Warm Up to Science: TEKS-Based Engagement Activities for Grade 7 Science
Product Crosswalk for 2021 TEKS

REGION 4

Notes

- Aligned items address content included within a student expectation. However, many items do not address all aspects of the student expectation (i.e. SEPs and RTCs connections).
- Partially aligned items do not fully align with TEKS adopted in 2021.

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Scientific and Engineering Practices **(1)** 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:					
(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;	7(1)(A) 7(4)(B)	1 2			
Matter and Energy **(6)** The student distinguishes between elements and compounds, classifies changes in matter, and understands the properties of solutions. The student is expected to:					
(A) compare and contrast elements and compounds in terms of atoms and molecules, chemical symbols, and chemical formulas;	*New to grade 7* *6(5)(A)*				Moved up from grade 6
(B) use the periodic table to identify the atoms and the number of each kind within a chemical formula;	*New to grade 7* *8(5)(D)*				Moved down from grade 8
(C) distinguish between physical and chemical changes in matter;	7(6)(A) *7(6)(B) 2010*	17 *18* 19 20 21			
(D) describe aqueous solutions in terms of solute and solvent, concentration, and dilution; and	NEW				
(E) investigate and model how temperature, surface area, and agitation affect the rate of dissolution of solid solutes in aqueous solutions.	NEW		*18*		*Item 18 addresses temperature and dissolving rate*
	7(5)(A) 2017			3 4 5 6	Removed in 2021; May be used to support 6(8)(B)
	7(5)(B) 2010		*7* *8* *9*		Streamlined out in 2017; May be used to support 7(12)(B)
	7(6)(A) 2010			14 15 16	Streamlined out in 2017
	7(6)(C) 2010			22 23 24	Streamlined out in 2017; May be used to support Biology (5)(A)

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Force, Motion, and Energy **(7)** The student describes the cause-and-effect relationship between force and motion. The student is expected to:					
(A) calculate average speed using distance and time measurements from investigations;	*New to grade 7* *6(8)(C)*				Moved up from grade 6
(B) distinguish between speed and velocity in linear motion in terms of distance, displacement, and direction;	*New to grade 7* *8(6)(B)*				Moved down from grade 8
(C) measure, record, and interpret an object's motion using distance-time graphs; and	*New to grade 7* *6(8)(D)*				Moved up from grade 6
(D) analyze the effect of balanced and unbalanced forces on the state of motion of an object using Newton's First Law of Motion.	NEW				Previously addressed in 2017 8(6)(C)
	7(7)(A) 2010			25 26 27 28	Streamlined out in 2017
	7(7)(A) 2017 *7(7)(B) 2010*			29 30 31	Removed in 2021; May be used to support 6(8)(B)
	7(7)(B) 2017 *7(7)(C) 2010*			32 33 34	Removed in 2021
Force, Motion, and Energy **(8)** The student understands the behavior of thermal energy as it flows into and out of systems. The student is expected to:					
(A) investigate methods of thermal energy transfer into and out of systems, including conduction, convection, and radiation;	*New to grade 7* *6(9)(A)*				Moved up from grade 6
(B) investigate how thermal energy moves in a predictable pattern from warmer to cooler until all substances within the system reach thermal equilibrium; and	*New to grade 7* *6(9)(B)*				Moved up from grade 6
(C) explain the relationship between temperature and the kinetic energy of the particles within a substance.	NEW				

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Earth and Space **(9)** The student understands the patterns of movement, organization, and characteristics of components of our solar system. The student is expected to:					
(A) describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, comets, Kuiper belt, and Oort cloud;	*New to grade 7* *6(11)(A)*				Moved up from grade 6 and expanded
(B) describe how gravity governs motion within Earth's solar system; and	*New to grade 7* *6(11)(B)*				Moved up from grade 6
(C) analyze the characteristics of Earth that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere.	7(9)(C)	47 48			
	7(9)(B) 2017			49 50	Removed in 2021
Earth and Space **(10)** The student understands the causes and effects of plate tectonics. The student is expected to:					
(A) describe the evidence that supports that Earth has changed over time, including fossil evidence, plate tectonics, and superposition; and	*New to grade 7* *8(9)(A)*				Moved down from grade 8
(B) describe how plate tectonics causes ocean basin formation, earthquakes, mountain building, and volcanic eruptions, including supervolcanoes and hot spots.	*New to grade 7* *6(10)(D)*				Moved up from grade 6; Also addressed in former 8(9)(B)
	7(8)(A) 2017			35 36 37	Removed in 2021; Partially addressed in 8(12)(A)
	7(8)(B) 2017			38 39 40 41 42 43	Removed in 2021; Weathering, erosion, and deposition are taught in elementary science

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Earth and Space **(11)** The student understands how human activity can impact the hydrosphere. The student is expected to:					
(A) analyze the beneficial and harmful influences of human activity on groundwater and surface water in a watershed; and	7(8)(C)	44 45 46			Beneficial influences were added in 2021
(B) describe human dependence and influence on ocean systems and explain how human activities impact these systems.	*New to grade 7* 8(11)(C) *8(11)(D) 2010*				Moved up from grade 8

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Organisms and Environments **(12)** Organisms and environments. The student understands that ecosystems are dependent upon the cycling of matter and the flow of energy. The student is expected to:					
(A) diagram the flow of energy within trophic levels and describe how the available energy decreases in successive trophic levels in energy pyramids; and	7(5)(B) *7(5)(C) 2010*	10 13	11 12		Items 11 and 12 address food webs; May be used to review prior learning
(B) describe how ecosystems are sustained by the continuous flow of energy and the recycling of matter and nutrients within the biosphere.	7(10)(B) 2017		55 56 57		Biodiversity is not directly addressed in new TEKS
	7(5)(B) 2010		*7* *8* *9*		Cycling of matter was address in 2010 TEKS
	7(10)(A) 2017			51 52 53 54	Removed in 2021
	7(10)(C) 2017			58 59 60	Partially addressed in grade 8
	7(11)(A) 2017			61 62 63	Removed in 2021
	7(11)(B) 2017			64 65 66	Moved to grade 6

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Organisms and Environments **(13)** The student knows how systems are organized and function to support the health of an organism and how traits are inherited. The student is expected to:					
(A) identify and model the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, urinary, reproductive, integumentary, nervous, immune, and endocrine systems;	7(12)(B)	73 74 75 76 77			Immune system added in 2021; Excretory system changed to urinary system in 2021
(B) describe the hierarchical organization of cells, tissues, organs, and organ systems within plants and animals;	7(12)(C)	78 79			
(C) compare the results of asexual and sexual reproduction of plants and animals in relation to the diversity of offspring and the changes in the population over time; and	7(14)(B)	95 96 97 98			
(D) describe and give examples of how natural and artificial selection change the occurrence of traits in a population over generations.	7(11)(C)	67 68 69			
	7(12)(A) 2017			70 71 72	Removed in 2021
	7(12)(D) 2017			80 81 82 83 84	Moved to grade 8
	7(12)(E) 2017			85	Removed in 2021; May support 8(13)(A)
	7(12)(F) 2017			86 87	Moved to grade 6
	7(13)(A) 2017			88 89	Removed in 2021
	7(13)(B) 2017			90 91 92	Removed in 2021

2021 TEKS	2017 TEKS	Aligned	Partially Aligned	Not Aligned	Notes
Organisms and Environments **(14)** The student knows how systems are organized and function to support the health of an organism and how traits are inherited. The student is expected to:					
(A) describe the taxonomic system that categorizes organisms based on similarities and differences shared among groups; and	NEW				Moved down from Biology
(B) describe the characteristics of the recognized kingdoms and their importance in ecosystems such as bacteria aiding digestion or fungi decomposing organic matter.	New in grade 7 6(12)(D)				Kingdoms moved up from grade 6; Importance in ecosystems added in 2021
	7(14)(A) 2017			93 94	Removed in 2021; Partially addressed in grade 8
	7(14)(C) 2017			99 100	Moved to grade 8

	# of WUTS			
2021 TEKS	**Aligned to Grade 7**	**Partially Aligned to Grade 7**	**Not Aligned to Grade 7**	**Aligned to Grade 6 or Grade 8**
Scientific and Engineering Practices	2	0	0	0
Matter and Energy	5	(1)	10	4
Force, Motion, and Energy	0	0	10	3
Earth and Space	5	0	11	3
Organisms and Environments	16	8	33	18
TOTAL PERCENTAGE	28%	8%	64%	28%