

Proposed Science TEKS

Middle School (Grades 6-8)

OFFICIAL PUBLIC COMMENTS

Summary Listing

<u>Course</u>	<u>Introduction Statements</u>	<u>Total Number of Knowledge/Skills (KS) and Student Expectations (SE)</u>	<u>Number of KS or SE Statements with at Least One Comment</u>
Grade 6	4	54	21
Grade 7	5	58	18
Grade 8	4	51	10
		163	49

Compiled During February 13 - March 20, 2009

Category	Public Comment	Teacher	Admin.	Parent	Community	Univ. -College	Total
General Middle School	Simple machines is not found in any grade level.	1					1
General Middle School	Add a focus on interactions and equilibrium of body systems.	1					1
General Middle School	TEKS are "an inch deep and a mile wide."	1					1
General Middle School	I strongly support content-based TEKS revisions.	9					9
General Middle School	Do not like new structure. Prefer spiraling of content.	2					2
General Middle School	"Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable." Why has this statement been included?	1					1
General Middle School	This entire phrase must be removed from the TEKS: Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.	2					2
General Middle School	The SBOE should adopt the TEKS as presented by the writing team with the changes added to the document at the adoption of the TEKS at first reading in January.	1					1
General Middle School	Organisms and the environment is general to 5-8. So, why the emphasis on physical in 6th, life in 7th, and earth in 8th?	1					1
General Middle School	Will state provide funds to purchase necessary equipment and supplies?	2					2
General Middle School	My first issue is that 6th graders are not functioning at the intelligence level that these TEKS require.	1					1
General Middle School	New TEKS are less vague and allow for a greater understanding of content.	5					5
General Middle School	Like scientific topics at a greater depth. Students will no longer be bored and frustrated.	1					1
Grade 8 - General	Glad that weather and earth/moon system are in 8th Grade.	1					1
General Middle School	I have concerns about the new middle school changes. Isn't the proposed change taking us back to how middle school was taught before the last change in the TEKS? Was it effective then?	1					1

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General Middle School	Due to the increasingly complexity of content and concepts it seems reasonable to go back to year-long focus strands.	1					1
General Middle School	I much prefer the broader integration that we currently have. Our district has spent years aligning our curriculum so that each successive year builds on what was taught the previous year...and now you want to go back to the PAST? I vote NO on these proposed changes.	1					1
General Middle School	If a student is being tested at Grade 8 over concepts taught in 6th grade which have not been spiraled across the 7th and 8th grade levels, this would put students at a <u>disadvantage in meeting standards.</u>	1					1
General Middle School	Our PreK-8 Texas students need a strong foundation in scientific claims and evidence, performing inquiry-based investigations, problem solving and critical thinking in order to achieve success with their high school science courses. It is critical teachers have a clear specific framework which vertically aligns across grade levels to allow students to build upon sound scientific concepts and skills needed to compete in a global society.	1					1
General Middle School	I am glad we are going to 40% lab in middle school.		1				1
General Middle School	Excellent work! I can now see what each grade level is expected to teach. Highly recommend that the current textbooks for middle schools be aligned to the proposed TEKS to ensure all students have a consistent tool for research/reading/studying as well as the same teacher curriculum, e.g. model lessons for each SE.		1				1
General Middle School	I prefer the "spiraled" curriculum that we have seen over the past 10 years.	1					1
General Middle School	The new TEKS are less vague and should allow for a greater understanding of living systems without reteaching material.	1					1
General Middle School	Remove ecology and environmental science from 6 th and 8 th grades and add them to the 7 th grade instead.	1					1

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General Middle School	The integrated method of teaching middle school science should stay for several reasons: 1) it is better high school preparation, 2) it allows the students to build a solid science foundation, 3) we do not have resources to support or change, and 4) too much pressure will be on the 8th graders to recall material for TAKS testing.	1					1
Grade 6							
Grade 6 - General	Overall, I like the new 6 th grade science TEKS.	1					1
Grade 6 - General	The student expectations are not developmentally appropriate for students at 6th grade. For example, calculating density at 6th grade is too high level for regular 6th graders. Also, asking 6th graders to understand molecules and compounds before they learn anything else is a poor sequencing choice. It would be more beneficial for 6th graders to understand the parts of an atom, and the differences between physical and chemical properties, and leave the molecules and compounds concept for 7th/8th grade.	1					1
Grade 6 - General	Also gone from the 6th grade TEKS is the focus on surface and ground water. Again, as this is an area of so much current news / interest, I do not like to see it taken away.	1					1
Grade 6 - General	There is no genetics component in the revised 6th grade TEKS. With all the advancements in genetics (cloning, stem cell research, etc.) this is an important area to be introduced at the 6th grade level.	1					1
Grade 6 - General	Genetics are only covered in 7th grade, I propose either an introduction into the subject in 6th grade or a continuation of the subject in 8th grade.	1					1
Grade 6 - General	No genetics content. Also lacking focus on surface and ground water.	1					1
Grade 6 - General	Content is too difficult; too much information is presented; can students handle density, compounds and mixtures, decimals and metrics, and computers in the lab?		1				1
Grade 6 - General	Remove ecology and environmental science. Move to grade 7.	1					1

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Grade 6 - General	Science TEKS do not match 6th grade Math TEKS when referring to manipulating formulas (which is in 7th grade Math).	1					1
Grade 6 - General	6th graders are not functioning at the intelligence level that these TEKS require. My second issue is with the amount of material that the students must cover. Matter an energy--compounds and mixtures and density. Using metrics and decimals when they have not been exposed to these and their brains are not developed enough is an issue. Computer usage--Although many students have a good background for gaming, MANY students do not have access to computers on a regular basis. I do like the more "Earth" types of science in 6th grade.	1					1
Grade 6 -General	Are 6th graders able to learn what we need them to know about physical science before high school-this year would be the foundational year for chemistry and physics, leaving 3-4 years (7,8,9,10) before they actually take these courses. Perhaps earth science would be a better choice for 6th grade and physical science for 8th (students aren't required to know earth science to graduate).	2				1	3
Grade 6 - General	Nowhere in 6th, 7th or 8th grade Science do I see any mention of simple machines. The study of simple machines is the basis of modern physics and I know from the past, that many students who were not successful in many other areas of science, really blossomed when investigating and learning about simple machines.	1					1
Grade 6 - Introduction (1)	Why has the last sentence of this paragraph been added?	1					1
Grade 6 - Introduction (1)	Concern about the statement, "Students know that some questions are outside the realm of science because the deal with phenomena are not scientifically testable."		1				1

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Grade 6 - Introduction (a)(4)(A)(ii)	<p>Replace: Scientific investigations are conducted in different ways using different scientific research designs. However, all investigations require a well-designed research question or hypothesis, 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 pond organisms, or measuring the abiotic components of a habitat. Descriptive statistics include frequency, mean, median, and mode. No hypothesis and no dependent and independent variables are used in this type of investigation. On the other hand, Comparative investigations are used when conditions can be kept constant in order to focus on a single variable. Comparative analysis is used to compare the strength of a relationship between two variables. CONTINUED IN CELL BELOW.</p>		13			2	15
	<p>The investigator selects the independent variable (IV) and records the responses of the dependent (responding) variable (DV). No control group is used for this type of investigation. Conditions other than IV or DV are held constant or at least they are the same for all test groups. The IV is the factor being selected. The DV is the factor that responds to changes of the IV. Statistics used in the Comparative method include some type of comparison between or among means of various DVs .However, when a scientific study can have a control, then an Experimental investigation is used to determine causation. Students in grades 5-12 should experience all three types of investigations and understand that different scientific research questions require different research designs.</p>						

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Grade 6 Introduction (a)(4)(B)(i)	Omit the word "compounds" and the words "chemical reactions." Since sixth grade students will not yet have been introduced to atomic structure, bonding or valence electrons, it is inappropriate to introduce compounds or chemical reactions.		1				1
Grade 6 Introduction (4)(C)	Delete the words "including calculations and measurements."	1					1
Grade 6 - 2B	Edit SE to read: design and implement comparative and experimental investigations...		14			2	16
Grade 6 - 5A	The verb "know" is a concern. This would require a rubric indicating the level of knowing.	1					1
Grade 6 - 5B	Comment: regarding recognize that a limited number of the many known elements comprise the largest portion of solid Earth, etc... is extremely random information for this knowledge statement. This is the only time that elements on the Earth are mentioned for middle school.		1				1
Grade 6 - 5C	Omit this statement entirely, or change it to read "differentiate between symbols and compound formulas."	1					1
Grade 6 - 5C	Replace SE with: recognize that elements combine to form compounds such as H ₂ O, NaCl and CO ₂ .	14					14
Grade 6 - 5C	Omit this statement entirely or change it to read "identify element symbols and compound formulas."		1				1
Grade 6 - 5C	Differentiate between elements and compounds on the most basic level. What is "the most basic level?"	1					1
Grade 6 - 5D	Concern for a need for clarity to the "production of gas" and "color change" as these can exist in a physical change as well as a chemical change in matter.		1				1
Grade 6 - 5D	Replace SE with: 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 an unexpected color change.	14					14
Grade 6 - 5D	Delete "...the formation of compounds by using the..."	1					1

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Grade 6 - 5E (new)	Insert new SE: recognize that elements combine to form compounds, such as water, carbon dioxide and sodium chloride.	2	10			2	14
Grade 6 - 5F (new)	Insert new SE: (F) identify that organic compounds contain carbon and other elements such as hydrogen, oxygen, phosphorus, nitrogen, or sulfur.	1	10			3	14
Grade 6 - 6B	Calculating density is highly unnecessary and too abstract.	1					1
Grade 6 - 6B	Replace SE with: classify substances based on physical properties including volume and density.	14					14
Grade 6 - 7B	Delete term "logical" from SE.	14					14
Grade 6 - 8B	Replace SE with: identify and describe the changes in position, direction, and relative speed of an object when acted upon by unbalanced forces; note that "motion" is deleted from SE.	3	13			2	18
Grade 6 - 8C	Delete SE and move to Grade 8, KS 6.	14					14
Grade 6 - 8E (new)	Insert new SE: (E) investigate how inclined planes and pulleys can be used to change the amount of force to move an object.	12				2	14
Grade 6 - 8F (new)	Insert new SE: (F) investigate and describe applications of Newton's law of inertia, law of force and acceleration, and law of action-reaction such as in vehicle restraints, sports activities, amusement park rides, and rocket launches.	4	13			2	19
Grade 6 - 9	Edit KS to read: Force, motion, and energy. The student knows that energy occurs in many forms and can change forms.		10			2	12
Grade 6 - 9	Edit KS to read: The student knows that there is a relationship among force, motion, and energy.	14					14
Grade 6 - 9	Keep statement of fitting both the Law of Conservation of Energy for and the forms and types of energy.		1				1
Grade 6 - 10B	Delete and move to Grade 8, KS 9.	9				1	10
Grade 6 - 10C	Seems redundant to Grade 8 - 9B. Need clarification of differences.	1					1
Grade 6 - 10D	Delete and move to Grade 8, KS 9.	10					10
Grade 6 - 10D	Seems redundant to Grade 8 - 9B. Need clarification of differences.	1					1

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Grade 6 - 11B	What does "understand" look like in the classroom? This would require a rubric indicating the level understanding.	1					1
Grade 6 - 11C	Move to Grade 6, KS 12.	10					10
Grade 6 - 11C	Move to Grade 8.	2					2
Grade 6 - 12	Edit KS 6.12 and SE's to read: Earth and Space. The student knows components of our solar system. The student is expected to: (A) 7.9A analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the sun, presences of water, and composition of the atmosphere; and (B) 7.9B identify the accommodations, considering the characteristics of our solar system, that enable manned space exploration. (C) 6.11C describe the history and future of space exploration including the types of equipment and transportation needed for space travel.	10					10
Grade 6 - 12A	What does "understand" look like in the classroom? This would require a rubric indicating the level understanding.	1					1
Grade 6 - 12(E) and (F)	Move to new KS 13.	10					10
Grade 6 - 12A-D	Move to Grade 7.	10					10
Grade 6 - 12B, 12C, 12D	Regarding taxonomy, this is an important topic. It will next be taught in Biology. Four years is a large gap in instruction when dealing with classification.	1	1				2
Grade 6 - 12E	In addition to organism interactions, students should be able to identify internal and external stimuli and responses as this changes the overall interactions in an ecosystem.	1					1

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Grade 6 - 13 (new)	Insert new KS to read: (6.13) Organisms and environments. The student knows that there is a relationship between organisms and the environment. The student is expected to: (A) 7.10A observe and describe how different environments, biomes, support different varieties of organisms; (B) 7.10B describe how biodiversity contributes to the sustainability of an ecosystem; and (C) 7.10C describe the role of ecological succession after a natural disaster; (D) describe biotic and abiotic parts of an ecosystem in which organisms interact; and (E) diagram the levels of organization within an ecosystem including organism, population, community, and ecosystem.	10					10

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Grade 7							
Grade 7 - General	Congratulations! Progress is being made to having a 7th grade curriculum that addresses the needs and interests of the 7th graders that it is provided for. Please continue to emphasize highly the biological aspect of 7th grade science.	1					1
Grade 7 - General	To try and adequately develop all of these concepts to a level of mastery such that in eighth grade they will be in a better position to pass TAKS is ludicrous.	1					1
Grade 7 - General	7th grade lacks a transition for the Periodic Table. If 6th grade will begin the study of the Periodic Table, there needs to be a consistent build on it.	1					1
Grade 7 - General	I'm excited about the new revisions of the 7th grade TEKS. I will be able to more effectively cover the strands with a common theme...Life Science.	1					1
Grade 7 - Introduction (a)(4)(A)(ii)	Replace: Scientific investigations are conducted in different ways using different scientific research designs. However, all investigations require a well-designed research question or hypothesis, 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 pond organisms, or measuring the abiotic components of a habitat. Descriptive statistics include frequency, mean, median, and mode. No hypothesis and no dependent and independent variables are used in this type of investigation. On the other hand, Comparative investigations are used when conditions can be kept constant in order to focus on a single variable. Comparative analysis is used to compare the strength of a relationship between two variables. CONTINUED IN CELL BELOW.		13			2	15

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Grade 7 - Introduction (a)(4)(A)(ii)	With regard to: “Descriptive investigations are used to explore new phenomena such as conducting surveys of organisms or measuring the abiotic components in a given habitat.” Why do we have to use life science to do this? Every time we see a “such as” I know it can be tested in 8th grade.	1					1
Grade 7 - Introduction (C)	They need some introduction to force and motion as it applies to machines in 7 th . The 8 th has 5 equations that could be on the TAKS test. Introduction to Newton’s Laws and to equations is essential in 7 th . You are totally eliminating this.	1					1
Grade 7 - Introduction (D)	How many other objects does this relate to? They need reinforcement of an Earth and Moon relationship as expressed in the current TEKS (2) before 8 th grade.	1					1
Grade 7 - 2B	Edit SE to read: design and implement comparative and experimental investigations...		14		2		16
Grade 7 - 2C	The word qualitative is used but not the word quantitative -- why?	1					1
Grade 7 - 3B	Why are we being told which models we MUST include? All teachers use models but it should be our discretion and NOT just life science.	1					1
Grade 7 - 4A	Tools - is there really a need for test kits, collecting nets, insect traps?		1				1

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Grade 7 - 5B	"Cycling of matter within living systems" is a broad concept. Is the intent to focus on decay of biomass?	1					1
Grade 7 - 5B	Edit SE to read: identify the role of decomposers in the cycling of matter within living systems, such as in the decay of biomass in a compost bin.	14					14
Grade 7 - 5B	Why can't this TEKS say "recognize some of the cycles that exist in Science and their relationship between matter and energy, such as water cycle, carbon dioxide/oxygen cycle, nitrogen cycle, lunar cycle, and the three types of rocks that exist on earth?"	1					1
Grade 7 - 5C	Regarding the diagram the flow of energy, I think the word "describe" or "explain" needs to be added in conjunction with diagram.		1				1
Grade 7 - 6A	Delete and move to Grade 6 (5)(F).		12			2	14
Grade 7 - 6A	Either delete this SE or insert the words "by the compound formula" after the word identify.	1					1
Grade 7 - 6A	Regarding identify organic compounds, this is the only time the term "organic" is mentioned in middle school. Seems like a random vocabulary term.		1				1
Grade 7 - 6B	Shouldn't this be in Biology? They need a beginning point to talk about the Periodic Table. We talk about this concept (stomach digestion) in the human systems section. They need more meat in the chemistry section.	1					1
Grade 7 - 6C	This is about compounds so why doesn't it say so.	1					1
Grade 7 - 6C	Delete SE. Too complex for students.	1					1
Grade 7 - 7	There needs to be more Physical Science basis here such as basic tools to do work along with life science examples in the human body.		1				1
Grade 7 - 7A	Replace SE with: investigate how lever-type structures within the human body are related to work.		13			2	15
Grade 7 - 7A	Work is done when an object is moved, so work is done by moving a box with a ramp or without a ramp—work isn't done when the object doesn't move (standing still). Simple machines exchange force for distance, but as long as an object moves, work is done.	1					1

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Grade 7 - 7A	Does not make sense. Work is done when an object is moved.	1					1
Grade 7 - 7A	Edit SE to read: investigate how inclined planes and first class levers allow the body to do work with less force.	14					14
Grade 7 - 7A	Isn't this another way of saying Newton's Laws?	1					1
Grade 7 - 7B	Replace SE with: illustrate the transformation of energy within an organism, such as the transfer from chemical to mechanical or thermal energy.		13			2	15
Grade 7 - 7B	Edit SE to read: illustrate the transformation of energy within an organism such as the transfer from chemical energy to heat and thermal energy.	14					14
Grade 7 - 7B	Some of the equations and Newton's Laws would be more beneficial.	1					1
Grade 7 - 8A, B, C	Move to Grade 8 and replace KS and SEs with: Organisms and Environments. All organisms are classified into Domains and Kingdoms. Organisms within these taxonomic groups share similar characteristics which allow them to interact with the living and nonliving parts of their ecosystem. The student is expected to: (A) 6.12C recognize the broadest taxonomic classification of living organisms is divided into currently recognized Domains; (B) 6.12D 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; (C) 7.11A examine organisms or their structures, such as insects or leaves, and use dichotomous keys for identification.	10					10
Grade 7 - 8B	Delete terms "in ecoregions of Texas."	5					5
Grade 7 - 8B	So all examples of weathering, erosion, and deposition take place only in Texas?	1					1

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Grade 7 - 9A, B	Move to Grade 6 and replace with: Organisms and Environment. The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function. The student is expected to: (A) investigate and explain how internal structures of organisms are adapted to perform specific functions, such as gills in fish, hollow bones in birds, or xylem in plants; (B) 6.12A understand that all organisms are composed of one or more cells; (C) 7.12D differentiate between structure and function in plant and animal cell organelles including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplasts and vacuole; CONTINUED IN CELL BELOW.	10					10
	(D) 7.12F recognize that according to the cell theory all organisms are composed of cells which carry on similar functions, such as extracting energy from food to sustain life; (E) 6.12B recognize the presence of a nucleus determines whether a cell is prokaryotic or eukaryotic; (F) 7.12C recognize levels of organization in plants and animals including cells, tissues, organs, organ systems, and organisms; (G) 7.12B identify the main functions of the systems of the human organism including the circulatory, respiratory, skeletal, muscular, digestive ...						
Grade 7 - 10	The focus on using school ground to teach science need to be kept.		1				1
Grade 7 - 10A	Edit SE to read: (A) observe and describe how different environments, including biomes, support different varieties of organisms.	5					5
Grade 7 - 10A,B,C	Delete KS and SEs and move to Grade 6.	9					9

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Grade 7 - 10A,B	Edit KS and SEs to read: The student knows that a living organism must be able to maintain internal balance in response to external and internal stimuli. The student is expected to: (A) investigate how organisms respond to external stimuli found in the environment such as phototropism and fight or flight; and (B) describe and relate responses in organisms that may result from internal stimuli such as wilting in plants and fever or vomiting in animals that allow them to maintain balance. (Moved from 7.13)	14					14
Grade 7 - 10C	Why are we changing it to a microhabitat instead of leaving it as ecosystem? I have other examples around me to use. I also know if it is a "such as" it could be tested on the 8th grade test.	1					1
Grade 7 - 10C	Edit SE to read: describe the role of ecological succession after a natural disaster.	5					5
Grade 7 - 10C	Edit SE to read: observe, record, and describe the role of ecological succession of a garden with weeds or a natural disaster.		13			2	15
Grade 7 - 11A	Move SE to KS 8.	10					10
Grade 7 - 11B,C	Move SE to KS 12.	10					10
Grade 7 - 11B	Delete terms "in a bulb."	5					5
Grade 7 - 11C	Add genus species to SE, Galapagos Medium Ground Finch (<i>Geospiza fortis</i>).	14					14
Grade 7 - 11C	Move SE to KS 12.	10					10
Grade 7 - 12A	This SE is much too broad.		1				1
Grade 7 - 12A	Edit SE to read: investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants.		13			2	15
Grade 7 - 12A	Why are the examples specific to life science?	1					1
Grade 7 - 12B	Edit SE to read: identify several main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, excretory, reproductive, integumentary, nervous, and endocrine systems.		13			2	15

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Grade 7 - 12B	SE should read: identify the main functions of the system (functions is plural, implying more than one).		1				1
Grade 7 - 12F	Edit SE to read: recognize that according to the cell theory all organisms are composed of cells which carry on similar functions, such as extracting energy from food to sustain life.	5					5
Grade 7 - 13	Edit KS to read: The student knows that a living organism must be able to main internal balance in response to external and internal stimuli.	14					14
Grade 7 - 13A	Should this be both an external and internal response.	1					1
Grade 7 - 14	I have great concerns over the lack of scaffolding about genetic inheritance in TEKS 7.14 prior to the depth of knowledge and understanding expected in Biology TEKS 6A-H. There is little or no support for this concept in 6th or 8th grade. With the 4x4 pushing Biology into the 9th grade, the foundational knowledge for genetic variation is almost non-existent. Reread the objectives in 7.14. It starts at a definition of genetic inheritance, leads to a nominal comparison of asexual and sexual reproduction, and then focuses on genes on chromosomes as the controlling influence on traits. I feel teachers will have no clue how to string this all together.	1					1
Grade 7 - 14	It is imperative for the student to understand that adaptations that are due to genetic mutations and survival rates rather than environmental manipulation.		1				1
Grade 7 - 14C	Edit SE to read: recognize that inherited traits of individuals are governed in the genetic material found in the genes within chromosomes in the nucleus.		13			2	15
Grade 8							
Grade 8 - General	Grade 8 TEKS are more straight forward and relate to each other better.	1					1
Grade 8 - General	Remove ecology and environmental science. Move to Grade 7.	1					1
Grade 8 - General	Bring solar system information from Grade 6 and Grade 7 into Grade 8. Consolidate.	1					1
Grade 8 - General	Glad that weather and earth/moon system are in 8th Grade.	1					1

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Grade 8 - General	Genetics are only covered in 7th grade, I propose either an introduction into the subject in 6th grade or a continuation of the subject in 8th grade.	1					1
Grade 8 - Introduction (a)(4)(A)(ii)	Replace: Scientific investigations are conducted in different ways using different scientific research designs. However, all investigations require a well-designed research question or hypothesis, 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 pond organisms, or measuring the abiotic components of a habitat. Descriptive statistics include frequency, mean, median, and mode. No hypothesis and no dependent and independent variables are used in this type of investigation. On the other hand, Comparative investigations are used when conditions can be kept constant in order to focus on a single variable. Comparative analysis is used to compare the strength of a relationship between two variables. CONTINUED IN CELL BELOW.		13			2	15
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Grade 8 - Introduction (a)(4)(B)	Students should recognize if an equation is balanced or not – but not actually “balance” the equation. This was clarified in another section (5 F) , but I feel the descriptions of the student expectation should be consistent.	1					1
Grade 8 - 2B	Edit SE to read: design and implement comparative and experimental investigations...		10			2	12
Grade 8 - 4A	Tools - anemometer and psychrometer are not appropriate for this grade level.		1				1
Grade 8 - 6A	Replace SE: demonstrate and calculate how unbalanced forces (net forces) change the object’s acceleration resulting in a change in speed or direction or both (speed and direction) of the object’s motion.		10			2	12
Grade 8 - 6B	Edit SE to read: differentiate among speed, velocity, and acceleration.		10			2	12
Grade 8 - 6B	Edit SE to read: differentiate between velocity and acceleration.	14					14
Grade 8 - 6C	Delete and move to 6.8G Replace SE with: calculate average speed using distance and time measurements.	5	10				15
Grade 8 - 7C	Replace SE with: relate the positions of the Moon and Sun to their effect on ocean tides.	8	10			2	20
Grade 8 - 8A	A nebulae is a stage in a star’s development, not actually a "different" component of the universe.	1					1
Grade 8 - 8B	Our galaxy is classified as a spiral galaxy (not disc-shaped). It does appear like a disc from the “side.” This may confuse some students when they are taught how to classify galaxies.	1					1
Grade 8 - 9A	Replace SE with: illustrate the historical development of evidence that supports plate tectonic theory.		10			2	12
Grade 8 - 9B	Replace SE with: illustrate how plate tectonics causes major geological events, such as ocean basins, earthquakes, volcanic eruptions, and mountain building.	9					9
Grade 8 - 9C	Students should identify land features and predict how they were shaped by erosion and weathering.	1					1
Grade 8 - 9D	Insert new SE: classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation (moved from Grade 6 - 10B).	9					9

Category	Public Comment	Teacher	Admin.	Parent	Community	Univ. -College	Total
Grade 8 - 9E	Insert new SE: (E) analyze the effects of weathering, erosion, and deposition on the environment; and (moved from Grade 7 - 8B).	9					9
Grade 8 - 10D (new)	Insert new SE: (D) predict and describe how the different types of catastrophic events, such as floods, hurricanes, or tornadoes impact ecosystems (moved from Grade 7 - 8D).	9					9
Grade 8 - 11	Genetics must be a continued theme in Life Science. It must be included when exploring how environmental changes affect organisms and the traits in subsequent population.		1				1
Grade 8 - 11A-D	Move to Grade 7.	1					1
Grade 8 - 11C	Delete SE. Too complex for students.	9					9
Grade 8 - 11D (new)	Edit SE to read: "...such as polluted runoff..."	14					14
Grade 8 - 11D (new)	Add new SE: model the effects of human activity on ground water and surface water in a watershed (moved from Grade 7 - 8C).	9					9