

Texas Essential Knowledge and Skills for Grade 2

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§110.13. English Language Arts and Reading, Grade 2, Beginning with School Year 2009-2010.

(a) Introduction.

(1) The English Language Arts and Reading Texas Essential Knowledge and Skills (TEKS) are organized into the following strands: Reading, where students read and understand a wide variety of literary and informational texts; Writing, where students compose a variety of written texts with a clear controlling idea, coherent organization, and sufficient detail; Research, where students are expected to know how to locate a range of relevant sources and evaluate, synthesize, and present ideas and information; Listening and Speaking, where students listen and respond to the ideas of others while contributing their own ideas in conversations and in groups; and Oral and Written Conventions, where students learn how to use the oral and written conventions of the English language in speaking and writing. The Reading strand is structured to reflect the major topic areas of the National Reading Panel Report. In second grade, students will engage in activities that build on their prior knowledge and skills in order to strengthen their reading, writing, and oral language skills. Students should write and read (or be read to) on a daily basis.

(2) For students whose first language is not English, the students' native language serves as a foundation for English language acquisition.

(A) English language learners (ELLs) are acquiring English, learning content in English, and learning to read simultaneously. For this reason, it is imperative that reading instruction should be comprehensive and that students receive instruction in phonemic awareness, phonics, decoding, and word attack skills while simultaneously being taught academic vocabulary and comprehension skills and strategies. Reading instruction that enhances ELL's ability to decode unfamiliar words and to make sense of those words in context will expedite their ability to make sense of what they read and learn from reading. Additionally, developing fluency, spelling, and grammatical conventions of academic language must be done in meaningful contexts and not in isolation.

(B) For ELLs, comprehension of texts requires additional scaffolds to support comprehensible input. ELL students should use the knowledge of their first language (e.g., cognates) to further vocabulary development. Vocabulary needs to be taught in the context of connected discourse so that language is meaningful. ELLs must learn how rhetorical devices in English differ from those

in their native language. At the same time English learners are learning in English, the focus is on academic English, concepts, and the language structures specific to the content.

(C) During initial stages of English development, ELLs are expected to meet standards in a second language that many monolingual English speakers find difficult to meet in their native language. However, English language learners' abilities to meet these standards will be influenced by their proficiency in English. While English language learners can analyze, synthesize, and evaluate, their level of English proficiency may impede their ability to demonstrate this knowledge during the initial stages of English language acquisition. It is also critical to understand that ELLs with no previous or with interrupted schooling will require explicit and strategic support as they acquire English and learn to learn in English simultaneously.

(3) To meet Public Education Goal 1 of the Texas Education Code, §4.002, which states, "The students in the public education system will demonstrate exemplary performance in the reading and writing of the English language," students will accomplish the essential knowledge, skills, and student expectations at Grade 2 as described in subsection (b) of this section.

(4) To meet Texas Education Code, §28.002(h), which states, "... each school district shall foster the continuation of the tradition of teaching United States and Texas history and the free enterprise system in regular subject matter and in reading courses and in the adoption of textbooks," students will be provided oral and written narratives as well as other informational texts that can help them to become thoughtful, active citizens who appreciate the basic democratic values of our state and nation.

(b) Knowledge and skills.

(1) Reading/Beginning Reading Skills/Print Awareness. Students understand how English is written and printed. Students are expected to distinguish features of a sentence (e.g., capitalization of first word, ending punctuation, commas, quotation marks).

(2) Reading/Beginning Reading Skills/Phonics. Students use the relationships between letters and sounds, spelling patterns, and morphological analysis to decode written English. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:

(A) decode multisyllabic words in context and independent of context by applying common letter-sound correspondences including:

- (i) single letters (consonants and vowels);
- (ii) consonant blends (e.g., thr, spl);
- (iii) consonant digraphs (e.g., ng, ck, ph); and
- (iv) vowel digraphs (e.g., ie, ue, ew) and diphthongs (e.g., oi, ou);

(B) use common syllabication patterns to decode words including:

- (i) closed syllable (CVC) (e.g., pic-nic, mon-ster);
- (ii) open syllable (CV) (e.g., ti-ger);

- (iii) final stable syllable (e.g., sta-tion, tum-ble);
 - (iv) vowel-consonant-silent "e" words (VCe) (e.g., in-vite, cape);
 - (v) r-controlled vowels (e.g., per-fect, cor-ner); and
 - (vi) vowel digraphs and diphthongs (e.g., boy-hood, oat-meal);
- (C) decode words by applying knowledge of common spelling patterns (e.g., -ight, -ant);
 - (D) read words with common prefixes (e.g., un-, dis-) and suffixes (e.g., -ly, -less, -ful);
 - (E) identify and read abbreviations (e.g., Mr., Ave.);
 - (F) identify and read contractions (e.g., haven't, it's);
 - (G) identify and read at least 300 high-frequency words from a commonly used list; and
 - (H) monitor accuracy of decoding.

(3) Reading/Beginning Reading/Strategies. Students comprehend a variety of texts drawing on useful strategies as needed. Students are expected to:

- (A) use ideas (e.g., illustrations, titles, topic sentences, key words, and foreshadowing) to make and confirm predictions;
- (B) ask relevant questions, seek clarification, and locate facts and details about stories and other texts and support answers with evidence from text; and
- (C) establish purpose for reading selected texts and monitor comprehension, making corrections and adjustments when that understanding breaks down (e.g., identifying clues, using background knowledge, generating questions, re-reading a portion aloud).

(4) Reading/Fluency. Students read grade-level text with fluency and comprehension. Students are expected to read aloud grade-level appropriate text with fluency (rate, accuracy, expression, appropriate phrasing) and comprehension.

(5) Reading/Vocabulary Development. Students understand new vocabulary and use it when reading and writing. Students are expected to:

- (A) use prefixes and suffixes to determine the meaning of words (e.g., allow/disallow);
- (B) use context to determine the relevant meaning of unfamiliar words or multiple-meaning words;
- (C) identify and use common words that are opposite (antonyms) or similar (synonyms) in meaning; and
- (D) alphabetize a series of words and use a dictionary or a glossary to find words.

(6) Reading/Comprehension of Literary Text/Theme and Genre. Students analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to:

(A) identify moral lessons as themes in well-known fables, legends, myths, or stories; and

(B) compare different versions of the same story in traditional and contemporary folktales with respect to their characters, settings, and plot.

(7) Reading/Comprehension of Literary Text/Poetry. Students understand, make inferences and draw conclusions about the structure and elements of poetry and provide evidence from text to support their understanding. Students are expected to describe how rhyme, rhythm, and repetition interact to create images in poetry.

(8) Reading/Comprehension of Literary Text/Drama. Students understand, make inferences and draw conclusions about the structure and elements of drama and provide evidence from text to support their understanding. Students are expected to identify the elements of dialogue and use them in informal plays.

(9) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to:

(A) describe similarities and differences in the plots and settings of several works by the same author; and

(B) describe main characters in works of fiction, including their traits, motivations, and feelings.

(10) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and respond by providing evidence from text to support their understanding. Students are expected to distinguish between fiction and nonfiction.

(11) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author's sensory language creates imagery in literary text and provide evidence from text to support their understanding. Students are expected to recognize that some words and phrases have literal and non-literal meanings (e.g., take steps).

(12) Reading/Comprehension of Text/Independent Reading. Students read independently for sustained periods of time and produce evidence of their reading. Students are expected to read independently for a sustained period of time and paraphrase what the reading was about, maintaining meaning.

(13) Reading/Comprehension of Informational Text/Culture and History. Students analyze, make inferences and draw conclusions about the author's purpose in cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to identify the topic and explain the author's purpose in writing the text.

(14) Reading/Comprehension of Informational Text/Expository Text. Students analyze, make inferences and draw conclusions about and understand expository text and provide evidence from text to support their understanding. Students are expected to:

- (A) identify the main idea in a text and distinguish it from the topic;
 - (B) locate the facts that are clearly stated in a text;
 - (C) describe the order of events or ideas in a text; and
 - (D) use text features (e.g., table of contents, index, headings) to locate specific information in text.
- (15) Reading/Comprehension of Informational Text/Procedural Text. Students understand how to glean and use information in procedural texts and documents. Students are expected to:
- (A) follow written multi-step directions; and
 - (B) use common graphic features to assist in the interpretation of text (e.g., captions, illustrations).
- (16) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:
- (A) recognize different purposes of media (e.g., informational, entertainment);
 - (B) describe techniques used to create media messages (e.g., sound, graphics); and
 - (C) identify various written conventions for using digital media (e.g., e-mail, website, video game).
- (17) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:
- (A) plan a first draft by generating ideas for writing (e.g., drawing, sharing ideas, listing key ideas);
 - (B) develop drafts by sequencing ideas through writing sentences;
 - (C) revise drafts by adding or deleting words, phrases, or sentences;
 - (D) edit drafts for grammar, punctuation, and spelling using a teacher-developed rubric; and
 - (E) publish and share writing with others.
- (18) Writing/Literary Texts. Students write literary texts to express their ideas and feelings about real or imagined people, events, and ideas. Students are expected to:
- (A) write brief stories that include a beginning, middle, and end; and
 - (B) write short poems that convey sensory details.

(19) Writing/Expository and Procedural Texts. Students write expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. Students are expected to:

- (A) write brief compositions about topics of interest to the student;
- (B) write short letters that put ideas in a chronological or logical sequence and use appropriate conventions (e.g., date, salutation, closing); and
- (C) write brief comments on literary or informational texts.

(20) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive statements about issues that are important to the student for the appropriate audience in the school, home, or local community.

(21) Oral and Written Conventions/Conventions. Students understand the function of and use the conventions of academic language when speaking and writing. Students continue to apply earlier standards with greater complexity. Students are expected to:

- (A) understand and use the following parts of speech in the context of reading, writing, and speaking:
 - (i) verbs (past, present, and future);
 - (ii) nouns (singular/plural, common/proper);
 - (iii) adjectives (e.g., descriptive: old, wonderful; articles: a, an, the);
 - (iv) adverbs (e.g., time: before, next; manner: carefully, beautifully);
 - (v) prepositions and prepositional phrases;
 - (vi) pronouns (e.g., he, him); and
 - (vii) time-order transition words;
- (B) use complete sentences with correct subject-verb agreement; and
- (C) distinguish among declarative and interrogative sentences.

(22) Oral and Written Conventions/Handwriting, Capitalization, and Punctuation. Students write legibly and use appropriate capitalization and punctuation conventions in their compositions. Students are expected to:

- (A) write legibly leaving appropriate margins for readability;
- (B) use capitalization for:
 - (i) proper nouns;

(ii) months and days of the week; and

(iii) the salutation and closing of a letter; and

(C) recognize and use punctuation marks, including:

(i) ending punctuation in sentences;

(ii) apostrophes and contractions; and

(iii) apostrophes and possessives.

(23) Oral and Written Conventions/Spelling. Students spell correctly. Students are expected to:

(A) use phonological knowledge to match sounds to letters to construct unknown words;

(B) spell words with common orthographic patterns and rules:

(i) complex consonants (e.g., hard and soft c and g, ck);

(ii) r-controlled vowels;

(iii) long vowels (e.g., VCe-hope); and

(iv) vowel digraphs (e.g., oo-book, fool, ee-feet), diphthongs (e.g., ou-out, ow-cow, oi-coil, oy-toy);

(C) spell high-frequency words from a commonly used list;

(D) spell base words with inflectional endings (e.g., -ing and -ed);

(E) spell simple contractions (e.g., isn't, aren't, can't); and

(F) use resources to find correct spellings.

(24) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

(A) generate a list of topics of class-wide interest and formulate open-ended questions about one or two of the topics; and

(B) decide what sources of information might be relevant to answer these questions.

(25) Research/Gathering Sources. Students determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather. Students are expected to:

(A) gather evidence from available sources (natural and personal) as well as from interviews with local experts;

(B) use text features (e.g., table of contents, alphabetized index, headings) in age-appropriate reference works (e.g., picture dictionaries) to locate information; and

(C) record basic information in simple visual formats (e.g., notes, charts, picture graphs, diagrams).

(26) **Research/Synthesizing Information.** Students clarify research questions and evaluate and synthesize collected information. Students are expected to revise the topic as a result of answers to initial research questions.

(27) **Research/Organizing and Presenting Ideas.** Students organize and present their ideas and information according to the purpose of the research and their audience. Students (with adult assistance) are expected to create a visual display or dramatization to convey the results of the research.

(28) **Listening and Speaking/Listening.** Students use comprehension skills to listen attentively to others in formal and informal settings. Students continue to apply earlier standards with greater complexity. Students are expected to:

(A) listen attentively to speakers and ask relevant questions to clarify information; and

(B) follow, restate, and give oral instructions that involve a short related sequence of actions.

(29) **Listening and Speaking/Speaking.** Students speak clearly and to the point, using the conventions of language. Students continue to apply earlier standards with greater complexity. Students are expected to share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace, using the conventions of language.

(30) **Listening and Speaking/Teamwork.** Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to follow agreed-upon rules for discussion, including listening to others, speaking when recognized, and making appropriate contributions.

Reading and Comprehension Skills—Second Grade

[Figure: 19 TAC §110.10\(b\)](#)

Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author’s message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

(A) establish purposes for reading selected texts based upon content to enhance comprehension;

(B) ask literal questions of text;

(C) monitor and adjust comprehension (e.g., using background knowledge, creating sensory images, re-reading a portion aloud, generating questions);

(D) make inferences about text using textual evidence to support understanding;

(E) retell important events in stories in logical order; and

(F) make connections to own experiences, to ideas in other texts, and to the larger community and discuss textual evidence.

§111.14. Mathematics, Grade 2.

(a) Introduction.

(1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 2 are developing an understanding of the base-ten place value system, comparing and ordering whole numbers, applying addition and subtraction, and using measurement processes.

(2) Throughout mathematics in Kindergarten-Grade 2, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use numbers in ordering, labeling, and expressing quantities and relationships to solve problems and translate informal language into mathematical language and symbols. Students use objects to create and identify patterns and use those patterns to express relationships, make predictions, and solve problems as they build an understanding of number, operation, shape, and space. Students progress from informal to formal language to describe two- and three-dimensional geometric figures and likenesses in the physical world. Students begin to develop measurement concepts as they identify and compare attributes of objects and situations. Students collect, organize, and display data and use information from graphs to answer questions, make summary statements, and make informal predictions based on their experiences.

(3) Throughout mathematics in Kindergarten-Grade 2, students develop numerical fluency with conceptual understanding and computational accuracy. Students in Kindergarten-Grade 2 use basic number sense to compose and decompose numbers in order to solve problems requiring precision, estimation, and reasonableness. By the end of Grade 2, students know basic addition and subtraction facts and are using them to work flexibly, efficiently, and accurately with numbers during addition and subtraction computation.

(4) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Kindergarten-Grade 2, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve meaningful problems as they do mathematics.

(b) Knowledge and skills.

(2.1) Number, operation, and quantitative reasoning. The student understands how place value is used to represent whole numbers. The student is expected to:

- (A) use concrete models of hundreds, tens, and ones to represent a given whole number (up to 999) in various ways;
 - (B) use place value to read, write, and describe the value of whole numbers to 999; and
 - (C) use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols (<, =, >).
- (2.2) Number, operation, and quantitative reasoning. The student describes how fractions are used to name parts of whole objects or sets of objects. The student is expected to:
- (A) use concrete models to represent and name fractional parts of a whole object (with denominators of 12 or less);
 - (B) use concrete models to represent and name fractional parts of a set of objects (with denominators of 12 or less); and
 - (C) use concrete models to determine if a fractional part of a whole is closer to 0, $\frac{1}{2}$, or 1.
- (2.3) Number, operation, and quantitative reasoning. The student adds and subtracts whole numbers to solve problems. The student is expected to:
- (A) recall and apply basic addition and subtraction facts (to 18);
 - (B) model addition and subtraction of two-digit numbers with objects, pictures, words, and numbers;
 - (C) select addition or subtraction to solve problems using two-digit numbers, whether or not regrouping is necessary;
 - (D) determine the value of a collection of coins up to one dollar; and
 - (E) describe how the cent symbol, dollar symbol, and the decimal point are used to name the value of a collection of coins.
- (2.4) Number, operation, and quantitative reasoning. The student models multiplication and division. The student is expected to:
- (A) model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined; and
 - (B) model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.
- (2.5) Patterns, relationships, and algebraic thinking. **The** student uses patterns in numbers and operations. The student is expected to:
- (A) find patterns in numbers such as in a 100s chart;

(B) use patterns in place value to compare and order whole numbers through 999; and

(C) use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as

$8 + 9 = 17$, $9 + 8 = 17$, $17 - 8 = 9$, and

$17 - 9 = 8$.

(2.6) Patterns, relationships, and algebraic thinking. The student uses patterns to describe relationships and make predictions. The student is expected to:

(A) generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels;

(B) identify patterns in a list of related number pairs based on a real-life situation and extend the list; and

(C) identify, describe, and extend repeating and additive patterns to make predictions and solve problems.

(2.7) Geometry and spatial reasoning. The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two- and three-dimensional geometric figures or both. The student is expected to:

(A) describe attributes (the number of vertices, faces, edges, sides) of two- and three-dimensional geometric figures such as circles, polygons, spheres, cones, cylinders, prisms, and pyramids, etc.;

(B) use attributes to describe how 2 two-dimensional figures or 2 three-dimensional geometric figures are alike or different; and

(C) cut two-dimensional geometric figures apart and identify the new geometric figures formed.

(2.8) Geometry and spatial reasoning. The student recognizes that a line can be used to represent a set of numbers and its properties. The student is expected to use whole numbers to locate and name points on a number line.

(2.9) Measurement. The student directly compares the attributes of length, area, weight/mass, and capacity, and uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length, area, capacity, and weight/mass. The student recognizes and uses models that approximate standard units (from both SI, also known as metric, and customary systems) of length, weight/mass, capacity, and time. The student is expected to:

(A) identify concrete models that approximate standard units of length and use them to measure length;

(B) select a non-standard unit of measure such as square tiles to determine the area of a two-dimensional surface;

(C) select a non-standard unit of measure such as a bathroom cup or a jar to determine the capacity of a given container; and

(D) select a non-standard unit of measure such as beans or marbles to determine the weight/mass of a given object.

(2.10) Measurement. The student uses standard tools to estimate and measure time and temperature (in degrees Fahrenheit). The student is expected to:

(A) read a thermometer to gather data;

(B) read and write times shown on analog and digital clocks using five-minute increments; and

(C) describe activities that take approximately one second, one minute, and one hour.

(2.11) Probability and statistics. The student organizes data to make it useful for interpreting information. The student is expected to:

(A) construct picture graphs and bar-type graphs;

(B) draw conclusions and answer questions based on picture graphs and bar-type graphs; and

(C) use data to describe events as more likely or less likely such as drawing a certain color crayon from a bag of seven red crayons and three green crayons.

(2.12) Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(A) identify the mathematics in everyday situations;

(B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;

(C) select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and

(D) use tools such as real objects, manipulatives, and technology to solve problems.

(2.13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to:

(A) explain and record observations using objects, words, pictures, numbers, and technology; and

(B) relate informal language to mathematical language and symbols.

(2.14) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology.

§112.13. Science, Grade 2, Beginning with School Year 2010-2011.

(a) Introduction.

(1) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process."

(2) Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include patterns, cycles, systems, models, and change and constancy.

(3) The study of elementary science includes planning and safely implementing classroom and outdoor investigations using scientific processes, including inquiry methods, analyzing information, making informed decisions, and using tools to collect and record information, while addressing the major concepts and vocabulary, in the context of physical, earth, and life sciences. Districts are encouraged to facilitate classroom and outdoor investigations for at least 60% of instructional time.

(4) In Grade 2, careful observation and investigation are used to learn about the natural world and reveal patterns, changes, and cycles. Students should understand that certain types of questions can be answered by using observation and investigations and that the information gathered in these may change as new observations are made. As students participate in investigation, they develop the skills necessary to do science as well as develop new science concepts.

(A) Within the physical environment, students expand their understanding of the properties of objects such as shape, mass, temperature, and flexibility then use those properties to compare, classify, and then combine the objects to do something that they could not do before. Students manipulate objects to demonstrate a change in motion and position.

(B) Within the natural environment, students will observe the properties of earth materials as well as predictable patterns that occur on Earth and in the sky. The students understand that those patterns are used to make choices in clothing, activities, and transportation.

(C) Within the living environment, students explore patterns, systems, and cycles by investigating characteristics of organisms, life cycles, and interactions among all the components within their habitat. Students examine how living organisms depend on each other and on their environment.

(b) Knowledge and skills.

(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures. The student is expected to:

- (A) identify and demonstrate safe practices as described in the Texas Safety Standards during classroom and outdoor investigations, including wearing safety goggles, washing hands, and using materials appropriately;
 - (B) describe the importance of safe practices; and
 - (C) identify and demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reuse or recycling of paper, plastic, and metal.
- (2) Scientific investigation and reasoning. The student develops abilities necessary to do scientific inquiry in classroom and outdoor investigations. The student is expected to:
- (A) ask questions about organisms, objects, and events during observations and investigations;
 - (B) plan and conduct descriptive investigations such as how organisms grow;
 - (C) collect data from observations using simple equipment such as hand lenses, primary balances, thermometers, and non-standard measurement tools;
 - (D) record and organize data using pictures, numbers, and words;
 - (E) communicate observations and justify explanations using student-generated data from simple descriptive investigations; and
 - (F) compare results of investigations with what students and scientists know about the world.
- (3) Scientific investigation and reasoning. The student knows that information and critical thinking, scientific problem solving, and the contributions of scientists are used in making decisions. The student is expected to:
- (A) identify and explain a problem in his/her own words and propose a task and solution for the problem such as lack of water in a habitat;
 - (B) make predictions based on observable patterns; and
 - (C) identify what a scientist is and explore what different scientists do.
- (4) Scientific investigation and reasoning. The student uses age-appropriate tools and models to investigate the natural world. The student is expected to:
- (A) collect, record, and compare information using tools, including computers, hand lenses, rulers, primary balances, plastic beakers, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and stopwatches; weather instruments such as thermometers, wind vanes, and rain gauges; and materials to support observations of habitats of organisms such as terrariums and aquariums; and
 - (B) measure and compare organisms and objects using non-standard units that approximate metric units.

(5) Matter and energy. The student knows that matter has physical properties and those properties determine how it is described, classified, changed, and used. The student is expected to:

- (A) classify matter by physical properties, including shape, relative mass, relative temperature, texture, flexibility, and whether material is a solid or liquid;
- (B) compare changes in materials caused by heating and cooling;
- (C) demonstrate that things can be done to materials to change their physical properties such as cutting, folding, sanding, and melting; and
- (D) combine materials that when put together can do things that they cannot do by themselves such as building a tower or a bridge and justify the selection of those materials based on their physical properties.

(6) Force, motion, and energy. The student knows that forces cause change and energy exists in many forms. The student is expected to:

- (A) investigate the effects on an object by increasing or decreasing amounts of light, heat, and sound energy such as how the color of an object appears different in dimmer light or how heat melts butter;
- (B) observe and identify how magnets are used in everyday life;
- (C) trace the changes in the position of an object over time such as a cup rolling on the floor and a car rolling down a ramp; and
- (D) compare patterns of movement of objects such as sliding, rolling, and spinning.

(7) Earth and space. The student knows that the natural world includes earth materials. The student is expected to:

- (A) observe and describe rocks by size, texture, and color;
- (B) identify and compare the properties of natural sources of freshwater and saltwater; and
- (C) distinguish between natural and manmade resources.

(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

- (A) measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data;
- (B) identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation;
- (C) explore the processes in the water cycle, including evaporation, condensation, and precipitation, as connected to weather conditions; and

- (D) observe, describe, and record patterns of objects in the sky, including the appearance of the Moon.
- (9) Organisms and environments. The student knows that living organisms have basic needs that must be met for them to survive within their environment. The student is expected to:
- (A) identify the basic needs of plants and animals;
 - (B) identify factors in the environment, including temperature and precipitation, that affect growth and behavior such as migration, hibernation, and dormancy of living things; and
 - (C) compare and give examples of the ways living organisms depend on each other and on their environments such as food chains within a garden, park, beach, lake, and wooded area.
- (10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
- (A) observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs such as fins help fish move and balance in the water;
 - (B) observe, record, and compare how the physical characteristics of plants help them meet their basic needs such as stems carry water throughout the plant; and
 - (C) investigate and record some of the unique stages that insects undergo during their life cycle.

§113.13. Social Studies, Grade 2, Beginning with School Year 2011-2012.

(a) Introduction.

- (1) In Grade 2, students focus on a study of their local community by examining the impact of significant individuals and events on the history of the community as well as on the state and nation. Students begin to develop the concepts of time and chronology. The relationship between the physical environment and human activities is introduced as are the concepts of consumers and producers. Students identify functions of government as well as services provided by the local government. Students continue to acquire knowledge of customs, symbols, and celebrations that represent American beliefs and principles. Students identify the significance of works of art in the local community and explain how technological innovations have changed transportation and communication. Students communicate what they have learned in written, oral, and visual forms.
- (2) To support the teaching of the essential knowledge and skills, the use of a variety of rich material such as nonfiction texts, primary sources, biographies, folklore, poetry, songs, and artworks is encouraged. Motivating resources are available from museums, historical sites, presidential libraries, online tours, and local and state preservation societies.
- (3) The eight strands of the essential knowledge and skills for social studies are intended to be integrated for instructional purposes. Skills listed in the social studies skills strand in subsection (b) of this section should be incorporated into the teaching of all essential knowledge and skills for social studies. A greater

depth of understanding of complex content material can be attained when integrated social studies content from the various disciplines and critical-thinking skills are taught together. Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(4) Students identify the role of the U.S. free enterprise system within the parameters of this course and understand that this system may also be referenced as capitalism or the free market system.

(5) Throughout social studies in Kindergarten-Grade 12, students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced in the Texas Education Code (TEC), §28.002(h).

(6) Students understand that a constitutional republic is a representative form of government whose representatives derive their authority from the consent of the governed, serve for an established tenure, and are sworn to uphold the constitution.

(7) Students must demonstrate learning performance related to any federal and state mandates regarding classroom instruction. Although Grade 2 is not required to participate in Celebrate Freedom Week, according to the TEC, §29.907, primary grades lay the foundation for subsequent learning. As a result, Grade 2 Texas essential knowledge and skills include standards related to this patriotic observance.

(8) Students identify and discuss how the actions of U.S. citizens and the local, state, and federal governments have either met or failed to meet the ideals espoused in the founding documents.

(b) Knowledge and skills.

(1) History. The student understands the historical significance of landmarks and celebrations in the community, state, and nation. The student is expected to:

(A) explain the significance of various community, state, and national celebrations such as Veterans Day, Memorial Day, Independence Day, and Thanksgiving; and

(B) identify and explain the significance of various community, state, and national landmarks such as monuments and government buildings.

(2) History. The student understands the concepts of time and chronology. The student is expected to:

(A) describe the order of events by using designations of time periods such as historical and present times;

(B) apply vocabulary related to chronology, including past, present, and future; and

(C) create and interpret timelines for events in the past and present.

(3) History. The student understands how various sources provide information about the past and present. The student is expected to:

- (A) identify several sources of information about a given period or event such as reference materials, biographies, newspapers, and electronic sources; and
 - (B) describe various evidence of the same time period using primary sources such as photographs, journals, and interviews.
- (4) History. The student understands how historical figures, patriots, and good citizens helped shape the community, state, and nation. The student is expected to:
- (A) identify contributions of historical figures, including Thurgood Marshall, Irma Rangel, John Hancock, and Theodore Roosevelt, who have influenced the community, state, and nation;
 - (B) identify historical figures such as Amelia Earhart, W. E. B. DuBois, Robert Fulton, and George Washington Carver who have exhibited individualism and inventiveness; and
 - (C) explain how people and events have influenced local community history.
- (5) Geography. The student uses simple geographic tools such as maps and globes. The student is expected to:
- (A) interpret information on maps and globes using basic map elements such as title, orientation (north, south, east, west), and legend/map keys; and
 - (B) create maps to show places and routes within the home, school, and community.
- (6) Geography. The student understands the locations and characteristics of places and regions in the community, state, and nation. The student is expected to:
- (A) identify major landforms and bodies of water, including each of the continents and each of the oceans, on maps and globes;
 - (B) locate places of significance, including the local community, Texas, the state capital, the U.S. capital, major cities in Texas, the coast of Texas, Canada, Mexico, and the United States on maps and globes; and
 - (C) examine information from various sources about places and regions.
- (7) Geography. The student understands how physical characteristics of places and regions affect people's activities and settlement patterns. The student is expected to:
- (A) describe how weather patterns and seasonal patterns affect activities and settlement patterns;
 - (B) describe how natural resources and natural hazards affect activities and settlement patterns;
 - (C) explain how people depend on the physical environment and natural resources to meet basic needs; and
 - (D) identify the characteristics of different communities, including urban, suburban, and rural, and how they affect activities and settlement patterns.

(8) Geography. The student understands how humans use and modify the physical environment. The student is expected to:

- (A) identify ways in which people have modified the physical environment such as building roads, clearing land for urban development and agricultural use, and drilling for oil;
- (B) identify positive and negative consequences of human modification of the physical environment such as the use of irrigation to improve crop yields; and
- (C) identify ways people can conserve and replenish natural resources.

(9) Economics. The student understands the value of work. The student is expected to:

- (A) explain how work provides income to purchase goods and services; and
- (B) explain the choices people in the U.S. free enterprise system can make about earning, spending, and saving money and where to live and work.

(10) Economics. The student understands the roles of producers and consumers in the production of goods and services. The student is expected to:

- (A) distinguish between producing and consuming;
- (B) identify ways in which people are both producers and consumers; and
- (C) examine the development of a product from a natural resource to a finished product.

(11) Government. The student understands the purpose of governments. The student is expected to:

- (A) identify functions of governments such as establishing order, providing security, and managing conflict;
- (B) identify governmental services in the community such as police and fire protection, libraries, schools, and parks and explain their value to the community; and
- (C) describe how governments tax citizens to pay for services.

(12) Government. The student understands the role of public officials. The student is expected to:

- (A) name current public officials, including mayor, governor, and president;
- (B) compare the roles of public officials, including mayor, governor, and president;
- (C) identify ways that public officials are selected, including election and appointment to office; and
- (D) identify how citizens participate in their own governance through staying informed of what public officials are doing, providing input to them, and volunteering to participate in government functions.

(13) Citizenship. The student understands characteristics of good citizenship as exemplified by historical figures and other individuals. The student is expected to:

- (A) identify characteristics of good citizenship, including truthfulness, justice, equality, respect for oneself and others, responsibility in daily life, and participation in government by educating oneself about the issues, respectfully holding public officials to their word, and voting;
- (B) identify historical figures such as Paul Revere, Abigail Adams, World War II Women Airforce Service Pilots (WASPs) and Navajo Code Talkers, and Sojourner Truth who have exemplified good citizenship;
- (C) identify other individuals who exemplify good citizenship; and
- (D) identify ways to actively practice good citizenship, including involvement in community service.

(14) Citizenship. The student identifies customs, symbols, and celebrations that represent American beliefs and principles that contribute to our national identity. The student is expected to:

- (A) recite the Pledge of Allegiance to the United States Flag and the Pledge to the Texas Flag;
- (B) identify selected patriotic songs, including "The Star Spangled Banner" and "America the Beautiful";
- (C) identify selected symbols such as state and national birds and flowers and patriotic symbols such as the U.S. and Texas flags and Uncle Sam; and
- (D) identify how selected customs, symbols, and celebrations reflect an American love of individualism, inventiveness, and freedom.

(15) Culture. The student understands the significance of works of art in the local community. The student is expected to:

- (A) identify selected stories, poems, statues, paintings, and other examples of the local cultural heritage; and
- (B) explain the significance of selected stories, poems, statues, paintings, and other examples of the local cultural heritage.

(16) Culture. The student understands ethnic and/or cultural celebrations. The student is expected to:

- (A) identify the significance of various ethnic and/or cultural celebrations; and
- (B) compare ethnic and/or cultural celebrations.

(17) Science, technology, and society. The student understands how science and technology have affected life, past and present. The student is expected to:

- (A) describe how science and technology change communication, transportation, and recreation; and
 - (B) explain how science and technology change the ways in which people meet basic needs.
- (18) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including electronic technology. The student is expected to:
- (A) obtain information about a topic using a variety of valid oral sources such as conversations, interviews, and music;
 - (B) obtain information about a topic using a variety of valid visual sources such as pictures, maps, electronic sources, literature, reference sources, and artifacts;
 - (C) use various parts of a source, including the table of contents, glossary, and index, as well as keyword Internet searches to locate information;
 - (D) sequence and categorize information; and
 - (E) interpret oral, visual, and print material by identifying the main idea, predicting, and comparing and contrasting.
- (19) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:
- (A) express ideas orally based on knowledge and experiences; and
 - (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas.
- (20) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:
- (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and
 - (B) use a decision-making process to identify a situation that requires a decision, gather information, generate options, predict outcomes, take action to implement a decision, and reflect on the effectiveness of that decision.

§114.2. Languages Other Than English, Elementary.

School districts are strongly encouraged to offer languages other than English in the elementary grades. For districts that offer languages in elementary, the essential knowledge and skills are those designated as Levels I and II - novice progress checkpoint, exploratory languages, and cultural and linguistic topics in Subchapter C of this chapter (relating to Texas Essential Knowledge and Skills for Languages Other Than English).

§115.4. Health Education, Grade 2.

(a) Introduction.

(1) In health education, students acquire the health information and skills necessary to become healthy adults and learn about behaviors in which they should and should not participate. To achieve that goal, students will understand the following: students should first seek guidance in the area of health from their parents; personal behaviors can increase or reduce health risks throughout the lifespan; health is influenced by a variety of factors; students can recognize and utilize health information and products; and personal/interpersonal skills are needed to promote individual, family, and community health.

(2) In Grade 2, students learn age-appropriate skills to help them stay healthy and safe. Students are taught, in a basic way, that there are external factors that influence our health, and that the students can take responsibility for protecting their health. Students are taught ways to communicate in a healthy way with friends, families, and classmates.

(b) Knowledge and skills.

(1) Health behaviors. The student understands that personal health decisions and behaviors affect health throughout the life span. The student is expected to:

(A) explain actions an individual can take when not feeling well;

(B) describe and demonstrate personal health habits such as brushing and flossing teeth and exercise;

(C) identify food groups and describe the effects of eating too much sugar and fat such as knowing that sugar causes dental cavities;

(D) identify healthy and unhealthy food choices such as a healthy breakfast and snacks and fast food choices;

(E) define stress and describe healthy behaviors that reduce stress such as exercise;

(F) describe the importance of individual health maintenance activities such as regular medical and dental checkups; and

(G) describe how a healthy diet can help protect the body against some diseases.

(2) Health behaviors. The student understands that safe, unsafe, and/or harmful behaviors result in positive and negative consequences throughout the life span. The student is expected to:

(A) identify and describe the harmful effects of alcohol, tobacco, and other drugs on the body;

(B) identify ways to avoid deliberate and accidental injuries;

- (C) explain the need to use protective equipment when engaging in certain recreational activities such as skateboarding, rollerblading, cycling, and swimming;
 - (D) explain the importance of avoiding dangerous substances;
 - (E) explain ways to avoid weapons and report the presence of weapons to an adult; and
 - (F) identify a trusted adult such as a parent, teacher, or law enforcement officer and identify ways to react when approached and made to feel uncomfortable or unsafe by another person/adult.
- (3) Health information. The student understands the basic structures and functions of the human body and how they relate to personal health throughout the life span. The student is expected to:
- (A) describe behaviors that protect the body structure and organs such as wearing a seat belt and wearing a bicycle helmet;
 - (B) identify the major organs of the body such as the heart, lungs, and brain and describe their primary function; and
 - (C) identify the major systems of the body.
- (4) Health information. The student understands the difference between sickness and health in persons of all ages. The student is expected to:
- (A) explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization;
 - (B) identify causes of disease other than germs such as allergies and heart disease;
 - (C) explain how the body provides protection from disease; and
 - (D) apply practices to control spread of germs in daily life such as hand washing and skin care.
- (5) Health information. The student recognizes factors that influence the health of an individual. The student is expected to:
- (A) identify hazards in the environment that affect health and safety such as having loaded guns in the home and drinking untreated water;
 - (B) describe strategies for protecting the environment and the relationship between the environment and individual health such as air pollution and ultra-violet rays; and
 - (C) identify personal responsibilities as a family member in promoting and practicing health behaviors.
- (6) Health information. The student understands how to recognize health information. The student is expected to:

- (A) identify people who can provide health information; and
- (B) identify various media that provide health information.

(7) Influencing factors. The student recognizes the influence of media and technology on personal health. The student is expected to:

- (A) describe how the media can influence an individual's health choices such as television ads for fast foods and breakfast cereals; and
- (B) discuss how personal health care products have been improved by technology such as sunblock and safety equipment.

(8) Influencing factors. The student understands how relationships influence personal health. The student is expected to:

- (A) describe how friends can influence a person's health; and
- (B) recognize unsafe requests made by friends such as playing in the street.

(9) Personal/interpersonal skills. The student comprehends the skills necessary for building and maintaining healthy relationships. The student is expected to:

- (A) identify characteristics needed to be a responsible family member or friend;
- (B) list and demonstrate good listening skills; and
- (C) demonstrate refusal skills.

(10) Personal/interpersonal skills. The student understands healthy ways to communicate consideration and respect for self, family, friends, and others. The student is expected to:

- (A) describe how to effectively communicate;
- (B) express needs, wants, and emotions in healthy ways; and
- (C) explain the benefits of practicing self-control.

(11) Personal/interpersonal skills. The student demonstrates critical-thinking, decision-making, goal-setting and problem-solving skills for making health-promoting decisions. The student is expected to:

- (A) explain steps in the decision-making process and the importance of following the steps;
- (B) describe how personal-health decisions affect self and others;
- (C) list the steps and describe the importance of task completion and goal setting; and
- (D) explain why obtaining help, especially from parents/trusted adults, can be helpful when making decisions about personal health.

§116.4. Physical Education, Grade 2.**(a) Introduction.**

(1) In Physical Education, students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically-active lifestyle. The student exhibits a physically-active lifestyle and understands the relationship between physical activity and health throughout the lifespan.

(2) Second grade students learn to demonstrate key elements of fundamental movement skills and mature form in locomotive skills. Students learn to describe the function of the heart, lungs, and bones as they relate to movement. Students are introduced to basic concepts of health promotion such as the relationship between a physically-active lifestyle and the health of the heart. Students learn to work in a group and demonstrate the basic elements of socially responsible conflict resolution.

(b) Knowledge and skills.

(1) Movement. The student demonstrates competency in fundamental movement patterns and proficiency in a few specialized movement forms. The student is expected to:

(A) travel independently in a large group while safely and quickly changing speed and direction;

(B) demonstrate skills of chasing, fleeing, and dodging to avoid or catch others;

(C) combine shapes, levels, and pathways into simple sequences;

(D) demonstrate mature form in walking, hopping, and skipping;

(E) demonstrate balance in symmetrical and non-symmetrical shapes from different basis of support;

(F) demonstrate a variety of relationships in dynamic movement situations such as under, over, behind, next to, through, right, left, up, or down;

(G) demonstrate simple stunts that exhibit personal agility such as jumping-one and two foot takeoffs and landing with good control;

(H) demonstrate smooth transition from one body part to the next in rolling activities such as side roll, log roll, balance/curl, and roll/balance in a new position;

(I) demonstrate control weight transfers such as feet to hands with controlled landing and feet to back;

(J) demonstrate the ability to mirror a partner;

(K) walk in time to a 4/4 underlying beat;

(L) perform rhythmical sequences such as simple folk, creative, and ribbon routines;

(M) jump a self-turned rope repeatedly; and

(N) demonstrate on cue key elements of hand dribble, foot dribble, kick and strike such as striking balloon or ball with hand.

(2) Movement. The student applies movement concepts and principles to the learning and development of motor skills. The student is expected to:

(A) recognize that attention to the feeling of movement is important in motor skill development; and

(B) identify similar movement concepts and terms in a variety of skills such as straddle position, ready position, and bending knees to absorb force.

(3) Physical activity and health. The student exhibits a health enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge. The student is expected to:

(A) describe and select physical activities that provide opportunities for enjoyment and challenge;

(B) participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate, and perspiration;

(C) participate in appropriate exercises for flexibility in shoulders, legs, and trunk; and

(D) lift and support his/her weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping.

(4) Physical activity and health. The student knows the benefits from involvement in daily physical activity and factors that affect physical performance. The student is expected to:

(A) identify how regular physical activity strengthens the heart, lungs, and muscular system;

(B) describe how the blood carries oxygen and nutrients through the body;

(C) identify foods that enhance a healthy heart;

(D) explain the need for foods as a source of nutrients that provide energy for physical activity;

(E) describe the negative effects of smoking on the lungs and the ability to exercise; and

(F) describe the need for rest and sleep in caring for the body.

(5) Physical activity and health. The student knows and applies safety practices associated with physical activities. The student is expected to:

- (A) use equipment and space safely and properly;
 - (B) select and use appropriate protective equipment in preventing injuries such as helmets, elbow/knee pads, wrist guards, proper shoes, and clothing;
 - (C) list the effects the sun has on the body and describe protective measures such as sunscreen, hat, and long sleeves;
 - (D) list water safety rules and describe their importance;
 - (E) identify safe cycling and road practices; and
 - (F) describe appropriate reactions to emergency situations common to physical activity settings such as universal safety precautions and dialing 911.
- (6) Social development. The student understands basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance, and gymnastics. The student is expected to:
- (A) identify goals to be accomplished during simple games such as not getting tagged; and
 - (B) identify strategies in simple games and activities such as dodging to avoid being tagged.
- (7) Social development. The student develops positive self-management and social skills needed to work independently and with others in physical activity settings. The student is expected to:
- (A) display good sportsmanship; and
 - (B) treat others with respect during play.

§117.8. Art, Grade 2.

(a) Introduction.

- (1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences, as a source for creating artworks. They express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.
- (2) By analyzing artistic styles and historical periods students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze artworks, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

(b) Knowledge and skills.

(1) Perception. The student develops and organizes ideas from the environment. The student is expected to:

(A) identify variations in objects and subjects from the environment, using the senses; and

(B) identify art elements such as color, texture, form, line, and space and art principles such as emphasis, pattern, and rhythm.

(2) Creative expression/performance. The student expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to:

(A) express ideas and feelings in artworks, using a variety of colors, forms, and lines;

(B) create effective compositions, using design elements and principles; and

(C) identify and practice skills necessary for producing drawings, paintings, prints, constructions, and modeled forms, using a variety of art materials.

(3) Historical/cultural heritage. The student demonstrates an understanding of art history and culture as records of human achievement. The student is expected to:

(A) identify stories and constructions in a variety of artworks;

(B) compare ways individuals and families are depicted in different artworks; and

(C) identify different kinds of jobs in art.

(4) Response/evaluation. The student makes informed judgments about personal artworks and the artworks of others. The student is expected to:

(A) define reasons for preferences in personal artworks; and

(B) identify ideas in original artworks, portfolios, and exhibitions by peers and artists.

§117.9. Music, Grade 2.

(a) Introduction.

(1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. In music, students develop their intellect and refine their emotions, understanding the cultural and creative nature of musical artistry and making connections among music, the other arts, technology, and other aspects of social life. Through creative performance, students apply the expressive technical skills of music and critical-thinking skills to evaluate multiple forms of problem solving.

(2) By reflecting on musical periods and styles, students understand music's role in history and are able to participate successfully in a diverse society. Students analyze and evaluate music, developing criteria for making critical judgments and informed choices.

(b) Knowledge and skills.

(1) Perception. The student describes and analyzes musical sound and demonstrates musical artistry. The student is expected to:

- (A) identify instruments visually and aurally;
- (B) use music terminology to explain sounds and performances; and
- (C) identify music forms such as AB and ABA.

(2) Creative expression/performance. The student performs a varied repertoire of music. The student is expected to:

- (A) sing or play a classroom instrument independently or in groups; and
- (B) sing songs from diverse cultures and styles or play such songs on a musical instrument.

(3) Creative expression/performance. The student reads and writes music notation. The student is expected to:

- (A) read and write simple music notation, using a system (letters, numbers, syllables); and
- (B) read and write music that incorporates basic rhythmic patterns in simple meters.

(4) Creative expression/performance. The student creates and arranges music within specified guidelines. The student is expected to:

- (A) create rhythmic phrases; and
- (B) create melodic phrases.

(5) Historical/cultural heritage. The student relates music to history, to society, and to culture. The student is expected to:

- (A) identify music from various periods of history and culture;
- (B) sing songs and play musical games from diverse cultures; and
- (C) identify relationships between music and other subjects.

(6) Response/evaluation. The student responds to and evaluates music and musical performance. The student is expected to:

(A) distinguish between beat/rhythm, higher/lower, louder/softer, faster/slower, and same/different in musical performances; and

(B) show appropriate audience behavior during live performances.

§117.10. Theatre, Grade 2.

(a) Introduction.

(1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing knowledge and skills students are expected to acquire. Through perceptual studies, students increase their understanding of self and others and develop clear ideas about the world. Through a variety of theatrical experiences, students communicate in a dramatic form, make artistic choices, solve problems, build positive self-concepts, and relate interpersonally.

(2) Students increase their understanding of heritage and traditions through historical and cultural studies in theatre. Student response and evaluation promote thinking and further discriminating judgment, developing students who are appreciative and evaluative consumers of live theatre, film, television, and other technologies.

(b) Knowledge and skills.

(1) Perception. The student develops concepts about self, human relationships, and the environment, using elements of drama and conventions of theatre. The student is expected to:

(A) react to sensory experiences;

(B) expand spatial awareness in dramatic play, using expressive and rhythmic movement;

(C) participate in dramatic play, using actions, sounds, and dialogue; and

(D) role-play, imitate, and recreate dialogue.

(2) Creative expression/performance. The student interprets characters, using the voice and body expressively, and creates dramatizations. The student is expected to:

(A) demonstrate safe use of movement and voice;

(B) role-play in real life and imaginative situations through narrative pantomime, dramatic play, and story dramatization;

(C) create dramatizations of limited-action stories, using simple pantomime and puppetry; and

(D) dramatize poems and songs, using simple pantomime and puppetry.

(3) Creative expression/performance. The student applies design, directing, and theatre production concepts and skills. The student is expected to:

- (A) select aspects of the environment for use in dramatic play;
- (B) adapt the environment for dramatic play, using simple materials;
- (C) plan dramatic play; and
- (D) cooperate and interact with others in dramatic play.

(4) Historical/cultural heritage. The student relates theatre to history, society, and culture. The student is expected to:

- (A) imitate life experiences from various historical periods in dramatic play; and
- (B) identify diverse cultural dimensions in dramatic play.

(5) Response/evaluation. The student responds to and evaluates theatre and theatrical performances. The student is expected to:

- (A) identify and apply appropriate audience behavior;
- (B) react to and begin to evaluate dramatic activities;
- (C) employ music, creative movement, and visual components in dramatic play; and
- (D) observe the performance of artists and identify theatrical vocations.

§126.6. Technology Applications, Kindergarten-Grade 2, Beginning with School Year 2012-2013.

(a) Introduction.

(1) The technology applications curriculum has six strands based on the National Educational Technology Standards for Students (NETS•S) and performance indicators developed by the International Society for Technology in Education (ISTE): creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts.

(2) Through the study of the six strands in technology applications, students use creative thinking and innovative processes to construct knowledge and develop products. Students communicate and collaborate both locally and globally to reinforce and promote learning. Research and information fluency includes the acquisition and evaluation of digital content. Students develop critical-thinking, problem-solving, and decision-making skills by collecting, analyzing, and reporting digital information. Students practice digital citizenship by behaving responsibly while using technology tools and resources. Through the study of technology operations and concepts, students learn technology related terms, concepts, and data input strategies.

(3) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Creativity and innovation. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to:

- (A) apply prior knowledge to develop new ideas, products, and processes;
- (B) create original products using a variety of resources;
- (C) explore virtual environments, simulations, models, and programming languages to enhance learning;
- (D) create and execute steps to accomplish a task; and
- (E) evaluate and modify steps to accomplish a task.

(2) Communication and collaboration. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:

- (A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally;
- (B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures;
- (C) format digital information, including font attributes, color, white space, graphics, and animation, for a defined audience and communication medium; and
- (D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.

(3) Research and information fluency. The student acquires and evaluates digital content. The student is expected to:

- (A) use search strategies to access information to guide inquiry;
- (B) use research skills to build a knowledge base regarding a topic, task, or assignment; and
- (C) evaluate the usefulness of acquired digital content.

(4) Critical thinking, problem solving, and decision making. The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:

- (A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem;

- (B) evaluate the appropriateness of a digital tool to achieve the desired product;
 - (C) evaluate products prior to final submission; and
 - (D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages.
- (5) Digital citizenship. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to:
- (A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment;
 - (B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws; and
 - (C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.
- (6) Technology operations and concepts. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:
- (A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies;
 - (B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems;
 - (C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files;
 - (D) use a variety of input, output, and storage devices;
 - (E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten-Grade 2 learning;
 - (F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning; and
 - (G) use the help feature online and in applications.