Texas Essential Knowledge and Skills for Grade 2

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§110.4. English Language Arts and Reading, Grade 2, Adopted 2017.

(a) Introduction.

(1) The English language arts and reading Texas Essential Knowledge and Skills (TEKS) embody the interconnected nature of listening, speaking, reading, writing, and thinking through the seven integrated strands of developing and sustaining foundational language skills; comprehension; response; multiple genres; author's purpose and craft; composition; and inquiry and research. The strands focus on academic oracy (proficiency in oral expression and comprehension), authentic reading, and reflective writing to ensure a literate Texas. The strands are integrated and progressive with students continuing to develop knowledge and skills with increased complexity and nuance in order to think critically and adapt to the ever-evolving nature of language and literacy.

(2) The seven strands of the essential knowledge and skills for English language arts and reading are intended to be integrated for instructional purposes and are recursive in nature. Strands include the four domains of language (listening, speaking, reading, writing) and their application in order to accelerate the acquisition of language skills so that students develop high levels of social and academic language proficiency. Although some strands may require more instructional time, each strand is of equal value, may be presented in any order, and should be integrated throughout the year. It is important to note that encoding (spelling) and decoding (reading) are reciprocal skills. Decoding is internalized when tactile and kinesthetic opportunities (encoding) are provided. Additionally, students should engage in academic conversations, write, read, and be read to on a daily basis with opportunities for cross-curricular content and student choice.

(3) Text complexity increases with challenging vocabulary, sophisticated sentence structures, nuanced text features, cognitively demanding content, and subtle relationships among ideas (Texas Education Agency, *STAAR Performance Level Descriptors*, 2013). As skills and knowledge are obtained in each of the seven strands, students will continue to apply earlier standards with greater depth to increasingly complex texts in multiple genres as they become self-directed, critical learners who work collaboratively while continuously using metacognitive skills.

(4) English language learners (ELLs) are expected to meet standards in a second language; however, their proficiency in English influences the ability to meet these standards. To demonstrate this knowledge throughout the stages of English language acquisition, comprehension of text requires additional scaffolds such as adapted text, translations, native language support, cognates,

summaries, pictures, realia, glossaries, bilingual dictionaries, thesauri, and other modes of comprehensible input. ELLs can and should be encouraged to use knowledge of their first language to enhance vocabulary development; vocabulary needs to be in the context of connected discourse so that it is meaningful. Strategic use of the student's first language is important to ensure linguistic, affective, cognitive, and academic development in English.

(5) Current research stresses the importance of effectively integrating second language acquisition with quality content area education in order to ensure that ELLs acquire social and academic language proficiency in English, learn the knowledge and skills, and reach their full academic potential. Instruction must be linguistically accommodated in accordance with the English Language Proficiency Standards (ELPS) and the student's English language proficiency levels to ensure the mastery of knowledge and skills in the required curriculum is accessible. For a further understanding of second language acquisition needs, refer to the ELPS and proficiency-level descriptors adopted in Chapter 74, Subchapter A, of this title (relating to Required Curriculum).

(6) Oral language proficiency holds a pivotal role in school success; verbal engagement must be maximized across grade levels (Kinsella, 2010). In order for students to become thinkers and proficient speakers in science, social studies, mathematics, fine arts, language arts and reading, and career and technical education, they must have multiple opportunities to practice and apply the academic language of each discipline (Fisher, Frey, & Rothenberg, 2008).

(7) 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) Developing and sustaining foundational language skills: listening, speaking, discussion, and thinking--oral language. The student develops oral language through listening, speaking, and discussion. The student is expected to:

(A) listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses;

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

(C) share information and ideas that focus on the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language;

(D) work collaboratively with others by following agreed-upon rules for discussion, including listening to others, speaking when recognized, making appropriate contributions, and building on the ideas of others; and

(E) develop social communication such as distinguishing between asking and telling.

(2) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--beginning reading and writing. The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to:

(A) demonstrate phonological awareness by:

(i) producing a series of rhyming words;

(ii) distinguishing between long and short vowel sounds in one-syllable and multi-syllable words;

(iii) recognizing the change in spoken word when a specified phoneme is added, changed, or removed; and

(iv) manipulating phonemes within base words;

(B) demonstrate and apply phonetic knowledge by:

(i) decoding words with short, long, or variant vowels, trigraphs, and blends;

(ii) decoding words with silent letters such as knife and gnat;

(iii) decoding multisyllabic words with closed syllables; open syllables; VCe syllables; vowel teams, including digraphs and diphthongs; r-controlled syllables; and final stable syllables;

(iv) decoding compound words, contractions, and common abbreviations;

(v) decoding words using knowledge of syllable division patterns such as VCCV, VCV, and VCCCV;

(vi) decoding words with prefixes, including un-, re-, and dis-, and inflectional endings, including -s, -es, -ed, -ing, -er, and -est; and

(vii) identifying and reading high-frequency words from a research-based list;

(C) demonstrate and apply spelling knowledge by:

(i) spelling one-syllable and multisyllabic words with closed syllables; open syllables; VCe syllables; vowel teams, including digraphs and diphthongs; r-controlled syllables; and final stable syllables;

(ii) spelling words with silent letters such as knife and gnat;

(iii) spelling compound words, contractions, and common abbreviations;

(iv) spelling multisyllabic words with multiple sound-spelling patterns;

(v) spelling words using knowledge of syllable division patterns, including words with double consonants in the middle of the word; and

(vi) spelling words with prefixes, including un-, re-, and dis-, and inflectional endings, including -s, -es, -ed, -ing, -er, and -est;

(D) alphabetize a series of words and use a dictionary or glossary to find words; and

(E) develop handwriting by accurately forming all cursive letters using appropriate strokes when connecting letters.

(3) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--vocabulary. The student uses newly acquired vocabulary expressively. The student is expected to:

(A) use print or digital resources to determine meaning and pronunciation of unknown words;

(B) use context within and beyond a sentence to determine the meaning of unfamiliar words;

(C) identify the meaning of and use words with affixes un-, re-, -ly, -er, and -est (comparative and superlative), and -ion/tion/sion; and

(D) identify, use, and explain the meaning of antonyms, synonyms, idioms, and homographs in context.

(4) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--fluency. The student reads grade-level text with fluency and comprehension. The student is expected to use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text.

(5) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--self-sustained reading. The student reads grade-appropriate texts independently. The student is expected to self-select text and read independently for a sustained period of time.

(6) Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to:

(A) establish purpose for reading assigned and self-selected texts;

(B) generate questions about text before, during, and after reading to deepen understanding and gain information;

(C) make and correct or confirm predictions using text features, characteristics of genre, and structures;

(D) create mental images to deepen understanding;

(E) make connections to personal experiences, ideas in other texts, and society;

(F) make inferences and use evidence to support understanding;

(G) evaluate details read to determine key ideas;

(H) synthesize information to create new understanding; and

(I) monitor comprehension and make adjustments such as re-reading, using background knowledge, checking for visual cues, and asking questions when understanding breaks down.

(7) Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to:

(A) describe personal connections to a variety of sources;

(B) write brief comments on literary or informational texts that demonstrate an understanding of the text;

(C) use text evidence to support an appropriate response;

(D) retell and paraphrase texts in ways that maintain meaning and logical order;

(E) interact with sources in meaningful ways such as illustrating or writing; and

(F) respond using newly acquired vocabulary as appropriate.

(8) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts--literary elements. The student recognizes and analyzes literary elements within and across increasingly complex traditional, contemporary, classical, and diverse literary texts. The student is expected to:

(A) discuss topics and determine theme using text evidence with adult assistance;

(B) describe the main character's (characters') internal and external traits;

(C) describe and understand plot elements, including the main events, the conflict, and the resolution, for texts read aloud and independently; and

(D) describe the importance of the setting.

(9) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts--genres. The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to:

(A) demonstrate knowledge of distinguishing characteristics of well-known children's literature such as folktales, fables, and fairy tales;

(B) explain visual patterns and structures in a variety of poems;

(C) discuss elements of drama such as characters, dialogue, and setting;

(D) recognize characteristics and structures of informational text, including:

(i) the central idea and supporting evidence with adult assistance;

(ii) features and graphics to locate and gain information; and

(iii) organizational patterns such as chronological order and cause and effect stated explicitly;

(E) recognize characteristics of persuasive text, including:

(i) stating what the author is trying to persuade the reader to think or do; and

(ii) distinguishing facts from opinion; and

(F) recognize characteristics of multimodal and digital texts.

(10) Author's purpose and craft: listening, speaking, reading, writing, and thinking using multiple texts. The student uses critical inquiry to analyze the authors' choices and how they influence and communicate meaning within a variety of texts. The student analyzes and applies author's craft purposefully in order to develop his or her own products and performances. The student is expected to:

(A) discuss the author's purpose for writing text;

(B) discuss how the use of text structure contributes to the author's purpose;

(C) discuss the author's use of print and graphic features to achieve specific purposes;

(D) discuss the use of descriptive, literal, and figurative language;

(E) identify the use of first or third person in a text; and

(F) identify and explain the use of repetition.

(11) Composition: listening, speaking, reading, writing, and thinking using multiple texts--writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to:

(A) plan a first draft by generating ideas for writing such as drawing and brainstorming;

(B) develop drafts into a focused piece of writing by:

(i) organizing with structure; and

(ii) developing an idea with specific and relevant details;

(C) revise drafts by adding, deleting, or rearranging words, phrases, or sentences;

(D) edit drafts using standard English conventions, including:

(i) complete sentences with subject-verb agreement;

(ii) past, present, and future verb tense;

(iii) singular, plural, common, and proper nouns;

(iv) adjectives, including articles;

(v) adverbs that convey time and adverbs that convey place;

(vi) prepositions and prepositional phrases;

(vii) pronouns, including subjective, objective, and possessive cases;

(viii) coordinating conjunctions to form compound subjects and predicates;

(ix) capitalization of months, days of the week, and the salutation and conclusion of a letter;

(x) end punctuation, apostrophes in contractions, and commas with items in a series and in dates; and

(xi) correct spelling of words with grade-appropriate orthographic patterns and rules and high-frequency words; and

(E) publish and share writing.

(12) Composition: listening, speaking, reading, writing, and thinking using multiple texts--genres. The student uses genre characteristics and craft to compose multiple texts that are meaningful. The student is expected to:

(A) compose literary texts, including personal narratives and poetry;

(B) compose informational texts, including procedural texts and reports; and

(C) compose correspondence such as thank you notes or letters.

(13) Inquiry and research: listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:

(A) generate questions for formal and informal inquiry with adult assistance;

(B) develop and follow a research plan with adult assistance;

(C) identify and gather relevant sources and information to answer the questions;

(D) identify primary and secondary sources;

(E) demonstrate understanding of information gathered;

(F) cite sources appropriately; and

(G) use an appropriate mode of delivery, whether written, oral, or multimodal, to present results.

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§111.4. Mathematics, Grade 2, Adopted 2012.

(a) Introduction.

(1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking,

mathematical fluency, and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.

(2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(3) For students to become fluent in mathematics, students must develop a robust sense of number. The National Research Council's report, "Adding It Up," defines procedural fluency as "skill in carrying out procedures flexibly, accurately, efficiently, and appropriately." As students develop procedural fluency, they must also realize that true problem solving may take time, effort, and perseverance. Students in Grade 2 are expected to perform their work without the use of calculators.

(4) The primary focal areas in Grade 2 are making comparisons within the base-10 place value system, solving problems with addition and subtraction within 1,000, and building foundations for multiplication.

(A) Students develop an understanding of the base-10 place value system and place value concepts. The students' understanding of base-10 place value includes ideas of counting in units and multiples of thousands, hundreds, tens, and ones and a grasp of number relationships, which students demonstrate in a variety of ways.

(B) Students identify situations in which addition and subtraction are useful to solve problems. Students develop a variety of strategies to use efficient, accurate, and generalizable methods to add and subtract multi-digit whole numbers.

(C) Students use the relationship between skip counting and equal groups of objects to represent the addition or subtraction of equivalent sets, which builds a strong foundation for multiplication and division.

(b) Knowledge and skills.

(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

(A) apply mathematics to problems arising in everyday life, society, and the workplace;

(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;

(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;

(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;

(E) create and use representations to organize, record, and communicate mathematical ideas;

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(2) Number and operations. The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:

(A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones;

(B) use standard, word, and expanded forms to represent numbers up to 1,200;

(C) generate a number that is greater than or less than a given whole number up to 1,200;

(D) use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =);

(E) locate the position of a given whole number on an open number line; and

(F) name the whole number that corresponds to a specific point on a number line.

(3) Number and operations. The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to:

(A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words;

(B) explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part;

(C) use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole; and

(D) identify examples and non-examples of halves, fourths, and eighths.

(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:

(A) recall basic facts to add and subtract within 20 with automaticity;

(B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations;

(C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and

(D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.

(5) Number and operations. The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to:

(A) determine the value of a collection of coins up to one dollar; and

(B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.

(6) Number and operations. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to:

(A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and

(B) model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.

(7) Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:

(A) determine whether a number up to 40 is even or odd using pairings of objects to represent the number;

(B) use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200; and

(C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.

(8) Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:

(A) create two-dimensional shapes based on given attributes, including number of sides and vertices;

(B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language;

(C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;

(D) compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and

(E) decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.

(9) Geometry and measurement. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:

(A) find the length of objects using concrete models for standard units of length;

(B) describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;

(C) represent whole numbers as distances from any given location on a number line;

(D) determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;

(E) determine a solution to a problem involving length, including estimating lengths;

(F) use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit; and

(G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.

(10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:

(A) explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category;

(B) organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more;

(C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one; and

(D) draw conclusions and make predictions from information in a graph.

(11) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:

(A) calculate how money saved can accumulate into a larger amount over time;

(B) explain that saving is an alternative to spending;

(C) distinguish between a deposit and a withdrawal;

(D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing;

(E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and

(F) differentiate between producers and consumers and calculate the cost to produce a simple item.

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§112.13. Science, Grade 2, Adopted 2017.

(a) Introduction.

(1) 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 investigations 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) A central theme throughout the study of scientific investigation and reasoning; matter and energy; force, motion, and energy; Earth and space; and organisms and environment is active engagement in asking questions, creating a method to answer those questions, answering those questions, communicating ideas, and exploring with scientific tools.

Scientific investigation and reasoning involves practicing safe procedures, asking questions about the natural world, and seeking answers to those questions through simple observations used in descriptive investigations.

(B) Within the physical environment, students expand their understanding of the properties of objects such as temperature, shape, 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.

(C) 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.

(D) 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.

(2) 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."

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

(4) 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.

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

(A) identify, describe, and demonstrate safe practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately; and

(B) 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;

(C) collect data from observations using scientific 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 and propose a task and solution for the problem;

(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, plastic beakers, magnets, collecting nets, notebooks, and safety goggles or chemical splash goggles, as appropriate; timing devices; 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.

(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 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 such as cutting, folding, sanding, and melting to change their physical properties; 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 objects 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; and

(C) trace and compare patterns of movement of objects such as sliding, rolling, and spinning over time.

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

(A) observe, describe, and compare 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; and

(C) 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 the ways living organisms depend on each other and on their environments such as through food chains.

(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;

(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 such as grasshoppers and butterflies undergo during their life cycle.

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§113.13. Social Studies, Grade 2, Adopted 2018.

(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 discuss how and whether the actions of U.S. citizens and the local, state, and federal governments have achieved 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 how historical figures helped shape the community, state, and nation. The student is expected to:

(A) identify contributions of historical figures, including Thurgood Marshall, Irma Rangel, and Theodore Roosevelt, who have influenced the state and nation; and

(B) describe how people and events have influenced local community history.

(3) Geography. The student uses simple geographic tools, including maps and globes. The student is expected to:

(A) identify and use information on maps and globes using basic map elements such as title, cardinal directions, and legend; and

(B) create maps to show places and routes within the home, school, and community.

(4) Geography. The student understands the location of places in their community, state, country, and the world. The student is expected to:

(A) identify major landforms and bodies of water, including each of the seven continents and each of the oceans, on maps and globes; and

(B) locate places, including the local community, Texas, the United States, the state capital, the U.S. capital, and the bordering countries of Canada and Mexico on maps and globes.

(5) 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 clearing land, building roads, using land for agriculture, and drilling for oil;

(B) identify consequences of human modification of the physical environment; and

(C) identify ways people can conserve and replenish Earth's resources.

(6) 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 can make about earning, spending, and saving money.

(7) 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) trace the development of a product from a natural resource to a finished product.

(8) 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; and

(B) identify governmental services in the community such as police and fire protection, libraries, schools, and parks and explain their value to the community.

(9) 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.

(10) 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 and other individuals who have exemplified good citizenship such as Paul Revere, Abigail Adams, World War II Women Airforce Service Pilots (WASPs), Navajo Code Talkers, and Sojourner Truth; and

(C) identify ways to actively practice good citizenship, including involvement in community service.

(11) Citizenship. The student understands important symbols, customs, 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) sing, recite, or identify selected patriotic songs, including "The Star-Spangled Banner" and "America the Beautiful";

(C) identify symbols such as state and national birds and flowers and Uncle Sam; and

(D) identify how selected symbols, customs, and celebrations reflect an American love of individualism, inventiveness, and freedom.

(12) 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.

(13) 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 have affected communication, transportation, and recreation; and

(B) explain how science and technology have affected the ways in which people meet basic needs.

(14) Science, technology, and society. The student identifies individuals who exhibited individualism and inventiveness. The student is expected to identify individuals who have exhibited individualism and inventiveness such as Amelia Earhart and George Washington Carver.

(15) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of valid sources, including technology. The student is expected to:

(A) gather information about a topic using a variety of valid oral and visual sources such as interviews, music, pictures, maps, and artifacts; and

(B) interpret oral, visual, and print material by sequencing, categorizing, identifying the main idea, predicting, comparing, and contrasting.

(16) Social studies skills. The student communicates in written, oral, and visual forms. 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;

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

(D) use social studies terminology correctly;

(E) express ideas orally based on knowledge and experiences; and

(F) create written and visual material such as stories, maps, and graphic organizers to express ideas.

(17) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others. The student is expected to use problem-solving and decision-making processes 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.

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§114.4. Languages Other Than English, Elementary, Adopted 2014.

(a) According to the National Standards for Foreign Language Learning, advanced level language proficiency is necessary for college and career readiness. To that end, students should have uninterrupted, consistent access to early standards-based learning experiences in languages other than English. School districts are strongly encouraged to offer languages other than English in the elementary grades in immersion or Foreign Language in Elementary Schools (FLES) settings with consistent and frequent exposure. For districts that offer languages in elementary school, the expected student outcomes are the same as those designated at levels I-IV in Subchapter C of this chapter (relating to Texas Essential Knowledge and Skills for Languages Other Than English).

(b) Districts may offer a level of a language in a variety of scheduling arrangements that may extend or reduce the traditional schedule when careful consideration is given to the instructional time available on a campus and the language ability, access to programs, and motivation of students.

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§115.14. Health Education, Grade 2, Adopted 2020.

(a) Introduction.

(1) The goal of health education is to provide instruction that allows youth to develop and sustain health-promoting behaviors throughout their lives. The understanding and application of these standards will allow students the ability to gather, interpret, and understand health information; achieve health literacy; and adapt to the ever-evolving science of health. The health education knowledge and skills should be presented to students in a positive manner to support the development of a healthy self-concept and responsible decision making. The standards will help students reinforce, foster, and apply positive character traits.

(2) There are essential skills that repeat throughout the five strands and embody the interconnection of health literacy. These skills include decision making, problem solving, goal setting, maintaining healthy relationships with self and others, seeking help and support, and recognizing various influences on health such as social, environmental, media, and genetic. These skills, developed early on and reinforced throughout a student's education, will foster mastery of health concepts. Health class educators are encouraged to partner with school counselors where available to schedule time for them to deliver classroom guidance lessons to help teach these essential competencies.

(3) In Kindergarten-Grade 3, students gain an understanding of health information and skills through five strands: physical health and hygiene; mental health and wellness; healthy eating and physical activity; injury and violence prevention and safety; and alcohol, tobacco, and other drugs.

(A) Physical health and hygiene education helps to prepare students for improved lifelong health outcomes. Learning about body systems lays the foundation for personal health and hygiene. Health literacy and preventative behaviors empower students to make informed choices to support self, family, and community.

(B) The mental health and wellness strand recognizes that the knowledge and skills necessary to manage emotions, reactions, and relationships are essential to reaching one's full potential. Students gain knowledge about social and emotional health, including

developing a healthy self-concept, understanding risk and protective factors, and identifying and managing mental health and wellness concerns. In the early grades, students develop fluency around emotions and self-regulation and understanding the relationship between feelings, thoughts, and behavior. In subsequent grades, students learn and practice appropriate ways to solve interpersonal conflicts, work to develop a positive self-image, and develop healthy self-management skills.

(C) The healthy eating and physical activity strand addresses the importance of nutrition and physical activity to support a healthy lifestyle. Students apply critical-thinking and decision-making skills to make positive health choices. Students learn about essential nutrients, food groups, portion control, government nutritional recommendations, and the health benefits of being physically active. Students evaluate the connection between physical activity and nutrition and the prevention of chronic diseases.

(D) By focusing on injury and violence prevention and safety, the standards promote student well-being and awareness of dangerous situations. Supporting student well-being and providing instruction in digital citizenship, bullying prevention, first aid, and identification of safe and unsafe situations creates empowered and educated students who are able to make decisions that keep themselves and others safe. Beginning in Kindergarten and continuing through high school, students gain knowledge and skills to support safety and wellness at school, at home, online, and in the community.

(E) The standards under the alcohol, tobacco, and other drugs strand focus on a number of protective factors that develop empowered students who are able to make better-informed decisions, including understanding the impact of substance use on physical, mental, and social health. Through this strand, students learn key concepts about alcohol, tobacco, and other drugs, including the use, misuse, and physiological effects; short- and long-term impacts on health; treatment; risk and protective factors; and prevention. These concepts introduce healthy alternatives and ways for students to ask for and seek out help from parents and other trusted adults.

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

(5) Students should first seek guidance in the area of health from a parent or legal guardian.

(b) Knowledge and skills.

(1) Physical health and hygiene--body systems. The student examines the structure, function, and relationships of body systems and their relevance to personal health. The student is expected to describe ways to protect the five senses such as wearing sunglasses or using a safe volume setting on audio devices.

(2) Physical health and hygiene--personal health and hygiene. The student understands health literacy, preventative health behaviors, and how to access and evaluate health care information to make informed decisions. The student is expected to:

(A) describe the importance of individual health maintenance activities such as regular medical checkups, dental exams, and vision and hearing screenings;

(B) explain actions an individual should take when not feeling well;

(C) discuss the importance of practicing personal hygiene and health habits;

(D) explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization;

(E) identify common illnesses and diseases, including asthma, diabetes, and epilepsy, and their symptoms; and

(F) discuss the signs and symptoms of illness that may occur after contact with biting insects, including ticks and mosquitos.

(3) Mental health and wellness--social and emotional health. The student identifies and applies strategies to develop socio-emotional health, self-regulation, and healthy relationships. The student is expected to:

(A) communicate needs, wants, and emotions in healthy ways;

(B) describe and practice calming and self-management strategies;

(C) discuss and explain how thoughts and emotions are related;

(D) explain the effect of peer influence on an individual's social and emotional health;

(E) describe the qualities of a good friend;

(F) describe and demonstrate respectful ways to communicate with family members, peers, teachers, and others;

(G) identify the feelings and perspectives of others by interpreting their verbal and nonverbal cues; and

(H) identify ways to prevent and repair broken friendships.

(4) Mental health and wellness--developing a healthy self-concept. The student develops the capacity for self-assessment and evaluation, goal setting, and decision making in order to develop a healthy self-concept. The student is expected to:

(A) discuss ways to be kind to self and others;

(B) define personal growth and identify areas for one's personal growth; and

(C) list the steps and describe the importance of goal setting and task completion.

(5) Mental health and wellness--identifying and managing mental health and wellness concerns. The student develops and uses appropriate skills to identify and manage conditions related to mental health and wellness. The student is expected to:

(A) identify strategies for managing different learning needs of self and others; and

(B) identify positive and negative stressors and how they impact emotions and learning.

(6) Healthy eating and physical activity--food and beverage daily recommendations. The student identifies and explains healthy eating strategies for enhancing and maintaining personal health throughout the lifespan. The student is expected to:

(A) identify types of nutrients;

(B) use familiar objects to identify healthy food portions from different food groups;

(C) identify healthy and unhealthy choices within the food groups; and

(D) identify the benefits of making healthy beverage choices, including water and milk, and limiting sweetened beverages such as soda and sports drinks.

(7) Healthy eating and physical activity--nutrition and physical activity literacy. The student obtains, processes, and understands basic physical activity and nutrition information needed to make health-promoting decisions. The student is expected to identify various media that provide health

information and how media can influence an individual's health choices such as television advertisements for fast foods and breakfast cereals.

(8) Healthy eating and physical activity--risk and protective factors. The student identifies and explains risk and protective factors related to healthy eating and physical activity. The student is expected to:

(A) identify signs and symptoms of common food allergies; and

(B) identify the benefits of establishing healthy eating and physical activity habits that will last a lifetime.

(9) Injury and violence prevention and safety--safety skills and unintentional injury. The student identifies and demonstrates safety and first aid knowledge to prevent and treat injuries. The student is expected to describe steps one can take to reduce hazards, avoid accidents, and prevent accidental injuries for self and others.

(10) Injury and violence prevention and safety--healthy relationships and conflict-resolution skills. The student differentiates between healthy and unhealthy relationships and demonstrates effective strategies to address conflict. The student is expected to:

(A) demonstrate refusal skills to protect personal space and avoid unsafe situations; and

(B) discuss the importance of telling a parent or another trusted adult when privacy or personal boundaries are not respected or when the student is made to feel unsafe.

(11) Injury and violence prevention and safety--healthy home, school, and community climate. The student understands that individual actions and awareness can impact safety, community, and environment. The student is expected to:

(A) describe unsafe situations, including interacting with strangers;

(B) explain ways to avoid weapons and report the presence of unsupervised weapons to a parent or another trusted adult;

(C) identify the hazards of unsupervised and improper handling of guns and other weapons; and

(D) identify two trusted adults not part of the immediate family and recall their phone numbers as part of a personal safety plan.

(12) Injury and violence prevention and safety--digital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:

(A) identify unsafe requests made in a digital or online environment and how to take appropriate action;

(B) explain why obtaining help, especially from parents or other trusted adults, is critical when making decisions regarding digital and online use; and

(C) identify consequences that result from cyberbullying and inappropriate digital and online usage.

(13) Injury and violence prevention and safety--interpersonal violence. The student understands the impact of interpersonal violence and the importance of seeking guidance and help to maintain personal safety. The student is expected to:

(A) describe consequences for the bully and the impact of bullying on the victim;

(B) describe the difference between reporting and tattling; and

(C) explain why obtaining assistance, especially from parents or other trusted adults, can be helpful when making decisions about personal safety.

(14) Alcohol, tobacco, and other drugs--use, misuse, and physiological effects. The student understands the difference between the use and misuse of different substances and how the use and misuse of substances impacts health. The student is expected to:

(A) describe the purposes of prescription and over-the-counter drugs and their intended benefits; and

(B) explain the harmful effects on physical health and how to avoid alcohol, tobacco, other drugs, and dangerous substances such as inhalants, vaping products, and household products.

(15) Alcohol, tobacco, and other drugs--treatment. The student understands how to seek emergency help for self and others in poisoning and overdose situations. The student is expected to describe what poisoning or overdose could look like and identify how to respond, including who to contact for help.

(16) Alcohol, tobacco, and other drugs--risk and protective factors. The student understands how various factors can influence decisions regarding substance use and the resources available for help. The student is expected to:

(A) identify unsafe requests related to alcohol, tobacco, and other drugs made by friends; and

(B) identify a trusted adult such as a parent, teacher, or law enforcement officer.

(17) Alcohol, tobacco, and other drugs--prevention. The student demonstrates refusal skills to avoid substance use and misuse. The student is expected to identify ways to avoid unsafe situations related to alcohol, tobacco, and other drugs and demonstrate refusal skills.

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§116.14. Physical Education, Grade 2, Adopted 2020.

(a) Introduction.

(1) Physical education is the foundation of a well-balanced curriculum. "It is an academic subject with a planned and sequential K-12 curriculum based on the national standards for physical education. Physical education provides cognitive content and instruction designed to develop motor skills, knowledge, and behaviors for physical activity and physical fitness. Supporting schools to establish daily physical education can provide students with the ability and confidence to be physically active for a lifetime" (Centers for Disease Control and Prevention (CDC), CDC Healthy Schools, May 2019).

(A) Physical education is designed to develop motor skills, knowledge, and behaviors for active living, physical fitness, sportsmanship, self-efficacy, and emotional intelligence. Physical education addresses the three domains of learning: cognitive skills related to the knowledge of movement, affective skills related to feelings and attitudes about movement, and psychomotor skills related to the manual or physical skills in movement literacy (SHAPE America, 2014, p. 4).

(B) Physically literate students have the ability to develop a lifetime of wellness. Physical literacy can be described as the ability to move with competence and confidence, to acquire knowledge and understanding, and to value and take responsibility for engagement in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person (Mandigo, Francis, Lodewyk & Lopez, 2012, and Whitehead, 2016).

(C) Research shows physical education is important to the development of the whole child and increases a lifetime of wellness. The Association for Supervision and Curriculum Development and the National Academy of Medicine support the belief that physical education, taught at a developmentally appropriate level, improves physical fitness and skill development, supports and improves academic achievement, reinforces self-discipline and teacher goal setting, reduces stress and increases blood flow to the brain, strengthens peer relationships, and improves self-confidence and self-esteem.

(2) The physical education standards are categorized into five strands that are of equal importance and value. The movement patterns and movement skills strand guides the physically literate student in the development of fundamental movement patterns, spatial and body awareness, and rhythmic activities. The performance strategies strand guides the physically literate student in utilizing strategies in fundamental components of games, activities, and outdoor and recreational pursuits. The health, physical activity, and fitness strand encompasses health-related fitness, environmental awareness, and safety practices that guide students to a health-enhancing, physically active lifestyle. The physically literate student demonstrates skills and mechanics used during physical activity and analyzes data used during fitness performance. The physically literate student recognizes the correlation between nutrition, hydration, and physical activity. The social and emotional health strand incorporates working with others, responding to class expectations, and applying self-management skills. The lifetime wellness strand engages students in physical activity for the purposes of self-expression, enjoyment, and challenge.

(3) Quality physical education programs include a comprehensive curriculum, physical activity, safety policies, safe environments, qualified physical education specialists instructing the class, and student assessment and do not use physical activity as a form of punishment. Texas state law outlines state requirements that support these essential components. In accordance with state law, physical education curriculum and instruction must be sequential, developmentally appropriate, and designed to meet the needs of all students, including students with disabilities and of all physical ability levels. At least 50% of the physical education class must be used for actual student physical activity at a moderate or vigorous intensity level, which aligns with additional state requirements for a minimum number of minutes for moderate or vigorous physical activity in Kindergarten-Grade 8. Required student-to-teacher ratios of 45-to-1 ensure the proper supervision and safety of students in physical education classes, and school districts must identify how student safety will be maintained if that ratio is exceeded. State law also requires that school districts and charter schools annually assess the physical fitness of students in Grade 3 or higher who are enrolled in a physical education course.

(4) Access to age-appropriate physical education equipment is essential to quality instruction. Basic, age-appropriate equipment for all students is imperative for the development of motor skills, manipulative skills, and eventually becoming a physically literate lifelong learner. Without basic, age-appropriate equipment, students will not have the necessary experiences to become physically literate, lifelong learners. All equipment should be age appropriate for the grade levels to be taught. The term "age appropriate" means that the equipment must include a variety of sizes, weights, and textures to provide differentiated experiences for various ages and ability levels of students. Basic equipment for quality instruction includes, but is not limited to, the following list: sports balls, including fleece balls, foam balls, tennis balls, beach balls, volleyballs, basketballs, soccer balls, footballs, baseballs, softballs, and unity balls; striking implements, including golf clubs, hockey sticks, baseball bats, pool noodles, tennis rackets, racquetball rackets, pickleball paddles, lollipop paddles, and ping pong paddles; goals for various sports, including soccer goals and basketball goals; nets and standards for a variety of sports, including volleyball, pickleball, badminton, and tennis; fitness-related equipment; other basic equipment, including scarves, bean bags, hula hoops, jump ropes, and scooters; classroom management equipment, including cones,

mats, pinnies, poly spots, and ball inflators; and technology, including microphones, projectors, speakers, heart rate monitors, timers, and other technology appropriate for instruction.

(5) In Kindergarten-Grade 5, students learn fundamental movement skills and cues; begin to understand that the body functions in relation to physical activity; develop body control; become aware of the health-related fitness components; begin applying strategies, rules, etiquette, and conflict resolution techniques in dynamic situations; and identify safety practices and protocols while being physically active. Students engage in activities that develop basic levels of strength, endurance, and flexibility. Activities are presented to complement a student's natural inclination to view physical activity as challenging and enjoyable.

(6) 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) Movement patterns and movement skills--locomotor skills. The physically literate student demonstrates competency in fundamental movement patterns and developmentally appropriate skills. The student is expected to:

(A) practice and apply correct technique while hopping, galloping, running, sliding, and skipping;

(B) demonstrate correct jumping and landing technique while consecutively jumping in place, forward and backward, side to side, half turns, and in tuck position;

(C) demonstrate basic balancing, cross lateralization, and sequencing of three skills with repetition; and

(D) spin and roll at different levels, speeds, and positions.

(2) Movement patterns and movement skills--non-locomotor skills. The physically literate student demonstrates competency in fundamental movement patterns and developmentally appropriate skills. The student is expected to:

(A) demonstrate maintaining balance standing on one foot while placing the free leg in a variety of different positions for eight seconds; and

(B) differentiate between bending, stretching, twisting, curling, pushing, pulling, and swaying.

(3) Movement patterns and movement skills--manipulative skills. The physically literate student demonstrates competency in developmentally appropriate manipulative skills. The student is expected to:

(A) demonstrate key elements in underhand throwing to a partner and overhand throwing to a target with opposite foot forward;

(B) demonstrate key elements when catching an accurately and softly thrown large ball without trapping against the body;

(C) demonstrate key elements of hand dribbling while walking;

(D) dribble a ball with control using both feet while walking;

(E) kick a moving ball using a continuous running approach;

(F) volley a lightweight object with consecutive hits to self or partner;

(G) strike a stationary object off the ground or an elevated surface with a hand or short- or long-handled implement consecutively;

(H) jump forward and backward with a self-turned rope; and

(I) demonstrate turning and jumping a long rope.

(4) Movement patterns and movement skills--spatial and body awareness. The physically literate student demonstrates competency in spatial and body awareness, including pathways, shapes, levels, speed, direction, and force. The student is expected to:

(A) demonstrate locomotor, non-locomotor, and manipulative skills safely in personal and general space;

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

(C) combine speed and direction as directed by the teacher.

(5) Movement patterns and movement skills--rhythmic activities. The physically literate student demonstrates competency in rhythmic activities and rhythmic combinations. The student is expected to demonstrate simple rhythmic sequences using various locomotor and coordination skills in eight counts.

(6) Performance strategies--games and activities. The physically literate student demonstrates competency in performance strategies in invasion, target, net or wall, fielding, striking, and cooperative games. The student is expected to:

(A) apply the skills of chasing, fleeing, and dodging to avoid or catch others during a variety of games at low, middle, and high levels with appropriate speed and direction;

(B) participate in appropriate drills and activities to enhance the learning of specific motor development skills; and

(C) demonstrate safe practices by using equipment appropriately and respecting personal space with minimal teacher guidance.

(7) Performance strategies--outdoor and recreational pursuits. The physically literate student demonstrates competency in outdoor and recreational pursuits. The student is expected to describe outdoor recreation and health and fitness activities in school and the community.

(8) Health, physical activity, and fitness--fitness principles. The physically literate student demonstrates and recognizes a health-enhancing, physically active lifestyle. The student is expected to:

(A) list the benefits of regular physical activity on the heart and lungs;

(B) define frequency and endurance as it relates to physical activities; and

(C) demonstrate correct technique of exercises that promote health-related fitness.

(9) Health, physical activity, and fitness--analyze data. The physically literate student demonstrates competency in the ability to analyze data used during fitness performance. The student is expected to:

(A) develop health-and skill-related goals with teacher guidance; and

(B) identify how to measure improvement and track progress in physical skills with a measuring tool.

(10) Health, physical activity, and fitness--nutrition and hydration. The physically literate student recognizes the correlation between nutrition, hydration, and physical activity. The student is expected to:

(A) identify the types of food that produce energy to enhance physical activity; and

(B) explain the need for proper hydration to enhance physical activity.

(11) Health, physical activity, and fitness--environmental awareness and safety practices. The physically literate student demonstrates competency in environmental awareness and understands safety practices. The student is expected to:

(A) explain how proper attire and safety equipment promote safe participation and prevent injury in a variety of physical activities; and

(B) identify and explain safety precautions, including pedestrian, water, sun, cycling, and skating safety.

(12) Social and emotional health--personal responsibility and self-management. The physically literate student demonstrates competency in personal responsibility. The student is expected to:

(A) differentiate between the positive and negative consequences of personal actions;

(B) explain and demonstrate respect for differences and similarities in abilities of self and others; and

(C) identify self-management skills to control personal impulses and emotions.

(13) Social and emotional health--resolving conflict and social interaction. The physically literate student demonstrates competency in resolving conflict and social interaction. The student is expected to:

(A) identify the causes of problems and propose solutions with teacher guidance; and

(B) communicate feelings and thoughts appropriately without cue.

(14) Social and emotional health--perseverance. The physically literate student perseveres while addressing challenges. The student is expected to explain how practicing challenging physical activities can build confidence and minimize frustration when learning skills.

(15) Social and emotional health--accepting and providing constructive feedback. The physically literate student accepts and provides constructive feedback. The student is expected to listen respectfully and respond appropriately to specific corrective feedback with teacher guidance.

(16) Lifetime wellness--application of lifetime wellness. The physically literate student identifies the value of lifetime wellness. The student is expected to:

(A) participate in moderate to vigorous physical activity on a regular basis; and

(B) identify and select physical activities for personal enjoyment.

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§117.108. Art, Grade 2, Adopted 2013.

(a) Introduction.

(1) The fine arts incorporate the study of dance, music, theatre, and the visual arts to offer unique experiences and empower students to explore realities, relationships, and ideas. These disciplines engage and motivate all students through active learning, critical thinking, and innovative problem solving. The fine arts develop cognitive functioning and increase student academic achievement, higher-order thinking, communication, and collaboration skills, making the fine arts applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.

(2) Four basic strands--foundations: observation and perception; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Each strand is of equal value and may be presented in any order throughout the year. Students rely on personal observations and perceptions, which are developed through increasing visual literacy and sensitivity to surroundings, communities, memories, imaginings, and life experiences, as sources for thinking about, planning, and creating original artworks. Students communicate their thoughts and ideas with innovation and creativity. Through art, students challenge their imaginations, foster critical thinking, collaborate with others, and build reflective skills. While exercising meaningful problem-solving skills, students develop the lifelong ability to make informed judgments.

(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) Foundations: observation and perception. The student develops and expands visual literacy skills using critical thinking, imagination, and the senses to observe and explore the world by learning about, understanding, and applying the elements of art, principles of design, and expressive qualities. The student uses what the student sees, knows, and has experienced as sources for examining, understanding, and creating artworks. The student is expected to:

(A) compare and contrast variations in objects and subjects from the environment using the senses; and

(B) identify the elements of art, including line, shape, color, texture, form, and space, and the principles of design, including emphasis, repetition/pattern, movement/rhythm, and balance.

(2) Creative expression. The student communicates ideas through original artworks using a variety of media with appropriate skills. The student expresses thoughts and ideas creatively while challenging the imagination, fostering reflective thinking, and developing disciplined effort and progressive problem-solving skills. The student is expected to:

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

(B) create compositions using the elements of art and principles of design; and

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

(3) Historical and cultural relevance. The student demonstrates an understanding of art history and culture by analyzing artistic styles, historical periods, and a variety of cultures. The student develops global awareness and respect for the traditions and contributions of diverse cultures. The student is expected to:

(A) interpret stories, content, and meanings in a variety of artworks;

(B) examine historical and contemporary artworks created by men and women, making connections to various cultures;

(C) analyze how art affects everyday life and is connected to jobs in art and design; and

(D) relate visual art concepts to other disciplines.

(4) Critical evaluation and response. The student responds to and analyzes artworks of self and others, contributing to the development of lifelong skills of making informed judgments and reasoned evaluations. The student is expected to:

(A) support reasons for preferences in personal artworks;

(B) compare and contrast ideas found in collections such as real or virtual art museums, galleries, portfolios, or exhibitions using original artworks created by artists or peers; and

(C) compile collections of artwork such as physical artwork, electronic images, sketchbooks, or portfolios for the purposes of self evaluations or exhibitions.

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§117.109. Music, Grade 2, Adopted 2013.

(a) Introduction.

(1) The fine arts incorporate the study of dance, music, theatre, and the visual arts to offer unique experiences and empower students to explore realities, relationships, and ideas. These disciplines engage and motivate all students through active learning, critical thinking, and innovative problem solving. The fine arts develop cognitive functioning and increase student academic achievement, higher-order thinking, communication, and collaboration skills, making the fine arts applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.

(2) Four basic strands--foundations: music literacy; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. The foundation of music literacy is fostered through reading, writing, reproducing, and creating music, thus developing a student's intellect. Through creative expression, students apply their music literacy and the critical-thinking skills of music to sing, play, read, write, and/or move. By experiencing musical periods and styles, students will understand the relevance of music to history, culture, and the world, including the relationship of music to other academic disciplines and the vocational possibilities offered. Through critical listening, students analyze, evaluate, and respond to music, developing criteria for making critical judgments and informed choices.

(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) Foundations: music literacy. The student describes and analyzes musical sound. The student is expected to:

(A) identify choral voices, including unison versus ensemble;

(B) identify instruments visually and aurally;

(C) use known music terminology to explain musical examples of tempo, including presto, moderato, and andante, and dynamics, including fortissimo and pianissimo; and

(D) identify and label simple small forms such as aaba and abac.

(2) Foundations: music literacy. The student reads, writes, and reproduces music notation. Technology and other tools may be used to read, write, and reproduce musical examples. The student is expected to:

(A) read, write, and reproduce rhythmic patterns using standard notation in 2/4 meter, including half note/half rest;

(B) read, write, and reproduce pentatonic melodic patterns using standard staff notation; and

(C) read, write, and reproduce basic music terminology, including allegro/largo and forte/piano.

(3) Creative expression. The student performs a varied repertoire of developmentally appropriate music in informal or formal settings. The student is expected to:

(A) sing tunefully or play classroom instruments, including rhythmic and melodic patterns, independently or in groups;

(B) sing songs or play classroom instruments from diverse cultures and styles, independently or in groups;

(C) move alone or with others to a varied repertoire of music using gross and fine locomotor and non-locomotor movement;

(D) perform simple part work, including rhythmic ostinato, and vocal exploration such as singing, speaking, and chanting; and

(E) perform music using tempo, including presto, moderato, and andante, and dynamics, including fortissimo and pianissimo.

(4) Creative expression. The student creates and explores new musical ideas. The student is expected to:

(A) create rhythmic phrases using known rhythms;

(B) create melodic phrases using known pitches; and

(C) explore new musical ideas in phrases using singing voice and classroom instruments.

(5) Historical and cultural relevance. The student examines music in relation to history and cultures. The student is expected to:

(A) sing songs and play musical games, including patriotic, folk, and seasonal music;

(B) examine short musical excerpts from various periods or times in history and diverse and local cultures; and

(C) identify simple interdisciplinary concepts relating to music.

(6) Critical evaluation and response. The student listens to, responds to, and evaluates music and musical performances. The student is expected to:

(A) begin to practice appropriate audience behavior during live or recorded performances;

(B) recognize known rhythmic and melodic elements in simple aural examples using known terminology;

(C) distinguish between rhythms, higher/lower pitches, louder/softer dynamics, faster/slower tempos, and simple patterns in musical performances; and

(D) respond verbally or through movement to short musical examples.

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§117.110. Theatre, Grade 2, Adopted 2013.

(a) Introduction.

(1) The fine arts incorporate the study of dance, music, theatre, and the visual arts to offer unique experiences and empower students to explore realities, relationships, and ideas. These disciplines engage and motivate all students through active learning, critical thinking, and innovative problem solving. The fine arts develop cognitive functioning and increase student academic achievement, higher-order thinking, communication, and collaboration skills, making the fine arts applicable to college readiness, career opportunities, workplace environments, social skills, and everyday life. Students develop aesthetic and cultural awareness through exploration, leading to creative expression. Creativity, encouraged through the study of the fine arts, is essential to nurture and develop the whole child.

(2) Four basic strands--foundations: inquiry and understanding; creative expression; historical and cultural relevance; and critical evaluation and response--provide broad, unifying structures for organizing knowledge and skills students are expected to acquire. Through the foundations: inquiry and understanding strand, students develop a perception of self, human relationships, and the world using elements of drama and conventions of theatre. Through the creative expression strand, students communicate in a dramatic form, engage in artistic thinking, build positive self-concepts, relate interpersonally, and integrate knowledge with other content areas in a relevant manner. Through the historical and cultural relevance strand, students increase their understanding of heritage and traditions in theatre and the diversity of world cultures as expressed in theatre. Through the critical evaluation and response strand, students engage in inquiry and dialogue, accept constructive criticism, revise personal views to promote creative and critical thinking, and develop the ability to appreciate and evaluate live theatre.

(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) Foundations: inquiry and understanding. 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 such as sight or sound through dramatic play;

(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 or puppetry; and

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

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

(A) select aspects of the environment such as location, climate, or time for use in dramatic play;

(B) adapt the environment for dramatic play using common objects such as tables or chairs;

(C) plan dramatic play; and

(D) cooperate and interact with others in dramatic play.

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

(A) imitate life experiences from school and community cultures in dramatic play; and

(B) explore diverse cultural and historical experiences through fables, myths, or fairytales in dramatic play.

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

(A) discuss, practice, and display appropriate audience behavior;

(B) react to and discuss dramatic activities; and

(C) integrate music, creative movement, and visual components in dramatic play.

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§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.