the impact of such a change.*
- *A report to adults and students about a meaningful project that would enhance the quality of life or learning in the school environment.*
- *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 actually known by the student.
- A summary of a piece of significant non-fiction writing in order to orally communicate the essential points to classmates.
- An event recounted in a student's life to tell his/her grandchildren, presented to the class with details and props.

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; and

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 particularly memorable commercials with an analysis on how the media manipulates the audience through the appeal.
- Evaluate a television program/video format or style; compare and contrast different styles.
- Prepare a presentation that expresses a position about a major news event and contrast this presentation to one done via the public broadcasting venue.
- Create a multimedia presentation that compares television news and commentaries and incorporates sound, photos or video, and animation.

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 a basic 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; and

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.*
- *Proofread own writing or the writing of others, using dictionaries and other resources, including the teacher or peers as appropriate*
- *Observe conventions of language during formal oral presentations.*
- *Revise a piece of writing by combining sentences.*

Standard:

E4b: 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:

E4b.1: adding or deleting details;

E4b.2: adding or deleting explanations;

E4b.3: clarifying difficult passages;

E4b.4: rearranging words, sentences, and paragraphs to improve or clarify meaning;

E4b.5: sharpening the focus; and

E4b.6: reconsidering the organizational structure.

Examples:

Examples of activities through which students might produce evidence of analyzing and revising work include:

- *Incorporate into revised drafts, as appropriate, suggestions taken from critiques made by peers and teachers.*
- *Produce a series of distinctly different drafts that result in a polished piece of writing or a presentation.*
- *Consider and respond to the critiques of peers and teachers.*
- *Critique the writing or oral presentation of a peer.*

Strand:

E5 Literature

Literature consists of poetry, fiction, non-fiction, and essays as distinguished from instructional, expository, or journalistic writing.

Standard:

E5a: The student responds to non-fiction, fiction, poetry, and drama using interpretive, critical, and evaluative processes; that is, the student:

Components:

E5a.1: identifies recurring themes across works;

E5a.2: analyzes the impact of authors' decisions regarding word choice and content;

E5a.3: considers the differences among genres;

E5a.4: evaluates literary merit;

E5a.5: considers the function of point of view or persona;

E5a.6: examines the reasons for a character's actions, taking into account the situation and basic motivation of the character;

E5a.7: identifies stereotypical characters as opposed to fully developed characters;

E5a.8: critiques the degree to which a plot is contrived or realistic; and

E5a.9: makes inferences and draws conclusions about contexts, events, characters, and settings.

Examples:

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

- *Determine why certain characters (either fictional or non-fictional) behave the way they do.*
- *Make connections between literary works according to a common theme.*
- *Produce a creative retelling of a familiar fairy tale for a group of adults.*
- *Create a verse by verse paraphrase of a poem.*
- *Compare a children’s literary classic with a televised version of the same work.*
- *Participate in formal or informal book talks.*
- *Write or perform a skit.*

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 poem.*
- *A short play.*
- *A picture book.*
- *A story.*

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 one another;
- understand how to compute fluently and make reasonable estimates.

In Grade 5, all students should:

- Standards:
- M1a:** understand place value and explain the relationship to addition and subtraction and multiplication and division of decimals;
 - M1b:** identify and generate equivalent forms of fractions, decimals, and percents;
 - M1c:** explain how decimals and percents are parts of a whole;
 - M1d:** use models to develop the concept of ratio as part to part and part to whole;
 - M1e:** represent and compare numbers less than zero by extending the number line and using familiar applications, like temperature, to demonstrate the usefulness of negative numbers;
 - M1f:** identify and use the distributive properties to simplify and/or perform computations;
 - M1g:** use order of operations, including the use of parentheses, to simplify numerical expressions;
 - M1h:** explain why fractions need common denominators to be added or subtracted;
 - M1i:** understand the concept of multiplication and division of fractions;
 - M1j:** understand and compute positive integer powers of nonnegative integers as repeated multiplication;
 - M1k:** demonstrate proficiency with two-digit divisors;
 - M1l:** use models and equivalent forms to add and subtract fractions with like and unlike denominators expressing answers in simplest form;
 - M1m:** estimate the results of computations involving whole numbers, fractions, and decimals, using a variety of strategies;
 - M1n:** compute and perform simple multiplication and division of fractions and decimals.

Essential To Know: Students apply the appropriate order of operations for expressions involving addition, subtraction, multiplication, and division.
Students use, interpret, and construct multiple representations of a number and translate among equivalent relationships for integers, fractions, decimals, and percents.

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 5, all students should:

- Standards:
- M2a:** express a general rule for a pattern or a function by using visual representations, words, tables, or graphs;
 - M2b:** explain the concept of variable;
 - M2c:** use variables as unknown quantities in general rules when describing mathematical patterns and relationships;
 - M2d:** apply algebraic order of operations and the commutative, associative and distributive properties to algebraic expressions, equations, and inequalities;
 - M2e:** construct tables and graphs that accurately represent the relationship between two variables;
 - M2f:** identify, describe, and compare situations that represent constant or varying rates of change.

Essential To Know: Students use symbolic algebra to represent and explain mathematical relationships.

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;
- uses visualization, spatial reasoning, and geometric modeling to solve problems.

In Grade 5, all students should:

- Standards:
- M3a:** identify faces, edges, vertices and bases of three-dimensional shapes;
 - M3b:** identify and plot ordered pairs in the first quadrant of a coordinate system;
 - M3c:** explore patterns that result from a combination of reflections, rotations, and translations of geometric figures, including rotational symmetry;
 - M3d:** visualize and draw two-dimensional views of three-dimensional objects made from rectangular solids.

Essential To Know: Students compare and analyze attributes and other features of two- and three-dimensional geometric shapes.

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, tools, and formulas to determine measurements.

In Grade 5, all students should:

- Standards:
- M4a:** extend the recognition of measurable attributes to include volume (cubic units);
 - M4b:** convert standard units of measurement within both customary and metric systems of measurement, e.g., inches to feet, centimeters to meters, etc.;
 - M4c:** develop strategies for estimating the volume of various shapes;
 - M4d:** extend the use of appropriate standard tools and units to include measures of volume and angle size;
 - M4e:** develop strategies to determine the surface areas and volumes of rectangular solids;
 - M4f:** differentiate between units of measurement for two- and three-dimensional objects and use appropriately.

Essential To Know: Students use appropriate units of measurement to measure two- and three-dimensional objects.

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 5, all students should:

- Standards:
- M5a:** explain and conduct sampling techniques for gathering data;
 - M5b:** select and use a graph that is appropriate for the type of data to be displayed;
 - M5c:** read and interpret quantitative and qualitative data;
 - M5d:** investigate the role of the mean as a balance point for the data set;
 - M5e:** recognize samples as subsets of larger populations;
 - M5f:** use a sample to make projections for a larger population;
 - M5g:** use common fractions to represent the probability of events that are neither certain nor impossible;
 - M5h:** compare theoretical and experimental outcomes in a simple experiment;
 - M5i:** make predictions based on experimental and theoretical probabilities.

Essential To Know: Students project information for a larger population based on a sample. Students explain the relationship between experimental and theoretical probabilities.

Strand: **M6 Problem Solving**

- Standard: **M6a:** Instructional programs from Pre-Kindergarten through Grade 12 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:** Instructional programs from Pre-Kindergarten through Grade 12 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:** Instructional programs from Pre-Kindergarten through Grade 12 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:** Instructional programs from Pre-Kindergarten through Grade 12 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:** Instructional programs from Pre-Kindergarten through Grade 12 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 Standards
Grade 5**

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: identifies and clarifies questions that can be answered through scientific investigations.

Components:

S1a1. analyzes a problem and determines appropriate questions that can be answered through investigations.

S1a2. develops a plan for how their questions might be answered based on a hypothesis.

Standards: S1b: identifies a hypothesis to guide their investigations.

S1c: designs and conducts controlled investigations.

Components:

S1c1. identifies and gathers materials and/or information sources needed to conduct investigations.

S1c2. identifies variables to be controlled.

S1c3. plans and follows logical steps to conduct controlled investigations.

S1c4. performs measurements using appropriate scientific tools (such as thermometers, microscopes, probes, planispheres, etc.) and units of measure (U.S. customary units and metric units).

S1c5. records data from investigations in an organized and appropriate format (e.g., t-chart, table, list, line graph, written log, etc).

Standards: S1d: forms relationships between evidence and explanations.

S1e: begins to recognize and analyze alternative explanation and conclusions.

S1f: analyzes, makes statements, and forms conclusions using models and data displayed in a Venn diagram, graph and table.

S1g: communicates scientific explorations through discussions, drawing, graphs, tables, reports, and multi-media presentations.

S1h: demonstrates safe practices in science.

Components:

S1h1. explains and conducts safe Sun and night sky viewing procedures and practices.

S1h2. explains and conducts safe use of tools and simple machines.

S1h3. explains and conducts safe experiments involving chemicals.

Strand:

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

Standards: S2a: explains the variety of contributions and discoveries about objects, events, and phenomena in nature were made by women and men who chose careers in science.

S2b: understands that scientists value peer review and making public the result of scientific pursuits; science is not separate from society.

S2c: understands that doing science requires varying human abilities, interest, and habits of mind (such as: reasoning, insight, skill, creativity, intellectual honesty, skepticism, and openness to new ideas).

Strand:

S3 Personal & Social Perspectives: The student demonstrates an understanding of safety, types of resources, and changes in the environment; that is, the student:

Standards: S3a: explores the personal and societal challenges caused by both natural and human-made changes to the environment.

S3b: weighs the risks and benefits of resource use and management on the environment and human population.

Strand:

S4 Science and Technology: The student demonstrates an understanding of science and technology and the nature of technological design; that is, the student:

Standards: S4a: identifies a problem, designs a solution or product that addresses the problem, implements the design, and evaluates and communicates the design process to others.

S4b: identifies some of the technological solutions that make life easier and the trade-offs (safety, cost, efficiency, health and environmental side effects, etc.) involved in those solutions.

S4c: explains how scientific inquiry and technological design are similar and different.

Strand:

S5 Physical Science: The student demonstrates a conceptual understanding of matter, motion and energy; that is, the student:

Standards: S5a: explains that some materials may be composed of pieces too small to see without tools that magnify the material.

Components:

S5a1. explains that some materials are collections of small solids (e.g., sand, sugar, salt, powder) that can be viewed with a hand lens.

S5a2. determines that some materials (i.e., powders, sands) can be separated by their physical properties.

S5a3. demonstrates methods used to separate mixtures based on observable physical properties (e.g., screening, filtering).

Standards: S5b: investigates how some common materials interact to form new materials.

Components:

S5b1. demonstrates that combining two or more materials may retain or lose the materials' original properties.

S5b2. groups materials by their reactions with other materials and explains how reactions can be used to identify materials

S5b3. identifies properties of a material, made from combining two or materials, that are the same and/or different from the original materials.

Standards: S5c: demonstrates an understanding of how force, distance, and work are involved in simple machines.

Components:

S5c1. demonstrates that simple machines can change the direction or the size of an applied force.

S5c2. explains that simple machines reduce the force, or change the direction of force, needed to do work.

S5c3. compares the mass of an object to the force required to move it.

S5c4. describes the motion of an object by its position, direction of motion, and speed.

S5c5. describe and explain the relationship between the strength of a force and its effect on the motion on an object.

S5c6. describes tradeoffs of various simple machines (e.g., the easier it is to lift an object with a lever, the less high it is lifted).

Standards: S5d: distinguishes among different forms of energy and demonstrates that energy can change forms.

Components:

S5d1. recognizes that heat, light, sound, electricity, magnetism and motion are associated with energy.

S5d2. demonstrates that energy can be changed from one form into another (e.g., electrical energy into light, sunlight into heat or electricity).

Strand:

S6 Life Science: The student demonstrates a conceptual understanding of the structure and function of living systems, and ecosystems; that is, the student:

Standards: S6a: gains an understanding that the cell is the fundamental unit of life.

Components:

S6a1. observes and draws a variety of cells, using microscopes or video technology.

S6a2. explains that all organisms are composed of cells, the fundamental units of life.

S6a3. recognizes that most organisms are single-celled; others, including humans, are multi-cellular.

S6a4. relates cells to building blocks for more complex structures in multi-cellular organisms (e.g., tissues, organs, systems).

Standards: S6b: investigates adaptations of structures that carry out essential functions.

Components:

S6b1. provides examples of adaptations in structures that carry out essential life functions after studying various organisms and ecosystems (e.g., radulae in snails, gills in fish, ciliae in rotifers).

Standards: S6c: investigates how structures in organisms coordinate to carry out essential functions.

Components:

S6c1. recognizes the complementary nature of structure and function in living things, using examples from a studied ecosystem.

S6c2. investigates and describes how structures within organisms work together to serve specialized functions.

S6c3. predicts what might happen if one structure of an organism's body fails to perform its particular function.

Standards: S6d: examines and describes the flow of matter and energy in living systems.

Components:

S6d1. illustrates, with examples, food chains and webs that show the flow of matter and energy in an ecosystem.

S6d2. explains that (most) living things depend on food and oxygen for growth, repair, and energy.

S6d3. discusses and provides examples of how all organisms ultimately depend on the Sun for food and energy.

Strand:

S7 Earth & Space Sciences: The student demonstrates a conceptual understanding of Earth's systems, history, and significance in the solar system; that is, the student:

Standards: S7a: investigates landforms and relates a combination of constructive and destructive forces to their formation.

Components:

S7a1. identifies major features of earth's surface.

S7a2. describes and examines constructive forces (including volcanic eruption and sediment deposition) that change landforms.

S7a3. describes and examines destructive forces (including weathering and erosion from waves, wind, and water) that change landforms.

S7a4. observes and explains that weathered rock, along with organic materials from decomposed plants, animals, and bacteria (and possibly pieces of living organisms), make up soil.

S7a5. observe and describe that soils are often found in layers, each having a different composition and texture.

Standards: S7b: describes and gives examples of ways in which earth's surface is built up and torn down by natural and human-produced processes.

Components:

S7b1. examines and differentiates the geological processes that build and/or change features of the earth's surface.

S7b2. explains how weathering and erosion reshape landforms by eroding rock and soil in some areas and depositing them in others

S7b3. describes how forces over time lead to the formation of sedimentary rock

S7b4. interprets the impact of weather on earth materials.

Standards: S7c: develops an understanding of the Sun as a source of energy.

Components:

S7c1. identifies different forms of energy emitted by the Sun and provides examples from investigations.

S7c2. identifies, observes and describes the physical features of the Sun (e.g., sunspots, flares) using photographic images.

S7c3. identifies the Sun as our most important source of energy.

S7c4. describes how sunlight falling upon a tilted surface is less intense than direct sunlight and understands how that affects temperatures and seasons.

S7c5. identifies, observes and describes the physical features of the Sun (e.g. sunspots, flares) using photographic images.

Standards: S7d: investigates the apparent motion of the stars.

Components:

S7d1. identifies and finds constellations in the nighttime sky using a planisphere.

S7d2. observes, records, and describes the apparent motion of the constellations daily and seasonally.

Social Studies: Grade 5 - U.S. History: Pre-Columbian to the Present

Standards Introduction: The standards for grade five emphasize the history of the United States from Pre-Columbian times to the present. The ten themes of social studies still provide the basis of instruction. Students use a variety of sources of historical information to explore the historical development of the United States. Students study important U.S. documents to include treaties, the Constitution, Bill of Rights, Civil Rights legislation and federal regulations. The roles of the various branches of government are defined, and students have the opportunity to examine how science and technology influence government. Students participate in simulations, debates and projects as part of the learning experience. Comparisons among the U.S. and other countries provide students the experience of identifying commonalities and differences among cultures. Emphasis is placed on identifying the contributions that all people have made to American history.

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:** select an appropriate strategy from alternative courses of action, predict consequences, and determine a rational course of action.
SK1b: make a decision based on the data with information gathered from a database.
SK1c: use appropriate sources (glossary, dictionary, text, word lists) to gain meaning of essential terms and vocabulary.
SK1d: gather information and summarize on issues that affect society.
SK1e: use graphic tools to organize and summarize key ideas related to a topic.
SK1f: create a multimedia report using text, graphics, color, sound, special effects and/or animation.

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:** discuss the value of participation in community organizations.
SS1b: demonstrate that different situations call for different forms of action.
SS1c: give examples of citizens' rights and responsibilities.
SS1d: locate, access, and organize information to draw conclusions, form hypotheses, make judgments and form opinions to solve community issues.
SS1e: explain the key ideals of a democratic form of government.
SS1f: participate as a responsible and involved 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:** evaluate the cause and effects of immigration and migration.
SS2b: compare commonalities and differences among cultures.

- SS2c:** describe alternatives and analyze historical alternatives for dealing with social tensions and issues.
- SS2d:** identify the contributions of people of various racial, ethnic, and religious groups to the United States.
- SS2e:** analyze the impact of slavery and discrimination on the development of the nation.

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:

Standards:

- SS3a:** trace changes over time in the history of the United States and identify reasons for the change.
- SS3b:** explain when, where, and why groups of people colonized and settled in the United States.
- SS3c:** describe the changing concept of freedom in the historical development of the United States.
- SS3d:** identify factors which transform the development of the United States (e.g., agricultural, industrial, informational) economy.

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:** summarize how geography and location affect historical events.
- SS4b:** use maps, globes, charts, graphs, technology, geographic tools, maps, and symbols to gather and interpret data and to draw conclusions about American regions.
- SS4c:** discuss the geography of an area in terms of location, human-environmental interaction, place, movement, and region.
- SS4d:** summarize the relationship between physical features, natural resources, and land use.
- SS4e:** describe how people in the United States adapted and modified their environment.

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:** analyze how a person's connection to a geographic place influences attributes, perceptions, values, and beliefs and molds personal identity.
- SS5b:** discuss how social, racial, cultural, economic, and religious status influence an individual.

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:** explain the need for social institutions in providing safety, security, and order.
- SS6b:** describe how groups and institutions promote the common good.

SS6c: identify how reform movement affect existing values to all members of society through institutions and practices.

Strand/Theme:

SS7 Production, Distribution, and Consumption

Social studies programs 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:

SS7a: define barter, mercantilism, tariff, national debt, taxation, duties, and credit.

SS7b: describe how inventions have influenced the development of United States economy.

SS7c: identify the impact of consumerism on the United States economy.

SS7d: apply the concept of supply and demand to a historical event.

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: explain how and why laws and governments have changed.

SS8b: distinguish the differences among privileges, obligations, rights and duties.

SS8c: define legislation, executive, and judicial functions at the national level.

SS8d: identify key leaders of the national government in a given historical period.

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 how science and technology influence the economy and government.

SS9b: predict problems that arise when scientific advancements and social standards or mores come into conflict.

SS9c: explain the need for laws and policies to regulate scientific and technological applications.

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: explain how language, art, music, literature, belief systems, and other cultural elements can both connect people and cause misunderstandings.

SS10b: identify factors that contribute to cooperation among societies.

SS10c: explore global issues (e.g. such as health, security, resource allocation, development, and environmental).

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:** explain the proper use of personal care and grooming products for adolescents;
- HE1b:** compare and contrast practices for preventing disease and infection; and
- HE1c:** analyze the impact of communicable diseases on the community and the environment.

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 safety rules at home, in school, and in the community;
- HE2b:** summarize personal safety as it relates to recognizing and reporting child abuse or neglect;
- HE2c:** demonstrate first aid skills (i.e., cuts, scrapes, muscle cramps, bruises); and
- HE2d:** explain ways to avoid and reduce threatening situations.

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:** explain the impact of amounts of fat, sodium, cholesterol, and sugar in food on overall health;
- HE3b:** analyze information on comparable food labels;
- HE3c:** compare recommended amounts of fat, sodium, cholesterol, and sugar with amounts found in processed foods;

- HE3d:** describe how cultural, peer, and social influences affect food choices; and
- HE3e:** develop strategies for making good food and physical activity choices.

Strand

HE4 Mental Health

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

Standards:

- HE4a:** analyze factors contributing to the development of positive self-image and healthful relationships;
- HE4b:** describe school and community activities and resources that promote healthful choices and a sense of connectedness to others;
- HE4c:** identify strategies for reducing stress;
- HE4d:** identify abusive characteristics of bullying behavior; and
- HE4e:** identify effective verbal and nonverbal communication skills.

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:

Standards:

- HE5a:** describe short- and long-term effects of abuse of tobacco and drugs;
- HE5b:** explain reasons for drug use and healthful alternatives;
- HE5c:** identify peer pressure as an influence on tobacco, alcohol, and other drug use; and
- HE5d:** state ways to say no to pressure to use drugs, alcohol, or tobacco products.

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:

Standards:

- HE6a:** analyze the physical and emotional changes related to puberty;
- HE6b:** describe ways to maintain open communications with family members; and
- HE6c:** describe ways to communicate care and consideration in relationships.

Physical Education: Grade 5

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 5 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 5 all students will:

Standards:

- PE1a:** demonstrate combinations of motor skills, adapting to the demands of fluid, game-like situations (e.g., changing speed during dynamic situations);
- PE1b:** demonstrate eye-hand and eye-foot coordination using a ball and other objects (e.g., batting off a tee, catching a pass on the run);
- PE1c:** demonstrate combinations of motor skills and patterns in a variety of rhythmic/dance-related activities (e.g., creative, folk, and line dances);
- PE1d:** create and perform a simple gymnastic sequence, including travel, roll, balance, and weight transfer, with smooth transitions and changes of direction, speed, and flow;
- PE1e:** identify common phases of a movement pattern (e.g., preparation, movement, follow-through, or recovery) in a variety of movement skills (e.g., tennis serve, handstand, and free throw);
- PE1f:** use simple cues to improve personal performance and provide feedback to others in selected specialized motor skills (e.g., making a triangle to set a volleyball);

- PE1g:** distinguish between sufficient and insufficient practice when learning skills;
- PE1h:** compare and contrast rules and safety procedures of lead-up games; and
- PE1i:** 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 5 all students will:

Standards:

- PE2a:** participate regularly in moderate-to-vigorous physical activities during physical education class and recess;
- PE2b:** set personal health-related fitness goals based upon participation in a formal assessment using the adopted DoDEA Physical Fitness Assessment Program;
- PE2c:** engage in physical activities directly related to a personal goal for aerobic capacity development using a heart-rate monitor to stay within one's target heart-rate zone;
- PE2d:** explain the benefits of and demonstrate proper warm-up and cool-down activities;
- PE2e:** engage in physical activities directly related to personal strength and muscular endurance development goals and explain their importance to physical activity participation;
- PE2f:** engage in physical activities directly related to a personal goal for flexibility and explain the importance of flexibility/range of motion in relation to injury prevention;
- PE2g:** demonstrate diaphragmatic breathing and progressive muscular relaxation;
- PE2h:** identify leisure-time fitness-related activities available for youth in the community; and
- PE2i:** adapt individual level of physical activity and hydration based on changes in the body occurring during moderate-to-vigorous physical activity.

Visual Arts: Grade 5

Strand:

VA1 Media, Techniques, and Processes

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

Standards:

- VA1a:** The student explains the difference of various art materials, media, techniques, and their processes.
- VA1b:** The student demonstrates how different materials, media, technology, techniques, and processes cause different results.
- VA1c:** The student expands different materials, media, technology, techniques, and processes to communicate ideas and emotions through original works of art.
- 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 analyzes elements of art and principles of design in two- and three-dimensional works of art.
- VA2b:** The student analyzes how the elements of art and principles of design affect the purpose and meaning of an artwork.
- VA2c:** The student selects and uses the elements of art and principles of design to improve communication of ideas.

Strand:

VA3 Subject Matter Symbols, and Ideas

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

Standards:

- VA3a:** The student incorporates personal ideas and symbols in works of art.
- VA3b:** The student examines subject matter, symbols, and ideas of personal works of art and revises for improvement and clarity of expression.
- VA3c:** The student considers, compares, and applies subject matter, symbols and ideas from different sources in works of art.

Strand:

VA4 History and Culture

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

Standards:

- VA4a:** The student identifies the characteristics of a variety of artwork representing various artists, cultures, and historical periods to include that of the host nation.
- VA4b:** The student describes and categorizes a variety of significant art objects by artist, style, historical period, and cultural context.
- VA4c:** The student uses historical references to create works of art in the style of a particular period of art or culture.

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 describes, analyzes, and evaluates purposes for creating works of art by using art vocabulary.

VA5b: The student discusses cultural and aesthetic implications in both contemporary and historical works of art.

VA5c: The student evaluates personal artistic growth using given criteria.

Strand:

VA6 Connections to Other Disciplines

Makes connections between the visual arts and the other disciplines.

Standards:

VA6a: The student describes how the principles of design are interrelated with other disciplines.

VA6b: The student identifies potential art careers.

VA6c: The student creates works of art that extend knowledge to other curricular areas to include the performing arts.

Strand:

VA7 Technology Integration

Understands and creates art through technology.

Standards:

VA7a: The student selects elements of art and principles of design to create works of art using technology.

VA7b: The student identifies the characteristics of technological tools that resolve a visual problem.

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

Music: Grade 5

Strand:

MU1

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

Standards:

MU1a: The student begins to extend his or her vocal range and demonstrates proper tone production and breath control.

MU1b: The student plays appropriate music as defined by range, tone quality, accidentals, finger technique, phrasing, rhythmic accuracy, and tempo.

MU1c: The student performs with simple musical expression and interpretation.

Strand:

MU2

Reads and notates music

Standards:

MU2a: The student gains fluency in reading whole, half, dotted half, quarter, eighth notes and rests in duple and triple meters.

MU2b: The student notates whole, half, dotted half, quarter, eighth notes and rests in duple and triple meters with increasing fluency.

MU2c: The student identifies the names of the lines and spaces of the treble clef.

Strand:

MU3

Listens to, responds to, and describes music

Standards:

MU3a: The student listens to musical events such as motif, entrances, solos, duets.

MU3b: The student responds to musical events such as motif, entrances, solos, duets.

MU3c: The student describes musical events such as motif, entrances, solos, duets.

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 listens to world music, such as Gamalan, Didgeridoo, Chinese celebratory music, Japanese court music, Korean folk music, Music of African regions, etc.

MU4b: The student discusses the purposes of various types of world music.

MU4c: The student performs appropriate music related to history and culture, to include the host nation.

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 compares works and performances of world music.

MU5b: The student applies criteria for evaluating works and performances of world music.

MU5c: The student explains similarities and differences in works and performances of world music with appropriate terminology.

Strand:

MU6 Connections to Other Disciplines

Makes connections between music and the other disciplines.

Standards:

MU6a: The student identifies ways that world music is connected to other disciplines (Visual Arts, Social Studies, Literature, Science) in the curriculum.

MU6b: The student integrates what is learned about world music with other curricular areas.

MU6c: The student names and discusses music career opportunities.

Strand:

MU7 Technology Integration

Understands and creates music through technology.

Standards:

MU7a: The student acquires technology skills and vocabulary that are developmentally appropriate.

MU7b: The student expands and uses technology skills to create music.

MU7c: The student explores technologies used in creating different types of world music.