

TEST ADMINISTRATOR MANUAL

GRADE 8 Science STAAR Alternate 2

Administered April 2016

RELEASED

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Texas Essential Knowledge and Skills (TEKS) Curriculum Assessed

Grade 8 Science		Cluster 1
Reporting Category 1	Matter and Energy: The student understanding of the properties of their interactions.	will demonstrate an of matter and energy and
Knowledge and Skills Statement 7.6	The student knows that matter has physical and chemical properties and can undergo physical and chemical changes.	
Essence Statement	Recognizes the physical and cher changes of matter and how phys for classification.	nical properties and ical properties are used
Item 1 Prerequisite Skill	predict and identify changes in m heating and cooling such as ice n and water evaporating (1)	naterials caused by nelting, water freezing,
Item 2 Prerequisite Skill	compare changes in materials ca cooling (2)	used by heating and
Item 3 Prerequisite Skill	predict, observe and record chan matter caused by heating or cool	ges in the state of ling (3)
Item 4 Prerequisite Skill	predict the changes caused by he as ice becoming liquid water and the outside of a glass of ice wate	eating and cooling such condensation forming on r (4)

Grade 8 Science		Cluster 2
Reporting Category 3	Earth and Space: The student wi understanding of components, cy natural events of Earth and space	II demonstrate an /cles, patterns, and e systems.
Knowledge and Skills Statement 8.9	The student knows that natural events can impact Earth systems.	
Essence Statement	Recognizes that natural events a	ffect Earth's systems.
Item 5 Prerequisite Skill	observe and describe rocks by size	ze, texture, and color (2)
Item 6 Prerequisite Skill	explore and record how soils are rock and the decomposition of pl (3)	formed by weathering of ant and animal remains
Item 7 Prerequisite Skill	observe and identify slow change caused by weathering, erosion, a water, wind, and ice (4)	es to Earth's surface and deposition from
Item 8 Prerequisite Skill	recognize how landforms such as sand dunes are the result of char wind, water, and ice (5)	deltas, canyons, and nges to Earth's surface by

Grade 8 Science		Cluster 3
Reporting Category 4	Organisms and Environments: The demonstrate an understanding of functions of living organisms and on each other and on their enviro	ne student will f the structures and I their interdependence onment.
Knowledge and Skills Statement 7.10	The student knows that there is a relationship between organisms and the environment.	
Essence Statement	Knows the importance of biodive ecosystem.	rsity to the health of an
Item 9 Prerequisite Skill	identify factors in the environment and precipitation, that affect grown migration, hibernation, and dorm	nt, including temperature wth and behavior such as nancy of living things (2)
Item 10 Prerequisite Skill	describe environmental changes droughts where some organisms or move to new locations (3)	such as floods and thrive and others perish
Item 11 Prerequisite Skill	describe environmental changes droughts where some organisms or move to new locations (3)	such as floods and thrive and others perish
Item 12 Prerequisite Skill	describe the flow of energy throu with the Sun, and predict how ch affect the food web such as a fire	igh food webs, beginning langes in the ecosystem e in a forest (4)

Grade 8 Science		Cluster 4
Reporting Category 3	Earth and Space: The student wi understanding of components, cy natural events of Earth and space	ll demonstrate an /cles, patterns, and e systems.
Knowledge and Skills Statement 8.8	The student knows characteristics of the universe.	
Essence Statement	Recognizes characteristics of the components.	universe and its
Item 13 Prerequisite Skill	observe and record changes in th in the sky such as clouds, the Mo the Sun (1)	e appearance of objects on, and stars, including
Item 14 Prerequisite Skill	observe, describe, and record pa sky, including the appearance of	tterns of objects in the the Moon (2)
Item 15 Prerequisite Skill	construct models that demonstra Sun, Earth, and Moon, including	te the relationship of the orbits and positions (3)
Item 16 Prerequisite Skill	identify and compare the physica Sun, Earth and Moon (5)	I characteristics of the

Grade 8 Science		Cluster 5
Reporting Category 2	Force, Motion, and Energy: The s an understanding of force, motio relationships.	student will demonstrate n, and energy and their
Knowledge and Skills Statement 8.6	The student knows that there is a relationship between force, motion, and energy.	
Essence Statement	Recognizes that relationships exi- and energy.	st between force, motion,
Item 17 Prerequisite Skill	demonstrate and record the ways such as in a straight line, zigzag, forth, round and round, and fast	s that objects can move up and down, back and and slow (1)
Item 18 Prerequisite Skill	compare patterns of movement or rolling, and spinning (2)	of objects such as sliding,
Item 19 Prerequisite Skill	demonstrate and observe how po be changed by pushing and pullin being done such as swings, balls	osition and motion can ng objects to show work , pulleys, and wagons (3)
Item 20 Prerequisite Skill	design an experiment that tests to object (5)	the effect of force on an

Additional resources for STAAR Alternate 2, including the STAAR Alternate 2 Test Administrator Manual and the STAAR Alternate 2 Educator Guide, are available online: http://tea.texas.gov/student.assessment/ special-ed/staaralt/

SCIENCE

- Present Stimulus 1.
- *Direct* the student to Stimulus 1. *Communicate:* This is a glass of ice cubes. Ice cubes are made by freezing water.
- Communicate: Find the ice cubes.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the ice cubes,	-	mark A for question 1 and move to question 2.
If the student does not find the ice cubes,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions.
After the five-second wait time, if the student finds the ice cubes,	-	mark B for question 1 and move to question 2.
After the five-second wait time, if the student does not find the ice cubes,	-	mark C for question 1 and move to question 2.

- *Present* Stimulus 2a and 2b.
- *Direct* the student to Stimulus 2a. *Communicate:* **Two ice cubes are taken out of the glass and placed on a table in a warm room.**
- Direct the student to the answer choices in Stimulus 2b.
- Communicate: Find what will happen to the ice cubes in a warm room.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the melting ice cubes in Stimulus 2b,	-	mark A for question 2 and move to question 3.
If the student does not find the melting ice cubes in Stimulus 2b,	-	 model the desired student action by finding the melting ice cubes in Stimulus 2b and <i>communicate</i> "These ice cubes are melting in a warm room"; and replicate the initial presentation instructions.
After teacher modeling, if the student finds the melting ice cubes in Stimulus 2b,	-	mark B for question 2 and move to question 3.
After teacher modeling, if the student does not find the melting ice cubes in Stimulus 2b,	-	mark C for question 2 and move to question 3.

- Present Stimulus 3.
- *Direct* the student to Stimulus 3. *Communicate:* Water is being heated in a beaker on a heat source.
- *Direct* the student to each group of beakers without describing the contents of each one.
- *Communicate:* Find the group of beakers that shows the way water changes as the temperature increases and the water gets hotter.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the sequence showing no bubbles to heavy steam,	-	mark A for question 3 and move to question 4.
		provide one of these allowable teacher assists to the student:
If the student does not find the sequence showing no bubbles to heavy steam,	-	 Have the student tell what happens to water as it is heated. OR Highlight the bubbles in each answer choice.
		Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds the sequence showing no bubbles to heavy steam,	-	mark B for question 3 and move to question 4.
After the selected teacher assistance, if the student does not find the sequence showing no bubbles to heavy steam,		mark C for question 3 and move to question 4.

- Present Stimulus 4a and 4b.
- *Direct* the student to Stimulus 4a. *Communicate:* It is raining in this neighborhood, and the temperature is 40 degrees Fahrenheit. The weather report shows that the temperature will get colder.
- *Direct* the student to the stem and each answer choice in Stimulus 4b. *Communicate* the text in each answer choice.
- Communicate: Find the words that tell what will happen in this neighborhood when the temperature drops below 32 degrees Fahrenheit.

Stimulus 4a Stimulus 4b The water on the sidewalk will — splash and get clothing wet *freeze and get more slippery

dry quickly and cause few problems

Scoring Instructions		
Student Action		Test Administrator Action
If the student finds "freeze and get more slippery,"	-	mark A for question 4 and move to question 5.
If the student does not find "freeze and get more slippery,"	-	replicate the initial presentation instructions.
After the teacher repeats the instructions, if the student finds "freeze and get more slippery,"	-	mark B for question 4 and move to question 5.
After the teacher repeats the instructions, if the student does not find "freeze and get more slippery,"	-	mark C for question 4 and move to question 5.

- Present Stimulus 5.
- Direct the student to the outdoor scene. Communicate: The land is covered by soil and rocks.
- *Direct* the student to the small rocks near the water. *Communicate:* **These rocks near the water are small and smooth.**
- *Direct* the student to the large rocks away from the water. *Communicate:* **These rocks away from the water are large and rough.**
- Communicate: Find the rocks that are large and rough.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the large, rough rocks,	-	mark A for question 5 and move to question 6.
If the student does not find the large, rough rocks,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions.
After the five-second wait time, if the student finds the large, rough rocks,	-	mark B for question 5 and move to question 6.
After the five-second wait time, if the student does not find the large, rough rocks,	-	mark C for question 5 and move to question 6.

- Present Stimulus 6a and 6b.
- *Direct* the student to Stimulus 6a. *Communicate:* Weather breaks down rocks into smaller and smaller pieces until the rocks become soil. Soil contains nutrients that help support plant life.
- Direct the student to each answer choice in Stimulus 6b.
- Communicate: Find soil that is supporting plant life.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds the flower in the soil in Stimulus 6b,	-	mark A for question 6 and move to question 7.
If the student does not find the flower in the soil in Stimulus 6b,		 model the desired student action by finding the flower in the soil in Stimulus 6b and communicate "This soil supports plant life"; and replicate the initial presentation instructions.
After teacher modeling, if the student finds the flower in the soil in Stimulus 6b,	-	mark B for question 6 and move to question 7.
After teacher modeling, if the student does not find the flower in the soil in Stimulus 6b,		mark C for question 6 and move to question 7.

- Present Stimulus 7a and 7b.
- *Direct* the student to Stimulus 7a. *Communicate:* This is a mountain that has changed over a long period of time.
- Direct the student to each answer choice in Stimulus 7b. Communicate the text in each answer choice.
- Communicate: Find one reason the height of the mountain has changed.



Scoring Instructions		
Student Action		Test Administrator Action
If the student finds "erosion,"	-	mark A for question 7 and move to question 8.
If the student does not find "erosion,"		 provide one of these allowable teacher assists to the student: Define the process of erosion without using the term. OR Highlight the top of each mountain in Stimulus 7a. Replicate the initial presentation instructions.
After the selected teacher assistance, if the student finds "erosion,"		mark B for question 7 and move to question 8.
After the selected teacher assistance, if the student does not find "erosion,"	-	mark C for question 7 and move to question 8.

- Present Stimulus 8a and 8b.
- *Direct* the student to Stimulus 8a. *Communicate:* Sand dunes are formed when sand builds up into piles.
- Direct the student to each answer choice in Stimulus 8b. Communicate the text in each answer choice.
- Communicate: Find what can cause sand dunes to form.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "blowing wind,"	-	mark A for question 8 and move to question 9.	
If the student does not find "blowing wind,"	-	replicate the initial presentation instructions.	
After the teacher repeats the instructions, if the student finds "blowing wind,"	-	mark B for question 8 and move to question 9.	
After the teacher repeats the instructions, if the student does not find "blowing wind,"	-	mark C for question 8 and move to question 9.	

- Present Stimulus 9.
- *Direct* the student to Stimulus 9. *Communicate:* In winter many birds migrate to a warmer place. These birds are migrating in a group.
- Communicate: Find the birds that are migrating.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the birds migrating,	-	mark A for question 9 and move to question 10.	
If the student does not find the birds migrating,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 	
After the five-second wait time, if the student finds the birds migrating,	-	mark B for question 9 and move to question 10.	
After the five-second wait time, if the student does not find the birds migrating,	-	mark C for question 9 and move to question 10.	

- Present Stimulus 10a and 10b.
- *Direct* the student to the geese in Stimulus 10a. *Communicate:* These geese are migrating from a cold place to a warmer place to survive.
- *Direct* the student to each answer choice in Stimulus 10b.
- Communicate: Find the birds that are migrating to survive.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the flying birds in Stimulus 10b,	-	mark A for question 10 and move to question 11.	
If the student does not find the flying birds in Stimulus 10b,	-	 model the desired student action by finding the flying birds in Stimulus 10b and <i>communicate</i> "These birds are migrating to survive"; and replicate the initial presentation instructions. 	
After teacher modeling, if the student finds the flying birds in Stimulus 10b,	-	mark B for question 10 and move to question 11.	
After teacher modeling, if the student does not find the flying birds in Stimulus 10b,		mark C for question 10 and move to question 11.	

- Present Stimulus 11a and 11b.
- Direct the student to Stimulus 11a. Communicate: Here is a small pond ecosystem.
- *Direct* the student to each answer choice in Stimulus 11b. *Communicate* the text in each answer choice.
- Communicate: Find the event that would probably harm the organisms in this ecosystem.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "drought,"	-	mark A for question 11 and move to question 12.	
		provide one of these allowable teacher assists to the student:	
If the student does not find "drought,"	-	 Have the student identify what living organisms need to survive. OR Have the student tell about the effect of each answer choice. OR Highlight the living organisms in Stimulus 11a. 	
		Replicate the initial presentation instructions.	
After the selected teacher assistance, if the student finds "drought,"	-	mark B for question 11 and move to question 12.	
After the selected teacher assistance, if the student does not find "drought,"	-	mark C for question 11 and move to question 12.	

- Present Stimulus 12a and 12b.
- *Direct* the student to Stimulus 12a. *Communicate:* This is part of a food chain that shows how these organisms get energy from a food source.
- *Direct* the student to the food chain in Stimulus 12a. *Communicate:* **The sun provides energy for the grass. Grass provides food for the rabbit. The rabbit provides food for the fox.**
- *Direct* the student to each answer choice in Stimulus 12b. *Communicate* the text in each answer choice.
- Communicate: Find what might happen to the ecosystem if all the grasses were removed.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the sentence "Many animals would either die or move away,"	-	mark A for question 12 and move to question 13.	
If the student does not find the sentence "Many animals would either die or move away,"	-	replicate the initial presentation instructions.	
After the teacher repeats the instructions, if the student finds the sentence "Many animals would either die or move away,"	-	mark B for question 12 and move to question 13.	
After the teacher repeats the instructions, if the student does not find the sentence "Many animals would either die or move away,"	-	mark C for question 12 and move to question 13.	

- Present Stimulus 13.

Stimulus 13

- Direct the student to Stimulus 13. Communicate: The moon can be seen at night.
- Communicate: Find the moon.

Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the moon,	-	mark A for question 13 and move to question 14.	
If the student does not find the moon,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 	
After the five-second wait time, if the student finds the moon,	-	mark B for question 13 and move to question 14.	
After the five-second wait time, if the student does not find the moon,		mark C for question 13 and move to question 14.	

- Present Stimulus 14a and 14b.
- *Direct* the student to Stimulus 14a. *Communicate:* The moon appears to change shape in the sky. The different shapes of the lighted part of the moon are called phases.
- Direct the student to each answer choice in Stimulus 14b.
- Communicate: Find another phase of the moon.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the moon in Stimulus 14b,	-	mark A for question 14 and move to question 15.	
If the student does not find the moon in Stimulus 14b,	-	 model the desired student action by finding the moon in Stimulus 14b and <i>communicate</i> "This is another phase of the moon"; and replicate the initial presentation instructions. 	
After teacher modeling, if the student finds the moon in Stimulus 14b,	-	mark B for question 14 and move to question 15.	
After teacher modeling, if the student does not find the moon in Stimulus 14b,	-	mark C for question 14 and move to question 15.	

- Present Stimulus 15a and 15b.
- *Direct* the student to Stimulus 15a. *Communicate:* This shows what the surface of the moon looks like up close.
- *Direct* the student to each answer choice in Stimulus 15b. *Communicate* the text in each answer choice.
- Communicate: Find the sentence that states a characteristic of the moon.

Stimulus 15a



Stimulus 15b

The moon has no living organisms.

The moon has only a smooth, flat surface.

The moon has many lakes and oceans.

Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the sentence "The moon has no living organisms,"	-	mark A for question 15 and move to question 16.	
		provide one of these allowable teacher assists to the student:	
If the student does not find the sentence "The moon has no living organisms,"	-	 Have the student describe the surface of the moon. OR Highlight the last three words of each sentence in the answer choices. 	
		Replicate the initial presentation instructions.	
After the selected teacher assistance, if the student finds the sentence "The moon has no living organisms,"	-	mark B for question 15 and move to question 16.	
After the selected teacher assistance, if the student does not find the sentence "The moon has no living organisms,"	-	mark C for question 15 and move to question 16.	

- Present Stimulus 16a and 16b.
- *Direct* the student to Stimulus 16a. *Communicate:* Here are some characteristics of Earth and the moon: shape, surface, life.
- *Direct* the student to the Earth column. *Communicate* the text about Earth.
- Direct the student to the moon column. Communicate the text about the moon.
- *Direct* the student to each answer choice in Stimulus 16b. *Communicate* the text in each answer choice.
- Communicate: Find what Earth and the moon have in common.

Stimulus 16a

	Characteristics of Earth and the Moon							
	Characteristic	Earth	Moon					
	Shape	sphere	sphere					
	Surface	oceans; soil and rocks; hills and mountains	dust and rocks; hills and mountains					
	Life	living organisms	no living organisms					
Stimulus 16b		r						
	oceans and mountains	hills and rocks	living organisms and sphere shape					

Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "hills and rocks" in Stimulus 16b,	-	mark A for question 16 and move to question 17.	
If the student does not find "hills and rocks" in Stimulus 16b,	-	replicate the initial presentation instructions.	
After the teacher repeats the instructions, if the student finds "hills and rocks" in Stimulus 16b,	-	mark B for question 16 and move to question 17.	
After the teacher repeats the instructions, if the student does not find "hills and rocks" in Stimulus 16b,	-	mark C for question 16 and move to question 17.	

- Present Stimulus 17.
- *Direct* the student to Stimulus 17. *Communicate:* **A** ball is dropped. This is the path of the ball as it falls, bounces up and down several times, and then stops moving.
- Communicate: The dotted lines show the path the ball follows after it is dropped.
- Communicate: Find the path of the ball after it is dropped.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds any part of the dotted line,	-	mark A for question 17 and move to question 18.	
If the student does not find any part of the dotted line,	-	 remove the stimulus; wait at least five seconds; and replicate the initial presentation instructions. 	
After the five-second wait time, if the student finds any part of the dotted line,	-	mark B for question 17 and move to question 18.	
After the five-second wait time, if the student does not find any part of the dotted line,	-	mark C for question 17 and move to question 18.	

- Present Stimulus 18a and 18b.
- *Direct* the student to Stimulus 18a. *Communicate:* **The girl is holding a basketball that she is going to drop.**
- *Direct* the student to each answer choice in Stimulus 18b.
- Communicate: Find the path the ball will follow as it bounces and rolls.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the path of the ball as it bounces and rolls,	-	mark A for question 18 and move to question 19.	
If the student does not find the path of the ball as it bounces and rolls,		 model the desired student action by finding the path of the bouncing ball and communicate "This is the path of the ball as it bounces and rolls"; and replicate the initial presentation instructions. 	
After teacher modeling, if the student finds the path of the ball as it bounces and rolls,	-	mark B for question 18 and move to question 19.	
After teacher modeling, if the student does not find the path of the ball as it bounces and rolls,	-	mark C for question 18 and move to question 19.	

- Present Stimulus 19a and 19b.
- *Direct* the student to Stimulus 19a. *Communicate:* The student wants to lift a heavy box. The box is attached to a pulley.
- *Direct* the student to each answer choice in Stimulus 19b. *Communicate* the text in each answer choice.
- Communicate: Find what action the student will do to lift the box.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds the sentence "The student will pull down on the rope,"	-	mark A for question 19 and move to question 20.	
If the student does not find the sentence "The student will pull down on the rope,"	*	provide one of these allowable teacher assists to the student:	
		 Have the student role-play using a pulley. OR Have the student demonstrate a push and a pull. OR Draw an arrow indicating which way the box needs to move. 	
		Replicate the initial presentation instructions.	
After the selected teacher assistance, if the student finds the sentence "The student will pull down on the rope,"	-	mark B for question 19 and move to question 20.	
After the selected teacher assistance, if the student does not find the sentence "The student will pull down on the rope,"		mark C for question 19 and move to question 20.	

- Present Stimulus 20a and 20b.
- *Direct* the student to Stimulus 20a. *Communicate:* **Two students complete an investigation to test** force on two identical toy cars. The students push and release the cars from the same place.
- *Direct* the student to each answer choice in Stimulus 20b. *Communicate* the text in each answer choice.
- Communicate: Find the information that shows which car was pushed with greater force.



Scoring Instructions			
Student Action		Test Administrator Action	
If the student finds "the distance each car traveled,"	-	mark A for question 20.	
If the student does not find "the distance each car traveled,"	-	replicate the initial presentation instructions.	
After the teacher repeats the instructions, if the student finds "the distance each car traveled,"	-	mark B for question 20.	
After the teacher repeats the instructions, if the student does not find "the distance each car traveled,"	-	mark C for question 20.	

TEST ADMINISTRATOR MANUAL

STAAR ALTERNATE 2 GRADE 8 Science April 2016