

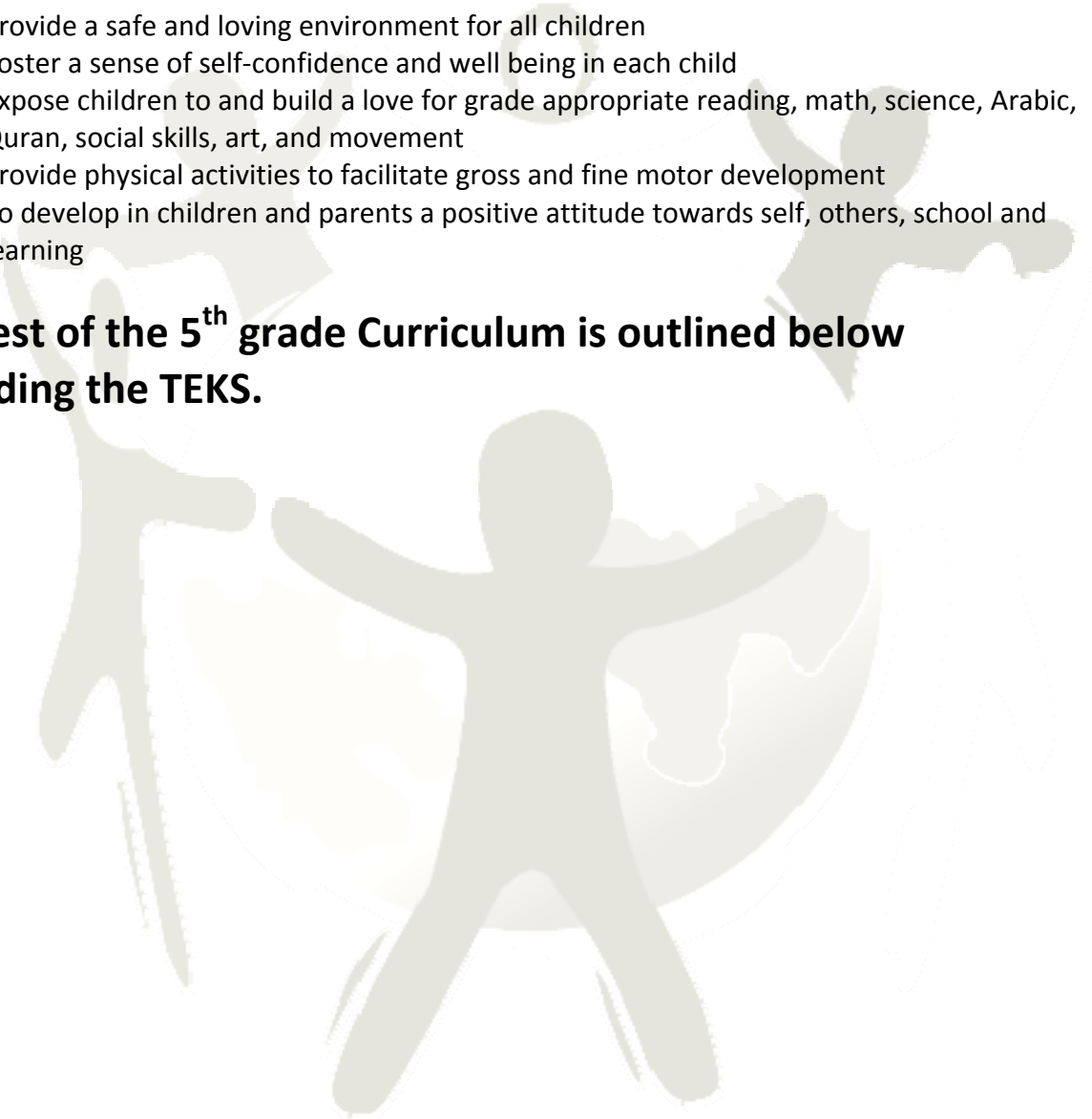
Fifth Grade Curriculum

Children in the Second Grade Program at Al Nur School explore the concepts listed below. Children learn these concepts at their own pace. Children are taught with hands-on materials, as well as with traditional methods.

Goals

- Provide a safe and loving environment for all children
- Foster a sense of self-confidence and well being in each child
- Expose children to and build a love for grade appropriate reading, math, science, Arabic, Quran, social skills, art, and movement
- Provide physical activities to facilitate gross and fine motor development
- To develop in children and parents a positive attitude towards self, others, school and learning

The rest of the 5th grade Curriculum is outlined below according the TEKS.



§110.16. English Language Arts and Reading, Grade 5, Beginning with School Year 2009-2010.

(a) Introduction.

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

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

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

(B) For ELLs, comprehension of texts requires additional scaffolds to support comprehensible input. ELL students should use the knowledge of their first language (e.g., cognates) to further vocabulary development. Vocabulary needs to be taught in the context of connected discourse so that language is meaningful. ELLs must learn how rhetorical devices in English differ from those in their native language. At the same time English learners are learning in English, the focus is on academic English, concepts, and the language structures specific to the content.

(C) During initial stages of English development, ELLs are expected to meet standards in a second language that many monolingual English speakers find difficult to meet in their native language. However, English language learners'

abilities to meet these standards will be influenced by their proficiency in English. While English language learners can analyze, synthesize, and evaluate, their level of English proficiency may impede their ability to demonstrate this knowledge during the initial stages of English language acquisition. It is also critical to understand that ELLs with no previous or with interrupted schooling will require explicit and strategic support as they acquire English and learn to learn in English simultaneously.

(3) To meet Public Education Goal 1 of the Texas Education Code, §4.002, which states, "The students in the public education system will demonstrate exemplary performance in the reading and writing of the English language," students will accomplish the essential knowledge, skills, and student expectations at Grade 5 as described in subsection (b) of this section.

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

(b) Knowledge and skills.

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

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

(A) determine the meaning of grade-level academic English words derived from Latin, Greek, or other linguistic roots and affixes;

(B) use context (e.g., in-sentence restatement) to determine or clarify the meaning of unfamiliar or multiple meaning words;

(C) produce analogies with known antonyms and synonyms;

(D) identify and explain the meaning of common idioms, adages, and other sayings; and

(E) use a dictionary, a glossary, or a thesaurus (printed or electronic) to determine the meanings, syllabication, pronunciations, alternate word choices, and parts of speech of words.

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

- (A) compare and contrast the themes or moral lessons of several works of fiction from various cultures;
- (B) describe the phenomena explained in origin myths from various cultures; and
- (C) explain the effect of a historical event or movement on the theme of a work of literature.

(4) Reading/Comprehension of Literary Text/Poetry. Students understand, make inferences and draw conclusions about the structure and elements of poetry and provide evidence from text to support their understanding. Students are expected to analyze how poets use sound effects (e.g., alliteration, internal rhyme, onomatopoeia, rhyme scheme) to reinforce meaning in poems.

(5) Reading/Comprehension of Literary Text/Drama. Students understand, make inferences and draw conclusions about the structure and elements of drama and provide evidence from text to support their understanding. Students are expected to analyze the similarities and differences between an original text and its dramatic adaptation.

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

- (A) describe incidents that advance the story or novel, explaining how each incident gives rise to or foreshadows future events;
- (B) explain the roles and functions of characters in various plots, including their relationships and conflicts; and
- (C) explain different forms of third-person points of view in stories.

(7) Reading/Comprehension of Literary Text/Literary Nonfiction. Students understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction and provide evidence from text to support their understanding. Students are expected to identify the literary language and devices used in biographies and autobiographies, including how authors present major events in a person's life.

(8) Reading/Comprehension of Literary Text/Sensory Language. Students understand, make inferences and draw conclusions about how an author's sensory language creates imagery in literary text and provide evidence from text to support their understanding.

Students are expected to evaluate the impact of sensory details, imagery, and figurative language in literary text.

(9) Reading/Comprehension of Text/Independent Reading. Students read independently for sustained periods of time and produce evidence of their reading. Students are expected to read independently for a sustained period of time and summarize or paraphrase what the reading was about, maintaining meaning and logical order (e.g., generate a reading log or journal; participate in book talks).

(10) Reading/Comprehension of Informational Text/Culture and History. Students analyze, make inferences and draw conclusions about the author's purpose in cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding. Students are expected to draw conclusions from the information presented by an author and evaluate how well the author's purpose was achieved.

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

(A) summarize the main ideas and supporting details in a text in ways that maintain meaning and logical order;

(B) determine the facts in text and verify them through established methods;

(C) analyze how the organizational pattern of a text (e.g., cause-and-effect, compare-and-contrast, sequential order, logical order, classification schemes) influences the relationships among the ideas;

(D) use multiple text features and graphics to gain an overview of the contents of text and to locate information; and

(E) synthesize and make logical connections between ideas within a text and across two or three texts representing similar or different genres.

(12) Reading/Comprehension of Informational Text/Persuasive Text. Students analyze, make inferences and draw conclusions about persuasive text and provide evidence from text to support their analysis. Students are expected to:

(A) identify the author's viewpoint or position and explain the basic relationships among ideas (e.g., parallelism, comparison, causality) in the argument; and

(B) recognize exaggerated, contradictory, or misleading statements in text.

(13) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:

(A) interpret details from procedural text to complete a task, solve a problem, or perform procedures; and

(B) interpret factual or quantitative information presented in maps, charts, illustrations, graphs, timelines, tables, and diagrams.

(14) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:

(A) explain how messages conveyed in various forms of media are presented differently (e.g., documentaries, online information, televised news);

(B) consider the difference in techniques used in media (e.g., commercials, documentaries, news);

(C) identify the point of view of media presentations; and

(D) analyze various digital media venues for levels of formality and informality.

(15) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:

(A) plan a first draft by selecting a genre appropriate for conveying the intended meaning to an audience, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;

(B) develop drafts by choosing an appropriate organizational strategy (e.g., sequence of events, cause-effect, compare-contrast) and building on ideas to create a focused, organized, and coherent piece of writing;

(C) revise drafts to clarify meaning, enhance style, include simple and compound sentences, and improve transitions by adding, deleting, combining, and rearranging sentences or larger units of text after rethinking how well questions of purpose, audience, and genre have been addressed;

(D) edit drafts for grammar, mechanics, and spelling; and

(E) revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.

(16) Writing/Literary Texts. Students write literary texts to express their ideas and feelings about real or imagined people, events, and ideas. Students are expected to:

(A) write imaginative stories that include:

- (i) a clearly defined focus, plot, and point of view;
- (ii) a specific, believable setting created through the use of sensory details; and
- (iii) dialogue that develops the story; and

(B) write poems using:

- (i) poetic techniques (e.g., alliteration, onomatopoeia);
- (ii) figurative language (e.g., similes, metaphors); and
- (iii) graphic elements (e.g., capital letters, line length).

(17) Writing. Students write about their own experiences. Students are expected to write a personal narrative that conveys thoughts and feelings about an experience.

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

(A) create multi-paragraph essays to convey information about the topic that:

- (i) present effective introductions and concluding paragraphs;
- (ii) guide and inform the reader's understanding of key ideas and evidence;
- (iii) include specific facts, details, and examples in an appropriately organized structure; and
- (iv) use a variety of sentence structures and transitions to link paragraphs;

(B) write formal and informal letters that convey ideas, include important information, demonstrate a sense of closure, and use appropriate conventions (e.g., date, salutation, closing); and

(C) write responses to literary or expository texts and provide evidence from the text to demonstrate understanding.

(19) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write

persuasive essays for appropriate audiences that establish a position and include sound reasoning, detailed and relevant evidence, and consideration of alternatives.

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

(A) use and understand the function of the following parts of speech in the context of reading, writing, and speaking:

(i) verbs (irregular verbs and active voice);

(ii) collective nouns (e.g., class, public);

(iii) adjectives (e.g., descriptive, including origins: French windows, American cars) and their comparative and superlative forms (e.g., good, better, best);

(iv) adverbs (e.g., frequency: usually, sometimes; intensity: almost, a lot);

(v) prepositions and prepositional phrases to convey location, time, direction, or to provide details;

(vi) indefinite pronouns (e.g., all, both, nothing, anything);

(vii) subordinating conjunctions (e.g., while, because, although, if); and

(viii) transitional words (e.g., also, therefore);

(B) use the complete subject and the complete predicate in a sentence; and

(C) use complete simple and compound sentences with correct subject-verb agreement.

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

(A) use capitalization for:

(i) abbreviations;

(ii) initials and acronyms; and

(iii) organizations;

(B) recognize and use punctuation marks including:

- (i) commas in compound sentences; and
- (ii) proper punctuation and spacing for quotations; and

(C) use proper mechanics including italics and underlining for titles and emphasis.

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

(A) spell words with more advanced orthographic patterns and rules:

- (i) consonant changes (e.g., /t/ to /sh/ in select, selection; /k/ to /sh/ in music, musician);
- (ii) vowel changes (e.g., long to short in crime, criminal; long to schwa in define, definition; short to schwa in legality, legal); and
- (iii) silent and sounded consonants (e.g., haste, hasten; sign, signal; condemn, condemnation);

(B) spell words with:

- (i) Greek Roots (e.g., tele, photo, graph, meter);
- (ii) Latin Roots (e.g., spec, scribe, rupt, port, ject, dict);
- (iii) Greek suffixes (e.g., -ology, -phobia, -ism, -ist); and
- (iv) Latin derived suffixes (e.g., -able, -ible; -ance, -ence);

(C) differentiate between commonly confused terms (e.g., its, it's; affect, effect);

(D) use spelling patterns and rules and print and electronic resources to determine and check correct spellings; and

(E) know how to use the spell-check function in word processing while understanding its limitations.

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

(A) brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic; and

(B) generate a research plan for gathering relevant information about the major research question.

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

(A) follow the research plan to collect data from a range of print and electronic resources (e.g., reference texts, periodicals, web pages, online sources) and data from experts;

(B) differentiate between primary and secondary sources;

(C) record data, utilizing available technology (e.g., word processors) in order to see the relationships between ideas, and convert graphic/visual data (e.g., charts, diagrams, timelines) into written notes;

(D) identify the source of notes (e.g., author, title, page number) and record bibliographic information concerning those sources according to a standard format; and

(E) differentiate between paraphrasing and plagiarism and identify the importance of citing valid and reliable sources.

(25) Research/Synthesizing Information. Students clarify research questions and evaluate and synthesize collected information. Students are expected to:

(A) refine the major research question, if necessary, guided by the answers to a secondary set of questions; and

(B) evaluate the relevance, validity, and reliability of sources for the research.

(26) Research/Organizing and Presenting Ideas. Students organize and present their ideas and information according to the purpose of the research and their audience. Students are expected to synthesize the research into a written or an oral presentation that:

(A) compiles important information from multiple sources;

(B) develops a topic sentence, summarizes findings, and uses evidence to support conclusions;

(C) presents the findings in a consistent format; and

(D) uses quotations to support ideas and an appropriate form of documentation to acknowledge sources (e.g., bibliography, works cited).

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

- (A) listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose or perspective;
- (B) follow, restate, and give oral instructions that include multiple action steps; and
- (C) determine both main and supporting ideas in the speaker's message.

(28) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students continue to apply earlier standards with greater complexity. Students are expected to give organized presentations employing eye contact, speaking rate, volume, enunciation, natural gestures, and conventions of language to communicate ideas effectively.

(29) Listening and Speaking/Teamwork. Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement.

Figure: 19 TAC §110.10(b)

Fifth Grade (§110.16 English Language Arts and Reading)

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

- (A) establish purposes for reading selected texts based upon own or others' desired outcome to enhance comprehension;
- (B) ask literal, interpretive, evaluative, and universal questions of text;
- (C) monitor and adjust comprehension (e.g., using background knowledge, creating sensory images, re-reading a portion aloud, generating questions);
- (D) make inferences about text and use textual evidence to support understanding;
- (E) summarize and paraphrase texts in ways that maintain meaning and logical order within a text and across texts; and
- (F) make connections (e.g., thematic links, author analysis) between and across multiple texts of various genres and provide textual evidence.

§111.17. Mathematics, Grade 5.

(a) Introduction.

(1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 5 are comparing and contrasting lengths, areas, and volumes of two- or three-dimensional geometric figures; representing and interpreting data in graphs, charts, and tables; and applying whole number operations in a variety of contexts.

(2) Throughout mathematics in Grades 3-5, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use algorithms for addition, subtraction, multiplication, and division as generalizations connected to concrete experiences; and they concretely develop basic concepts of fractions and decimals. Students use appropriate language and organizational structures such as tables and charts to represent and communicate relationships, make predictions, and solve problems. Students select and use formal language to describe their reasoning as they identify, compare, and classify two- or three-dimensional geometric figures; and they use numbers, standard units, and measurement tools to describe and compare objects, make estimates, and solve application problems. Students organize data, choose an appropriate method to display the data, and interpret the data to make decisions and predictions and solve problems.

(3) Throughout mathematics in Grades 3-5, students develop numerical fluency with conceptual understanding and computational accuracy. Students in Grades 3-5 use knowledge of the base-ten place value system to compose and decompose numbers in order to solve problems requiring precision, estimation, and reasonableness. By the end of Grade 5, students know basic addition, subtraction, multiplication, and division facts and are using them to work flexibly, efficiently, and accurately with numbers during addition, subtraction, multiplication, and division computation.

(4) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Grades 3-5, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve meaningful problems as they do mathematics.

(b) Knowledge and skills.

(5.1) **Number, operation, and quantitative reasoning.** The student uses place value to represent whole numbers and decimals.

The student is expected to:

(A) use place value to read, write, compare, and order whole numbers through the 999,999,999,999; and

(B) use place value to read, write, compare, and order decimals through the thousandths place.

(5.2) Number, operation, and quantitative reasoning. The student uses fractions in problem-solving situations.

The student is expected to:

(A) generate a fraction equivalent to a given fraction such as $\frac{1}{2}$ and $\frac{3}{6}$ or $\frac{4}{12}$ and $\frac{1}{3}$;

(B) generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number;

(C) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators; and

(D) use models to relate decimals to fractions that name tenths, hundredths, and thousandths.

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems.

The student is expected to:

(A) use addition and subtraction to solve problems involving whole numbers and decimals;

(B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology);

(C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology), including interpreting the remainder within a given context;

(D) identify common factors of a set of whole numbers; and

(E) model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers.

(5.4) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results.

The student is expected to use strategies, including rounding and compatible numbers to estimate solutions to addition, subtraction, multiplication, and division problems.

(5.5) Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships.

The student is expected to:

(A) describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams; and

(B) identify prime and composite numbers using concrete objects, pictorial models, and patterns in factor pairs.

(5.6) Patterns, relationships, and algebraic thinking. The student describes relationships mathematically.

The student is expected to select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations.

(5.7) Geometry and spatial reasoning. The student generates geometric definitions using critical attributes.

The student is expected to identify essential attributes including parallel, perpendicular, and congruent parts of two- and three-dimensional geometric figures.

(5.8) Geometry and spatial reasoning. The student models transformations.

The student is expected to:

(A) sketch the results of translations, rotations, and reflections on a Quadrant I coordinate grid; and

(B) identify the transformation that generates one figure from the other when given two congruent figures on a Quadrant I coordinate grid.

(5.9) Geometry and spatial reasoning. The student recognizes the connection between ordered pairs of numbers and locations of points on a plane.

The student is expected to locate and name points on a coordinate grid using ordered pairs of whole numbers.

(5.10) Measurement. The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems.

The student is expected to:

(A) perform simple conversions within the same measurement system (SI (metric) or customary);

(B) connect models for perimeter, area, and volume with their respective formulas; and

(C) select and use appropriate units and formulas to measure length, perimeter, area, and volume.

(5.11) **Measurement.** The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius).

The student is expected to:

(A) solve problems involving changes in temperature; and

(B) solve problems involving elapsed time.

(5.12) **Probability and statistics.** The student describes and predicts the results of a probability experiment.

The student is expected to:

(A) use fractions to describe the results of an experiment;

(B) use experimental results to make predictions; and

(C) list all possible outcomes of a probability experiment such as tossing a coin.

(5.13) **Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data.

The student is expected to:

(A) use tables of related number pairs to make line graphs;

(B) describe characteristics of data presented in tables and graphs including median, mode, and range; and

(C) graph a given set of data using an appropriate graphical representation such as a picture or line graph.

(5.14) **Underlying processes and mathematical tools.** The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.

The student is expected to:

- (A) identify the mathematics in everyday situations;
- (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;
- (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and
- (D) use tools such as real objects, manipulatives, and technology to solve problems.

(5.15) Underlying processes and mathematical tools. The student communicates about Grade 5 mathematics using informal language.

The student is expected to:

- (A) explain and record observations using objects, words, pictures, numbers, and technology; and
- (B) relate informal language to mathematical language and symbols.

(5.16) Underlying processes and mathematical tools. The student uses logical reasoning.

The student is expected to:

- (A) make generalizations from patterns or sets of examples and nonexamples; and
- (B) justify why an answer is reasonable and explain the solution process.

§112.7. Science, Grade 5.

(a) Introduction.

(1) In Grade 5, the study of science includes planning and implementing field and laboratory investigations using scientific methods, analyzing information, making informed decisions, and using tools such as nets and cameras to collect and record information. Students also use computers and information technology tools to support scientific investigations.

(2) As students learn science skills, they identify structures and functions of Earth systems including the crust, mantle, and core and the effect of weathering on landforms. Students learn that growth, erosion, and dissolving are examples of how some past events have affected present events. Students learn about magnetism, physical states of matter, and conductivity as properties that are used to classify matter. In addition, students learn that light, heat, and electricity are all forms of energy.

(3) Students learn that adaptations can improve the survival of members of a species, and they explore an organism's niche within an ecosystem. Students continue the study of organisms by exploring a variety of traits that are inherited by offspring from their parents and study examples of learned characteristics.

(4) Science is a way of learning about the natural world. Students should know how science has built a vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models, and also should know that science may not answer all questions.

(5) A system is a collection of cycles, structures, and processes that interact. Students should understand a whole in terms of its components and how these components relate to each other and to the whole. All systems have basic properties that can be described in terms of space, time, energy, and matter. Change and constancy occur in systems and can be observed and measured as patterns. These patterns help to predict what will happen next and can change over time.

(6) Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world.

(b) Knowledge and skills.

(1) Scientific processes. The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to:

(A) demonstrate safe practices during field and laboratory investigations; and

(B) make wise choices in the use and conservation of resources and the disposal or recycling of materials.

(2) Scientific processes. The student uses scientific methods during field and laboratory investigations. The student is expected to:

(A) plan and implement descriptive and simple experimental investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology;

(B) collect information by observing and measuring;

(C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;

(D) communicate valid conclusions; and

(E) construct simple graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate information.

(3) Scientific processes. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:

(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;

(B) draw inferences based on information related to promotional materials for products and services;

(C) represent the natural world using models and identify their limitations;

(D) evaluate the impact of research on scientific thought, society, and the environment; and

(E) connect Grade 5 science concepts with the history of science and contributions of scientists.

(4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:

(A) collect and analyze information using tools including calculators, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collecting nets, and safety goggles; and

(B) demonstrate that repeated investigations may increase the reliability of results.

(5) Science concepts. The student knows that a system is a collection of cycles, structures, and processes that interact. The student is expected to:

(A) describe some cycles, structures, and processes that are found in a simple system; and

(B) describe some interactions that occur in a simple system.

(6) Science concepts. The student knows that some change occurs in cycles. The student is expected to:

(A) identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles;

(B) identify the significance of the water, carbon, and nitrogen cycles; and

(C) describe and compare life cycles of plants and animals.

(7) Science concepts. The student knows that matter has physical properties. The student is expected to:

(A) classify matter based on its physical properties including magnetism, physical state, and the ability to conduct or insulate heat, electricity, and sound;

(B) demonstrate that some mixtures maintain the physical properties of their ingredients;

(C) identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving sugar in water; and

(D) observe and measure characteristic properties of substances that remain constant such as boiling points and melting points.

(8) Science concepts. The student knows that energy occurs in many forms. The student is expected to:

(A) differentiate among forms of energy including light, heat, electrical, and solar energy;

(B) identify and demonstrate everyday examples of how light is reflected, such as from tinted windows, and refracted, such as in cameras, telescopes, and eyeglasses;

(C) demonstrate that electricity can flow in a circuit and can produce heat, light, sound, and magnetic effects; and

(D) verify that vibrating an object can produce sound.

(9) Science concepts. The student knows that adaptations may increase the survival of members of a species. The student is expected to:

(A) compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem;

(B) analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem; and

(C) predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem.

(10) Science concepts. The student knows that likenesses between offspring and parents can be inherited or learned. The student is expected to:

(A) identify traits that are inherited from parent to offspring in plants and animals; and

(B) give examples of learned characteristics that result from the influence of the environment.

(11) Science concepts. The student knows that certain past events affect present and future events. The student is expected to:

(A) identify and observe actions that require time for changes to be measurable, including growth, erosion, dissolving, weathering, and flow;

(B) draw conclusions about "what happened before" using data such as from tree-growth rings and sedimentary rock sequences; and

(C) identify past events that led to the formation of the Earth's renewable, non-renewable, and inexhaustible resources.

(12) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(A) interpret how land forms are the result of a combination of constructive and destructive forces such as deposition of sediment and weathering;

(B) describe processes responsible for the formation of coal, oil, gas, and minerals;

(C) identify the physical characteristics of the Earth and compare them to the physical characteristics of the moon; and

(D) identify gravity as the force that keeps planets in orbit around the Sun and the moon in orbit around the Earth.

§113.7. Social Studies, Grade 5.

(a) Introduction.

(1) In Grade 5, students learn about the history of the United States from its early beginnings to the present with a focus on colonial times through the 20th century. Historical content includes the colonial and revolutionary periods, the establishment of the United States, and issues that led to the Civil War. An overview of major events and significant individuals of the late-19th century and the 20th century is provided. Students learn about a variety of regions in the United States that result from physical features and human activity and identify how people adapt to and modify the environment. Students explain the characteristics and benefits of the free enterprise system and describe economic activities in the United States. Students identify the roots of representative government in this nation as well as the important ideas in the Declaration of Independence and the U.S. Constitution. Students recite and explain the meaning of the Pledge of Allegiance. Students examine the importance of effective leadership in a democratic society and identify important leaders in the national government. Students examine fundamental rights guaranteed in the Bill of Rights. Students describe customs and celebrations of various racial, ethnic, and religious groups in the nation and identify the contributions of famous inventors and scientists. Students use critical-thinking skills including sequencing, categorizing, and summarizing information and drawing inferences and conclusions.

(2) To support the teaching of the essential knowledge and skills, the use of a variety of rich primary and secondary source material such as biographies; novels; speeches and letters; and poetry, songs, and artworks is encouraged. Selections may include Yankee Doodle. Motivating resources are also available from museums, historical sites, presidential libraries, 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 with the history and geography strands establishing a sense of time and a sense of place. Skills listed in the geography and social studies skills strands 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.

(4) 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, §28.002(h).

(b) Knowledge and skills.

(1) History. The student understands the causes and effects of European colonization in the United States. The student is expected to:

(A) explain when, where, and why groups of people colonized and settled in the United States; and

(B) describe the accomplishments of significant colonial leaders such as Anne Hutchinson, William Penn, John Smith, and Roger Williams.

(2) History. The student understands how conflict between the American colonies and Great Britain led to American independence. The student is expected to:

(A) identify the contributions of significant individuals during the revolutionary period, including Thomas Jefferson and George Washington;

(B) analyze the causes and effects of events prior to and during the American Revolution such as the Boston Tea Party; and

(C) summarize the results of the American Revolution, including the establishment of the United States and the origins of U.S. military institutions.

(3) History. The student understands the events that led from the Articles of Confederation to the creation of the U.S. Constitution and the government it established. The student is expected to:

(A) identify the contributions of individuals including James Madison and Roger Sherman who helped create the U.S. Constitution; and

(B) summarize the events that led to the creation of the U.S. Constitution.

(4) History. The student understands political, economic, and social changes that occurred in the United States during the 19th century. The student is expected to:

(A) identify changes in society resulting from the Industrial Revolution and explain how these changes led to conflict among sections of the United States;

(B) identify reasons people moved west;

(C) identify examples of U.S. territorial expansion;

(D) describe the causes and effects of the Civil War;

(E) explain the reasons for and rights provided by the 13th, 14th, and 15th amendments to the U.S. Constitution;

(F) explain how industry and the mechanization of agriculture changed the American way of life; and

(G) identify the challenges, opportunities, and contributions of people from selected Native-American and immigrant groups.

(5) History. The student understands important issues, events, and individuals of the 20th century in the United States. The student is expected to:

(A) analyze various issues and events of the 20th century such as urbanization, industrialization, increased use of oil and gas, world wars, and the Great Depression; and

(B) identify the accomplishments of notable individuals such as Carrie Chapman Catt, Dwight Eisenhower, Martin Luther King, Jr., Rosa Parks, Colin Powell, and Franklin D. Roosevelt who have made contributions to society in the areas of civil rights, women's rights, military actions, and politics.

(6) Geography. The student uses geographic tools to collect, analyze, and interpret data. The student is expected to:

(A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and

(B) translate geographic data into a variety of formats such as raw data to graphs and maps.

(7) Geography. The student understands the concept of regions. The student is expected to:

(A) describe a variety of regions in the United States such as political, population, and economic regions that result from patterns of human activity;

(B) describe a variety of regions in the United States such as landform, climate, and vegetation regions that result from physical characteristics; and

(C) locate the fifty states on a map and identify regions such as New England and the Great Plains made up of various groups of states.

(8) Geography. The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to:

(A) identify and describe the types of settlement and patterns of land use in the United States;

(B) describe clusters of settlement in the United States and explain their distribution;

(C) analyze the location of cities in the United States, including capital cities, and explain their distribution, past and present; and

(D) explain the geographic factors that influence patterns of settlement and the distribution of population in the United States, past and present.

(9) Geography. The student understands how people adapt to and modify their environment. The student is expected to:

(A) describe ways people have adapted to and modified their environment in the United States, past and present;

(B) identify reasons why people have adapted to and modified their environment in the United States, past and present, such as the use of human resources to meet basic needs; and

(C) analyze the consequences of human modification of the environment in the United States, past and present.

(10) Economics. The student understands the basic economic patterns of early societies in the United States. The student is expected to:

(A) explain the economic patterns of various early Native-American groups in the United States; and

(B) explain the economic patterns of early European colonists.

(11) Economics. The student understands the reasons for exploration and colonization. The student is expected to:

(A) identify the economic motivations for European exploration and settlement in the United States; and

(B) identify major industries of colonial America.

(12) Economics. The student understands the characteristics and benefits of the free enterprise system in the United States. The student is expected to:

(A) describe the development of the free enterprise system in colonial America and the United States;

(B) describe how the free enterprise system works in the United States; and

(C) give examples of the benefits of the free enterprise system in the United States.

(13) Economics. The student understands the impact of supply and demand on consumers and producers in a free enterprise system. The student is expected to:

(A) explain how supply and demand affects consumers in the United States; and

(B) evaluate the effects of supply and demand on business, industry, and agriculture, including the plantation system, in the United States.

(14) Economics. The student understands patterns of work and economic activities in the United States. The student is expected to:

(A) analyze how people in different parts of the United States earn a living, past and present;

(B) identify and explain how geographic factors have influenced the location of economic activities in the United States;

(C) analyze the effects of immigration, migration, and limited resources on the economic development and growth of the United States;

(D) describe the impact of mass production, specialization, and division of labor on the economic growth of the United States;

(E) analyze how developments in transportation and communication have influenced economic activities in the United States; and

(F) explain the impact of American ideas about progress and equality of opportunity on the economic development and growth of the United States.

(15) Government. The student understands how people organized governments in colonial America. The student is expected to:

(A) compare the systems of government of early European colonists; and

(B) identify examples of representative government in the American colonies, including the Mayflower Compact and the Virginia House of Burgesses.

(16) Government. The student understands important ideas in the Declaration of Independence and the U.S. Constitution. The student is expected to:

(A) identify the purposes and explain the importance of the Declaration of Independence; and

(B) explain the purposes of the U.S. Constitution as identified in the Preamble to the Constitution.

(17) Government. The student understands the framework of government created by the U.S. Constitution. The student is expected to:

(A) identify and explain the basic functions of the three branches of government;

(B) identify the reasons for and describe the system of checks and balances outlined in the U.S. Constitution; and

(C) distinguish between national and state governments and compare their responsibilities in the U.S. federal system.

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

(A) explain selected patriotic symbols and landmarks such as the Statue of Liberty and the White House and political symbols such as the donkey and elephant;

(B) sing or recite The Star-Spangled Banner and explain its history;

(C) recite and explain the meaning of the Pledge of Allegiance; and

(D) describe the origins and significance of national celebrations such as Memorial Day, Labor Day, and Columbus Day.

(19) Citizenship. The student understands the importance of individual participation in the democratic process. The student is expected to:

(A) explain how individuals can participate in civic affairs and political parties at the national level;

(B) analyze the role of the individual in national elections;

(C) identify significant individuals such as César Chávez and Benjamin Franklin who modeled active participation in the democratic process; and

(D) explain how to contact elected and appointed leaders in the national governments.

(20) Citizenship. The student understands the importance of effective leadership in a democratic society. The student is expected to:

(A) identify leaders in the national governments, including the president and selected members of Congress, and their political parties; and

(B) identify and compare leadership qualities of national leaders, past and present.

(21) Citizenship. The student understands the fundamental rights of American citizens guaranteed in the Bill of Rights and other amendments to the U.S. Constitution. The student is expected to:

(A) summarize the reasons for the creation of the Bill of Rights;

(B) describe important individual rights including freedom of religion, speech, and press and the right to assemble and petition the government;

(C) describe important due process rights including trial by jury and the right to an attorney; and

(D) summarize selected amendments to the U.S. Constitution such as those that extended voting rights of U.S. citizens.

(22) Culture. The student understands the relationship between the arts and the times during which they were created. The student is expected to:

(A) identify significant examples of art, music, and literature from various periods in U.S. history; and

(B) explain how examples of art, music, and literature reflect the times during which they were created.

(23) Culture. The student understands the contributions of people of various racial, ethnic, and religious groups to the United States. The student is expected to:

(A) identify the similarities and differences within and among selected racial, ethnic, and religious groups in the United States;

(B) describe customs, celebrations, and traditions of selected racial, ethnic, and religious groups in the United States; and

(C) summarize the contributions of people of selected racial, ethnic, and religious groups to our national identity.

(24) Science, technology, and society. The student understands the impact of science and technology on life in the United States. The student is expected to:

(A) describe the contributions of famous inventors and scientists such as Neil Armstrong, John J. Audubon, Benjamin Banneker, Clarence Birdseye, George Washington Carver, Thomas Edison, and Carl Sagan;

(B) identify how scientific discoveries and technological innovations such as the transcontinental railroad, the discovery of oil, and the rapid growth of technology industries have advanced the economic development of the United States;

(C) explain how scientific discoveries and technological innovations in the fields of medicine, communication, and transportation have benefited individuals and society in the United States;

(D) analyze environmental changes brought about by scientific discoveries and technological innovations such as air conditioning and fertilizers; and

(E) predict how future scientific discoveries and technological innovations could affect life in the United States.

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

(A) differentiate between, locate, and use primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; and artifacts to acquire information about the United States and Texas;

(B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions;

(C) organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines, and maps;

(D) identify different points of view about an issue or topic;

(E) identify the elements of frame of reference that influenced the participants in an event; and

(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs.

(26) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:

(A) use social studies terminology correctly;

- (B) incorporate main and supporting ideas in verbal and written communication;
- (C) express ideas orally based on research and experiences;
- (D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies; and
- (E) use standard grammar, spelling, sentence structure, and punctuation.

(27) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:

- (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and
- (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

§114.2. Languages Other Than English, Elementary.

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

§115.7. Health Education, Grade 5.

(a) Introduction.

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

(2) In addition to age-appropriate information about personal health habits, students in Grade 5 are taught about the human body and the changes that come with puberty. Students are taught how to maintain healthy body systems and prevent disease. Students

Arabic

*We are following the **Al Aafaq** Curriculum Series Level 4 for Arabic.*

Quran

- Develop the love of Quran and a motivation to memorize it.
- Know the right etiquette for learning Quran and learn to respect it.
- Continue memorizing the twenty- ninth Juz .
- Revise Juz Ammah and the twenty- ninth Juz.
- Understand meanings of the Surahs with the help of stories, pictures, and plays.
- Improve on Quran recitation and pronunciation.
- Learn how to read and write the Ayahs they are memorizing.

Islamic Studies

*(We are following the **I Love Islam** Curriculum Series Level 5 for Islamic Studies)*

- Develop the love of Islam and a sense of Muslim identity.
- Develop love and respect for knowledge and scholars and the school.
- Know Allah (s.w.t.) and Attributes of Allah.
- Know the Five Pillars of Islam.
- Know the Six Pillars of Faith (Iman).
- Know the major Prophets of Allah (s.w.t.) and their stories.
- Know Prophet Mohammad (s.a.w.) and his Sira.
- Know some of the characteristics of a good Muslim.
- Show respect towards to elders.
- Learn to love one another, know kindness and sharing.
- Build a sense of truthfulness and honesty.
- Build a sense of responsibility towards the community and the environment.
- Know how to use the toilet and perform Istinja.
- Know how to perform wudu and salat.
- Memorize dua'as for different everyday situations.
- Learn 15 new Hadeeth and their meanings.
- Learn about the Muslim Holidays (Eid-ul Fitr, Eid-ul Adha).
- Learn about Muslim Holy Cities (Macca, Madina, Al Quds).