

## Task Specific Change in Materials/Approach from Instruction to Assessment: Science

In order to provide more rigor as required by Texas legislation, the materials used in STAAR Alternate assessment observations must be different than those used during instruction. The materials must vary enough from instruction so that the student is not just rotely repeating an answer or response from a previous instructional session without truly demonstrating the skill. The changes in materials, therefore, should be related to the content being measured. During the assessment observation a student must provide a different answer to the predetermined criterion or respond to a different experience in the predetermined criterion than was observed during instruction. Because some tasks and predetermined criteria are written specifically for a certain skill, teachers need to plan instruction and assessments in advance to ensure a change in materials is made. For example, when specific skills are to be assessed, it may be necessary to introduce and teach similar skills during instruction so that the content of the assessment observation is not compromised.

Instruction is critical since an assessment observation only reflects the skill acquisition that occurred during the instructional process. The assessment tasks have to be presented as written and cannot be changed, thus maintaining the standardization quality of STAAR Alternate. A student's performance can only be considered valid if the assessment task has not been previously practiced in the exact way that it was designed. Therefore, teachers must review the assessment tasks prior to beginning instruction to ensure the task is not duplicated, which will compromise the authentic response required during the assessment observation. Teachers are required to approach teaching sessions differently than assessment observations. The change in approach may vary from assessment task to assessment task.

Question to ask yourself: What is the best way for the skills/concepts in the assessment task to be addressed during instruction?			
Answers:			
As the skill naturally occurs	In separate lessons	With new items only	In a different presentation

The information on the following page provides guidance on the instruction for the assessment task that should occur before the observation. The change in materials must maintain the complexity level of the task and result in a new experience or a different answer than is requested in the assessment observation.

Instructional Focus				
	Natural Occurrences	Separate Lessons	New Items*	Different Presentations
Skill/Concept	<ul style="list-style-type: none"> <li>Broadly addressed as the skill/concept naturally occurs</li> <li>Exposure to numerous experiences showing how the skill/concept relates to the student</li> </ul>	<ul style="list-style-type: none"> <li>Specifically taught in isolation of other skills due to the complexity of the skill/concept</li> <li>Requires the use of new items presented in the same way as in the predetermined criteria</li> </ul>	<ul style="list-style-type: none"> <li>Specifically taught with new items *</li> </ul>	<ul style="list-style-type: none"> <li>Overall skill or concept taught but in a way that is different than that of the assessment task</li> </ul>
Predetermined criteria	<ul style="list-style-type: none"> <li>Not specifically addressed during instruction since the opportunity to emphasize the skill/concept frequently occurs</li> </ul>	<ul style="list-style-type: none"> <li>Each predetermined criterion is addressed in isolation of the other predetermined criterion since each skill/concept must be learned individually as a separate skill/concept before being demonstrated together</li> <li>Each predetermined criterion becomes a single, separate lesson which can occur over numerous days</li> </ul>	<ul style="list-style-type: none"> <li>Each predetermined criterion is addressed in the same way as in the assessment task</li> <li>All predetermined criteria are addressed together during a single lesson since the skill is often a process that cannot be completed until all three criteria are performed</li> </ul>	<ul style="list-style-type: none"> <li>Not specifically addressed during instruction since the predetermined criteria are often very specific</li> <li>Repeating the predetermined criteria during instruction exactly as written in the task would compromise the assessment observation</li> </ul>
Entire assessment task	<ul style="list-style-type: none"> <li>Not presented as written during instruction – presented for the first time as an entire task during the assessment observation</li> </ul>	<ul style="list-style-type: none"> <li>Not presented as written during instruction – becomes a culminating activity for the first time as an entire task during the assessment observation</li> </ul>	<ul style="list-style-type: none"> <li>Presented as written during instruction – instruction and assessment observation are exactly mirrored with the exception of the items</li> </ul>	<ul style="list-style-type: none"> <li>Not presented as written during instruction – presented for the first time during the assessment observation</li> </ul>

\* The term “item” refers to materials as well as to specific examples or problems presented in a task. An “item” refers to, but is not limited to, the following examples: consonant letter, word, paragraph, text, topic, equation, geometric figure, graph, quantity, journal entry, map, act of a good citizen, geographic feature, investigation, characteristic of a habitat, and a basic need.

# SCIENCE

Natural Occurrences 	Separate Lessons 	New Items 	Different Presentations 
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Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Identifies and classifies matter by its physical properties and determines how matter is changed						
5/Science	1/5.5	3	Change in physical properties		Use a different material and a different outside force to be applied resulting in a different conclusion	Given a material whose physical properties can be changed when an outside force is applied: determine the physical properties of the material before and after the force is applied, compare the recorded data taken before and after the force was applied, generate a conclusion regarding how the force affected the physical properties of the material
5/Science	1/5.5	2	Physical properties		Use a new mixture with different items containing different physical properties	Given a mixture that contains a combination of a least three items that when combined do not lose their individual physical properties: sort the items in the mixture according to physical properties, match a label to each sorted group, identify a physical property of each group
5/Science	1/5.5	1	Change in physical properties		Use a different object and a new force resulting in a different physical property change	Explore an object, participate in applying a force to the object that will change one of its physical properties, respond to the change in the physical property after the force was applied
Essence Statement B: Recognizes force, motion, and energy and their relationships						
5/Science	2/5.6	3	Force and motion		Provide opportunities to investigate effects of other types of force and motion where data is collected and compared	Conduct an investigation to determine the effects of the force of the wind on different objects, record observations of the effects of the wind on the objects, compare the collected data
5/Science	2/5.6	2	Force and motion		Provide instruction on forms of energy and their benefits	Identify an example of wind created by an alternate source, assist in using the example of created wind energy, identify a benefit of the example of created wind energy
5/Science	2/5.6	1	Force and motion		Expose to objects moving in the wind as they occur in everyday situations	Experience the sensation of wind, participate in using wind to move an object, respond to the object being moved by wind

# SCIENCE

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Grade/Subject	Rep Cat/K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Recognizes patterns in the natural world and among the Sun, Earth, and Moon system						
5/Science	3/5.8	3	Seasonal weather patterns		Instruct on weather conditions and activities for all four seasons and how to interpret weather data from different sources	Given weather data for a three-day period for two different seasons: determine the weather characteristics for each season, generate a list of appropriate activities for each season, justify why the activities are appropriate for each season
5/Science	3/5.8	2	Seasonal weather patterns		Provide instruction on all four seasons including weather, typical events, and the order in which they occur	Given descriptions for each season and representations of seasonal landscapes or events for all seasons: match the representations to the description of the season, identify the representations for the current season of the year, arrange the remaining representations into sequential order beginning with the current season
5/Science	3/5.8	1	Seasonal weather patterns		Expose to experiences in varying weather conditions during the season in which they naturally occur	Given a representation for the current season, a representation for the season that follows the current season, and representations for weather-related activities associated with each presented season: explore the representations, participate in pairing the representations of weather-related activities to the representations of the seasons, experience a weather-related activity associated with the current season
Essence Statement D: Knows that organisms undergo life processes and have structures that help them survive within their environments						
5/Science	4/5.10	3	Life cycles of organisms		Use a new organism with different structures and life cycle stages	Given reference materials depicting the life cycle of a specific insect: determine a fact about each stage which will be recorded and presented randomly to the student, organize the stages in sequential order, determine a purpose for one of the structures evident in the insect's adult stage
5/Science	4/5.10	2	Life cycles of organisms		Use a new organism with different structures and life cycle stages	Given pictures or representations of the stages in the life cycle of an animal in random order: match a picture or representation of each stage in the life cycle to a description of each stage, identify the first and last stage of the life cycle, identify a difference in the animal's appearance between the first stage and the last stage after all the stages have been placed in sequential order
5/Science	4/5.10	1	Life cycles of organisms		Use a new organism with different structures	Given representations of life cycle stages of an organism focusing on a structural change from the first stage to the last stage: explore the representations, acknowledge the first stage of the organism, respond to the structural change in the last stage

# SCIENCE

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Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Recognizes that matter is composed of atoms, has distinct properties, and interacts with energy						
8/Science	1/8.5	3	Changes in states of matter		Provide opportunities to investigate changes in states of matter, record observations, and analyze results	Given a frozen liquid, the student will conduct an investigation tracking the changes in states of matter as the teacher applies heat to the liquid: record observations of each state of matter, determine when the states of matter changed, answer a question relating to his or her observations
8/Science	1/8.5	2	Physical properties of matter		Use new objects with different physical properties	Given three objects that have different physical properties: examine the three objects, identify one physical property that is different for each object, sort additional objects into groups according to the student-identified physical properties
8/Science	1/8.5	1	Physical properties of matter		Use new objects with different physical properties	Given objects to explore that are the same in one physical property: participate in grouping the objects together according to the common physical property, respond to the physical property that is different when presented another object different from the original objects, participate in moving the different object away from the like objects
Essence Statement B: Knows that energy can neither be created nor destroyed but changes form						
8/Science	2/6.9	3	Energy transformations		Provide instruction on different forms of energy and examples of energy transformations	Given reference materials: generate a list of different forms of energy, locate examples of each form of energy on the list, determine the type of energy transformation that occurred when presented with an item that demonstrates a transformation
8/Science	2/6.9	2	Energy transformations		Provide instruction on different forms of energy including electrical energy and examples of energy transformations	Given representations for three forms of energy other than electrical energy: identify each of the forms of energy, match electrical devices to each of the forms of energy that results when the device is activated, identify the previous form of energy for each of the transformed energy examples
8/Science	2/6.9	1	Energy transformations		Expose to the use of electrical or battery operated devices as they naturally occur	Given an electrical or battery operated device that when activated provides a multisensory experience: acknowledge the device, participate in pairing the device to the energy source, respond to the multisensory experience provided when the device is activated

# SCIENCE

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Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Recognizes that natural events affect Earth's systems						
8/Science	3/8.9	3	Weather patterns		Instruct on and evaluate weather information using different weather maps, determine the impact of different kinds of weather, and the effects of weather on individuals	Given a United States weather map: locate two places on the map with significantly different temperatures, compare the temperature and precipitation in both places for the same three-day period, determine how to prepare for the weather at each location
8/Science	3/8.9	2	Weather patterns		Instruct on weather conditions, graphing, and the effects of weather on individuals	Given a seven-day weather forecast that shows a clear pattern for one weather condition: assist in graphing the weather condition for the seven days, identify the weather pattern, choose an article of clothing appropriate for the forecasted weather
8/Science	3/8.9	1	Weather patterns		Expose to the changes in weather as they are encountered	Given sensory input representing weather conditions for a three-day period in which the weather is the same the first two days and changes on the third day: experience the sensory input for the first day's weather condition, acknowledge the sensory input for the second day's weather condition, respond to the change in the third day's weather condition
Essence Statement D: Recognizes the classification of organisms						
8/Science	4/7.12	3	Ecosystems		Use a different ecosystem resulting in different plants and animals	Given reference materials: determine characteristics of a given ecosystem, generate a graphic organizer showing the animals and plants that are supported by the ecosystem, justify why a teacher-presented animal or plant cannot be supported by the ecosystem
8/Science	4/7.12	2	Ecosystems		Use a new location and a different season resulting in different animal and plant behaviors	Given reference materials: identify typical weather conditions for a given location during a specific season of the year, identify the animals and plants that live in that location, identify behaviors of living things that result from weather conditions
8/Science	4/7.12	1	Living versus nonliving		Expose to needs of living things in the school environment as the opportunity arises	Explore living and nonliving things, participate in sorting living and nonliving things, participate in providing water to a living thing

# SCIENCE

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Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement A: Recognizes the importance of the cell cycle and cell differentiation to the growth of organisms						
Biology	1/5	3	Function of plant parts		Provide instruction on different parts and their functions for a variety of plants and the concept of living things being composed of cells	Determine the function of each part of a given plant, compare the cells of each plant part, determine why the cells are different for different plant parts
Biology	1/5	2	Function of plant parts		Provide instruction on different parts and their functions for a variety of plants and the concept of living things being composed of cells	Identify plant parts, match the function of each part to its corresponding part, identify a true statement about the relationship between cell structure and plant parts when presented cells of each plant part
Biology	1/5	1	Organisms and environments: adaptations		Use a variety of new plants with different shaped parts	Explore a small plant and a large plant of the same species, participate in pairing plant parts from the small to the large plant, respond to the growth of the larger plant that was stimulated by cell division
Essence Statement B: Recognizes that the structure of DNA determines the inherited traits in organisms						
Biology	2/6	3	Inherited traits		Provide instruction on inherited traits versus learned behaviors with a variety of examples	Given pictures of members of a family with several children and one set of identical twins: generate a diagram showing the physical traits inherited from each parent, determine which parent shared the most inherited traits with the identical twins, justify why the identical twins have the same physical characteristics
Biology	2/6	2	Inherited traits		Use a new family with different inherited physical traits	Identify an inherited trait, complete a diagram linking traits from the parent to the offspring after being presented with representations of a family which includes several children, identify an inherited trait that is shared between siblings
Biology	2/6	1	Inherited traits		Use a new inherited trait	Explore a representation for an inherited trait, participate in pairing the inherited trait to the parent and its offspring after being presented representations for both the parent and its offspring, acknowledge the trait on himself or herself

# SCIENCE

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Grade/ Subject	Rep Cat/ K&S	Level	Skill Focus	Code	Description of Instruction	Assessment Task Summary
Essence Statement C: Knows that taxonomy is used to classify organisms based on shared characteristics						
Biology	3/8	3	Classification of organisms by kingdom		Provide instruction on the three kingdoms and examples of organisms that make up each of the three kingdoms	Given reference materials: generate a list of two characteristics each for the plant, animal, and fungus kingdoms; determine examples of organisms for each of the three kingdoms; compare the three kingdoms
Biology	3/8	2	Classification of plants by characteristics		Provide instruction on characteristics of plants and the need met by specific plant parts	Identify two characteristics that classify a plant as a living thing, identify the shared characteristics from examples of plants from a variety of species, identify the need met by each of two plant parts chosen by the teacher
Biology	3/8	1	Plant characteristics		Expose to plant parts as opportunities arise in the natural environment	Given two unpotted plants with different-shaped leaves, stems, or roots: acknowledge the leaves, stems, and roots of the first plant and then the same parts on the second plant, participate in pairing the leaves, stems, and roots of the first plant to those of the second plant, participate in placing the plants in soil and watering them
Essence Statement D: Knows that interdependence and interactions occur within an environmental system						
Biology	5/12	3	Interdependency of organisms		Use four new organisms resulting in a different mutualistic relationship	Given a wide array of reference materials and representations for four living organisms, two of which have a mutualistic relationship: conduct research about the four different organisms, determine which two organisms have a mutualistic relationship, determine how each organism benefits from the relationship
Biology	5/12	2	Food sources in the environment		Use a new habitat resulting in different organisms and food sources	Given a model or representation of a habitat: identify three living organisms that live in the habitat, match a food source to each organism, identify one result that would occur if an animal lost its food source
Biology	5/12	1	Food sources in the environment		Use a new animal in a different environment and food source	Given an animal or a representation of an animal in its natural environment along with its natural food source: acknowledge the animal, participate in pairing the animal with its food source from its environment, acknowledge a representation for "eat"