§112.18. Science, Grade 6~~, Adopted 2017.~~		
	TEKS with edits	Work Group Comments/Rationale
(b)	Introduction	
(1)	In Grades 6–8, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 6, the following concepts will be addressed in each strand:	
(A)	Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.	
(i)	Scientific practices. Students should be able to ask questions, plan, and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.	
(ii)	Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.	
(B)	Matter and energy. Students will build upon their knowledge of properties of solids, liquids and gases and will further explore their molecular energies. In Grade 6, students will learn how elements are classified as metals, nonmetals, or metalloids based on their properties on the Periodic Table. Students have previous experience with mixtures in Grade 5. Grade 6 will further their understanding by investigating the different types of mixtures. Subsequent grades will learn about compounds. In Grade 6, students will compare the density of substances relative to other substances and fluids and identify evidence of chemical changes.	
(C)	Force, motion, and energy. Students will investigate the relationship between force and motion using a variety of means, including calculations and measurements through the study of Newton's Third Law of Motion. Subsequent grades will study force & motion through Newton's First and Second Laws of Motion. Energy occurs as either potential or kinetic energy. Potential energy can take several forms, including gravitational, elastic, and chemical energy. Energy is conserved throughout systems by changing from one form to another.	

(D)	Earth and space. Cycles within Sun, Earth, and Moon systems are studied as students learn about seasons and tides. Students will understand that the Earth is divided into spheres and examine the processes within and organization of the geosphere. Researching the advantages and disadvantages of short- and long-term uses of resources enables informed decision making about resource management.	
(E)	Organisms and environments. All living organisms are made up of smaller units called cells. Cells can be organized into tissues, tissues into organs, and organs into organ systems. Ecosystems are organized into communities, populations, and organisms. Students will compare and contrast variations within organisms and how they impact survival. Students will examine relationships and interactions among organisms, biotic factors, and abiotic factors in an ecosystem.	
(2)	Nature of science. 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." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.	
(3)	Scientific hypotheses and theories. Students are expected to know that:	
(A)	hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and	
(B)	scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.	
(4)	Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making practices and ethical and social decisions that involve science.	
(5)	Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Stability and change occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.	
(6)	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 and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:	A separate Scientific and Engineering Practices Work Group developed recommendations for revisions to the current process skills for K-12, which have been incorporated into the Work Group C recommendations chart.
(A)	ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	
(B)	use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;	
(C)	use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency approved safety standards;	
(D)	use appropriate tools, such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, and hand lenses;	Work Group C added appropriate scientific tools for Grade 6.
(E)	collect quantitative data using the International System of Units (SI) and qualitative data as evidence;	
(F)	construct appropriate tables, graphs, maps, and charts using repeated trials and means, to organize data;	
(G)	develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and	
(H)	distinguish between scientific hypotheses, theories, and laws	
(2)	Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:	
(A)	identify advantages and limitations of models such as their size, scale, properties, and materials;	
(B)	analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;	
(C)	use mathematical calculations to assess quantitative relationships in data; and	

(D)	evaluate experimental and engineering designs.	**Multiple Viewpoints on Scientific and Engineering Practices SEs:** Add to 2.D, "evaluate experimental and engineering designs" *using multiple criteria, including cost-benefit analysis*.
(3)	Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions.	
(A)	develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;	
(B)	communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and	
(C)	engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.	
(4)	Scientific and engineering practices. The students knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:	
(A)	relate the impact of past and current research on scientific thought and society, including the process of science and contributions of diverse scientists as related to the content;	
(B)	make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, and methods used; and	
(C)	research and explore connections between grade-level appropriate science concepts and STEM careers.	**Multiple Viewpoints on Scientific and Engineering Practices SEs:** Replace 4C. "research and explore connections between grade-level appropriate science[SEP] concepts and STEM careers" with "*4(C)1. Research three resources such as museums, libraries, organizations, private companies, and online platforms where students can investigate STEM careers.*[SEP] *4(C)2. Identify three resources to identify mentors employed in a STEM field who could be interviewed for a discussion of the advantages/disadvantages of pursuing a STEM career."*

(5)	Matter and energy. The student knows that matter is made of atoms, can be classified according to its properties, and can undergo changes. The student is expected to:	
(A)	compare solids, liquids, and gases in terms of, structure, shape, volume, and energy of atoms and molecules;	Based on recommendations from Work Group B (Chemistry and IPC) this topic was moved from HS to MS. (Chem.4.C) (IPC.6.A)
(B)	investigate the properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures;	Based on recommendation from Work Group B (Chemistry) this topic was moved from HS to MS. (Chem.4.D)
(C)	classify elements on the periodic table as metals, nonmetals, and metalloids using their physical properties;	Revised from 6.6.A to give greater clarity of expectation and verb changed from compare to classify to increase rigor.
(D)	compare the density of substances relative to various fluids; and	Revised 6.6.B to remove calculate as it does not align with mathematics TEKS for this grade; also to build on conceptual understanding developed in elementary school.
(E)	identify the formation of a new substance by using the evidence of a possible chemical change including production of a gas, change in thermal energy, production of a precipitate, and color change.	Revised 6.5.C to focus on energy.
(6)	Force, motion, and energy. The student knows the nature of forces and their interactions. The student is expected to:	Rationale (6.6 A-C): The topics for this strand are distributed across the grade levels. In sixth grade the emphasis is on understanding the fundamentals of forces and introducing Newton's 3rd law.
(A)	identify and describe forces that act on objects, including gravity, friction, magnetism, applied forces, and normal forces;	
(B)	calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced; and	
(C)	identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of motion.	
(7)	Force, motion, and energy. The student knows that energy is conserved when transformed from one type to another. The student is expected to:	
(A)	compare and contrast kinetic energy with gravitational, elastic, and chemical potential energies; and	6.7.A Revised to clarify the potential energies that students should learn about.

(B)	describe how energy is conserved through transformations in systems such as electrical circuits, food webs, amusement park rides, and photosynthesis.	6.7.B Revised 6.9.C to include concept of conservation of energy in systems along with energy transformations.
(8)	Earth and space. The student knows the effects resulting from cyclical movements of the Sun, Earth, and Moon. The student is expected to:	
(A)	model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons;	(8.7.A) moved to grade 6
(B)	describe and predict how the positions of the sun and moon and their gravitational forces affect daily, spring, and neap cycles of ocean tides; and	6.8.B revised from 8.7C to be more specific about the cycles of tides, relate gravitation as the cause of tides, and introduce specific vocabulary.
(9)	Earth and space. The student understands the structure of Earth, and the rock cycle. The student is expected to:	**Multiple viewpoints:** There was a proposal for an additional SE 6.9D: *Determine the physical properties of permeability and porosity of rocks and relate to the resources that can be stored there.* The rationale for including it is to reinforce for students that the different spheres are not monolithic but overlap with each other and interact as a system. There was concern about the developmental appropriateness and specificity of these concepts in grade 6 as well as the amount of instructional time required.
(A)	differentiate among the biosphere, hydrosphere, atmosphere, and geosphere and identify their components;	6.9A is new to introduce the different spheres that will be a foundation for much of the rest of the MS science TEKS.
(B)	model and describe the layers of Earth, including the inner core, outer core, mantle, and crust; and	6.9.B is revised from existing 6.10.A to take it beyond only modeling and the vocabulary was simplified to make more grade-appropriate.
(C)	describe how rocks change through geologic processes in the rock cycle and classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation.	6.9.C is revised from existing 6.10.B; added the rock cycle to provide context for the classification of rocks according to the processes of formation rather than the characteristics of the sample

(10)	Earth and space. The student understands how resources are managed. The student is expected to:	
(A)	research and describe how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources.	Existing 6.7 is recommended to be deleted and replaced with more expansive standard that includes other kinds of resources besides energy resources.
(11)	Organisms and environments. The student knows that cells are the fundamental units of organisms. The student is expected to:	
(A)	identify that organisms are composed of cells, which come from pre-existing cells and are the basic unit of structure and function as explained by cell theory;	6.11.A is a revision of existing 7.12F. The term "cell theory" was kept despite the recommendation of one of the content advisors as it provides a good example of the scientific definition of a theory. Only the foundational components of cell theory are included as this is the first time students are introduced to the concept of cells. Moved to 6th grade for vertical alignment and better distribution of content across the grades.
(B)	describe the hierarchical organization of cells, tissues, organs, and organ systems within plants and animals; and	6.11.B is a revision of 7.12C. The verb was changed to increase rigor. The language of "levels of organization" was changed to "hierarchical organization" to reflect the language of taxonomy that the Biology WG requested. Moved to grade 6 for vertical alignment and better distribution of the content across grades.
(C)	identify the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, autotrophic and heterotrophic.	6.11.C was revised from current 6.12D to limit the scope. Mode of reproduction was deleted because it is not a defining characteristic of groups. Kingdoms were moved to grade 7 to build on this knowledge.
(12)	Organisms and environments. The student knows the impact of variation on the survival of populations. The student is expected to:	
(A)	describe how advantages and disadvantages for the survival of a population can result from variations within the population as environments change.	6.12 was revised from existing 7.11B to focus on the connection between variations and changes in populations over time.

(13)	Organisms and environments. The student knows that interdependence occurs among living systems and the environment. The student is expected to:	
(A)	describe predatory, competitive, and symbiotic relationships between organisms including mutualism, parasitism, and commensalism;	6.12.A food chains & food webs are taught in elementary school, this scaffolds the learning progression toward 7th grade. Other types of relationships (symbiotic) were added on the recommendation of the Biology WG.
(B)	investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as quantity of light, water, range of temperatures, or soil composition; and	Current 8.11.A – moved into 6th grade to better connect to similar content in ES & the content of the other SEs in this strand
(C)	describe the hierarchical organization of organism, population, and community within an ecosystem.	Current 6.12.F was revised to maintain continuity with the way the levels of organization within organisms are addressed in 6.11.B. The verb was changed to increase rigor.
~~(a)~~	~~**Introduction.**~~	
~~(1)~~	~~Grade 6 science is interdisciplinary in nature; however, much of the content focus is on physical science. National standards in science are organized as multi-grade blocks such as Grades 5-8 rather than individual grade levels. In order to follow the grade level format used in Texas, the various national standards are found among Grades 6, 7, and 8. Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include change and constancy, patterns, cycles, systems, models, and scale.~~	
	~~The strands for Grade 6 include the following.~~	
~~(A)~~	~~Scientific investigations and reasoning.~~	
~~(i)~~	~~To develop a rich knowledge of science and the natural world, students must become familiar with different modes of scientific inquiry, rules of evidence, ways of formulating questions, ways of proposing explanations, and the diverse ways scientists study the natural world and propose explanations based on evidence derived from their work.~~	

(ii)	Scientific investigations are conducted for different reasons. All investigations require a research question, careful observations, data gathering, and analysis of the data to identify the patterns that will explain the findings. Descriptive investigations are used to explore new phenomena such as conducting surveys of organisms or measuring the abiotic components in a given habitat. Descriptive statistics include frequency, range, mean, median, and mode. A hypothesis is not required in a descriptive investigation. On the other hand, when conditions can be controlled in order to focus on a single variable, experimental research design is used to determine causation. Students should experience both types of investigations and understand that different scientific research questions require different research designs.	
(iii)	Scientific investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and the 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. Models have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world.	
(B)	Matter and energy.	
(i)	Matter can be classified as elements, compounds, or mixtures. Students have already had experience with mixtures in Grade 5, so Grade 6 will concentrate on developing an understanding of elements and compounds. It is important that students learn the differences between elements and compounds based on observations, description of physical properties, and chemical reactions. Elements are represented by chemical symbols, while compounds are represented by chemical formulas. Subsequent grades will learn about the differences at the molecular and atomic level.	
(ii)	Elements are classified as metals, nonmetals, and metalloids based on their physical properties. The elements are divided into three groups on the Periodic Table. Each different substance usually has a different density, so density can be used as an identifying property. Therefore, calculating density aids classification of substances.	
(iii)	Energy resources are available on a renewable or nonrenewable basis. Understanding the origins and uses of these resources enables informed decision making. Students should consider the ethical/social issues surrounding Earth's natural energy resources, while looking at the advantages and disadvantages of their long-term uses.	
(C)	Force, motion, and energy. Energy occurs in two types, potential and kinetic, and can take several forms. Thermal energy can be transferred by conduction, convection, or radiation. It can also be changed from one form to another. Students will investigate the relationship between force and motion using a variety of means, including calculations and measurements.	

(D)	Earth and space. The focus of this strand is on introducing Earth's processes. Students should develop an understanding of Earth as part of our solar system. The topics include organization of our solar system, the role of gravity, and space exploration.	
(E)	Organisms and environments. Students will gain an understanding of the broadest taxonomic classifications of organisms and how characteristics determine their classification. The other major topics developed in this strand include the interdependence between organisms and their environments and the levels of organization within an ecosystem.	
(2)	Science, as defined by the National Academy of Science, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.	
(3)	Scientific hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions become theories. Scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Students should know that scientific theories, unlike hypotheses, are well established and highly reliable, but they may still be subject to change as new information and technologies are developed. Students should be able to distinguish between scientific decision-making methods and ethical/social decisions that involve the application of scientific information.	
(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.	
(b)	**Knowledge and skills.**	
(1)	**Scientific investigation and reasoning. The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices. The student is expected to:**	
(A)	demonstrate safe practices during laboratory and field investigations as outlined in Texas Education Agency-approved safety standards; and	
(B)	practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials.	
(2)	**Scientific investigation and reasoning. The student uses scientific practices during laboratory and field investigations. The student is expected to:**	
(A)	plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology;	

~~(B)~~	~~design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology;~~	
~~(C)~~	~~collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers;~~	
~~(D)~~	~~construct tables and graphs, using repeated trials and means, to organize data and identify patterns; and~~	
~~(E)~~	~~analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.~~	
~~(3)~~	~~**Scientific investigation and reasoning. The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists. The student is expected to:**~~	
~~(A)~~	~~analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, so as to encourage critical thinking by the student;~~	
~~(B)~~	~~use models to represent aspects of the natural world such as a model of Earth's layers;~~	
~~(C)~~	~~identify advantages and limitations of models such as size, scale, properties, and materials; and~~	
~~(D)~~	~~relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content.~~	
~~(4)~~	~~**Scientific investigation and reasoning. The student knows how to use a variety of tools and safety equipment to conduct science inquiry. The student is expected to:**~~	
~~(A)~~	~~use appropriate tools, including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, balances, microscopes, thermometers, calculators, computers, timing devices, and other necessary equipment to collect, record, and analyze information; and~~	
~~(B)~~	~~use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher.~~	
~~(5)~~	~~**Matter and energy. The student knows the differences between elements and compounds. The student is expected to:**~~	
~~(A)~~	~~know that an element is a pure substance represented by a chemical symbol and that a compound is a pure substance represented by a chemical formula;~~	Revised in 7.5.A
~~(B)~~	~~recognize that a limited number of the many known elements comprise the largest portion of solid Earth, living matter, oceans, and the atmosphere; and~~	This SE was deleted to reduce the scope and streamline the instructional time.

~~(C)~~	~~identify the formation of a new substance by using the evidence of a possible chemical change such as production of a gas, change in temperature, production of a precipitate, or color change.~~	Revised and renumbered to 6.5.E.
~~(6)~~	~~**Matter and energy. The student knows matter has physical properties that can be used for classification. The student is expected to:**~~	
~~(A)~~	~~compare metals, nonmetals, and metalloids using physical properties such as luster, conductivity, or malleability;~~	Revised and renumbered to 6.6.A.
~~(B)~~	~~calculate density to identify an unknown substance; and~~	Revised and renumbered to 6.6.B.
~~(C)~~	~~test the physical properties of minerals, including hardness, color, luster, and streak.~~	This SE was deleted because it did not fit with the overall alignment; minerals are not a critical concept for middle school and developmentally inappropriate; physical properties are taught in other SEs
~~(7)~~	~~**Matter and energy. The student knows that some of Earth's energy resources are available on a nearly perpetual basis, while others can be renewed over a relatively short period of time. Some energy resources, once depleted, are essentially nonrenewable. The student is expected to**~~	
	~~research and discuss the advantages and disadvantages of using coal, oil, natural gas, nuclear power, biomass, wind, hydropower, geothermal, and solar resources.~~	Deleted and replaced with more expansive standard (6.10) that includes other kinds of resources besides energy resources.
~~(8)~~	~~**Force, motion, and energy. The student knows force and motion are related to potential and kinetic energy. The student is expected to:**~~	
~~(A)~~	~~compare and contrast potential and kinetic energy;~~	Revised and renumbered to 6.7.A.
~~(B)~~	~~identify and describe the changes in position, direction, and speed of an object when acted upon by unbalanced forces;~~	6.8.B deleted and topic moved to grade 7.6.D and 8.6.A for better vertical alignment.
~~(C)~~	~~calculate average speed using distance and time measurements;~~	Moved and renumbered to 7.6.A without revision.
~~(D)~~	~~measure and graph changes in motion; and~~	Revised and moved to grade 7 (7.6.C).
~~(E)~~	~~investigate how inclined planes can be used to change the amount of force to move an object.~~	Deleted because understanding simple machines requires concept of work which is developmentally inappropriate.
~~(9)~~	~~**Force, motion, and energy. The student knows that the Law of Conservation of Energy states that energy can neither be created nor destroyed, it just changes form. The student is expected to:**~~	

~~(A)~~	~~investigate methods of thermal energy transfer, including conduction, convection, and radiation;~~	Moved and renumbered to 7.7.A without revision.
~~(B)~~	~~verify through investigations that thermal energy moves in a predictable pattern from warmer to cooler until all the substances attain the same temperature such as an ice cube melting; and~~	Revised and moved to grade 7 (7.7.B).
~~(C)~~	~~demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy.~~	Revised and renumbered to 6.7.B.
~~(10)~~	~~**Earth and space. The student understands the structure of Earth, the rock cycle, and plate tectonics. The student is expected to:**~~	
~~(A)~~	~~build a model to illustrate the compositional and mechanical layers of Earth, including the inner core, outer core, mantle, crust, asthenosphere, and lithosphere;~~	Revised and renumbered to 6.9.B.
~~(B)~~	~~classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation;~~	Revised and renumbered to 6.9.C.
~~(C)~~	~~identify the major tectonic plates, including Eurasian, African, Indo-Australian, Pacific, North American, and South American; and~~	Deleted because it does not add to student's understanding of the broad concepts of plate tectonics.
~~(D)~~	~~describe how plate tectonics causes major geological events such as ocean basin formation, earthquakes, volcanic eruptions, and mountain building.~~	Revised and moved to grade 7 (7.9.B).
~~(11)~~	~~**Earth and space. The student understands the organization of our solar system and the relationships among the various bodies that comprise it. The student is expected to:**~~	
~~(A)~~	~~describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets;~~	Revised and moved to grade 7 (7.8.A).
~~(B)~~	~~understand that gravity is the force that governs the motion of our solar system; and~~	Revised and moved to grade 7 (7.8.B)
~~(C)~~	~~describe the history and future of space exploration, including the types of equipment and transportation needed for space travel.~~	Deleted to reduce the scope and streamline instructional time; there is also some overlap with social studies TEKS.
~~(12)~~	~~**Organisms and environments. The student knows all organisms are classified into domains and kingdoms. Organisms within these taxonomic groups share similar characteristics that allow them to interact with the living and nonliving parts of their ecosystem. The student is expected to:**~~	
~~(A)~~	~~understand that all organisms are composed of one or more cells;~~	Deleted and incorporated into 6.11.A.
~~(B)~~	~~recognize that the presence of a nucleus is a key factor used to determine whether a cell is prokaryotic or eukaryotic;~~	Deleted; concept is part of 6.11.C.
~~(C)~~	~~recognize that the broadest taxonomic classification of living organisms is divided into currently recognized domains;~~	Deleted based on recommendation from content advisor.

~~(D)~~	~~identify the basic characteristics of organisms, including prokaryotic or eukaryotic, unicellular or multicellular, autotrophic or heterotrophic, and mode of reproduction, that further classify them in the currently recognized kingdoms;~~	Revised and renumbered to 6.11.C.
~~(E)~~	~~describe biotic and abiotic parts of an ecosystem in which organisms interact; and~~	Deleted; concept is part of 6.13.B. Recommendation made to K-5 group to introduce vocabulary in grade 5.
~~(F)~~	~~diagram the levels of organization within an ecosystem, including organism, population, community, and ecosystem.~~	Revised and renumbered to 6.13.C.