



Teacher Guide

Directions for Test Administration

Science

Grade 8

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Purpose

The Directions for Test Administration (DTA) is required for administration. The DTA provides the exact wording of the items to be read aloud by the TA during administration, the materials needed in preparation of the test, and guidelines for how to present the items to the student. Please use the DTA in conjunction with the Test Administration Manual (TAM) and the MSAA Online Assessment System User Guide for Test Administrators for detailed instructions.

MSAA Administration Materials

Document	Purpose
Test Administration Manual (TAM)	The TAM provides policies and procedures for TAs and TCs to prepare for the administration of the test, including a vocabulary list for ASL translation, tactile graphics, word boards or word banks, and AT/AAC devices.
Directions for Test Administration (DTA)	The DTA provides all directions for a successful one-to-one MSAA administration and includes directions and scripts for each item of the test.
MSAA Online Assessment System User Guide for Test Administrators	The user guide for TAs provides technical information and troubleshooting tips, plus step-by-step instructions to navigate the MSAA Online Assessment System, such as how to complete the Learner Characteristics Inventory (LCI); how to pause, resume, and submit a test for scoring; when to contact the MSAA Service Center; and how to administer the Student Response Check (SRC).

Directions

Become familiar with and follow all directions for test administration provided in the TAM. All text that TAs are to say aloud is boldfaced, and all text providing directions for what TAs are to do is in italics.

Please see the example below:

Item 1

3.ESS.2.1.1: Use observations to describe weather conditions.	
Teacher Script	
SAY	Sofia observes a tree bending as air blows on it outside. <i>Indicate the picture to the student.</i>
ASK	Which word can Sofia use to describe the weather? <i>Indicate and read each response option to the student.</i> foggy windy sleepy
Student Response	
RECORD	<i>Fill in the circle for the student's response.</i> <input type="radio"/> A. foggy <input type="radio"/> B. windy <input type="radio"/> C. sleepy <input type="radio"/> D. No Response

Boldfaced text:
TA reads item text to the student.

Italicized text:
Directions for what the TA is to do.

NOTE: For certain items, there is alternative text provided. Alternative text may appear in the SAY and/or ASK sections. It is **required** that TAs read the alternative text provided.

Beginning Science Grade 8

Item 1

MS.LS.1.5.1: Ask questions to help identify factors that could be affecting the growth of an organism.	
Teacher Script	
SAY	<p>Jeanie has a baby hamster. She wants to be sure it grows up healthy. She feeds it every day.</p> <p><i>Indicate the picture to the student.</i></p>
ASK	<p>Which question should Jeanie ask to find out how to help the hamster grow?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Is the hamster a boy or a girl?</p> <p>What is the best name for the hamster?</p> <p>Does the hamster get enough food and water?</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Is the hamster a boy or a girl?</p> <p><input type="radio"/> B. What is the best name for the hamster?</p> <p><input type="radio"/> C. Does the hamster get enough food and water?</p> <p><input type="radio"/> D. No Response</p>

Item 2

MS.LS.1.5.2: Analyze data to determine whether a particular factor is affecting the growth of organisms.	
Teacher Script	
SAY	<p>A scientist measured the growth of small plants growing on the ocean surface. Then, she added fertilizer to the plants and measured their growth again. Her data are shown in the data table.</p> <p><i>Indicate and read the data table to the student.</i></p> <p>This data table is titled Effect of Adding Fertilizer to Ocean Plants. It compares the growth of ocean plants before and after adding fertilizer. Before adding the fertilizer, the plant growth rate was point two five. After adding fertilizer, the growth rate was point six five.</p>
ASK	<p>According to the data table, which factor affected the growth of the ocean plants?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>cloudy skies</p> <p>ocean temperature</p> <p>presence of fertilizer</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. cloudy skies</p> <p><input type="radio"/> B. ocean temperature</p> <p><input checked="" type="radio"/> C. presence of fertilizer</p> <p><input type="radio"/> D. No Response</p>

Item 3

MS.LS.1.5.3: Use provided information to explain how the growth of organisms is influenced by various environmental and/or genetic factors.

Teacher Script	
SAY	<p>Scientists conducted an investigation to see how different foods available in spring affect geese. They captured geese and weighed them. Then, they weighed how much grass was in the stomach of each goose. The scientists released the geese and then captured them a second time, repeating their measurements. The data table lists their data.</p> <p><i>Indicate and read the data table to the student.</i></p> <p>This data table is titled How Does Eating Grass Affect Goose Weight? It lists average goose weight and the average weight of grass eaten by geese on two different dates. On March first, the average weight of grass eaten was twenty-two point seven grams. The average goose weight on that date was four point sixty-five kilograms. On March twelfth, the average weight of grass eaten was twenty-six point two grams. The average goose weight on that date was five point twenty-seven kilograms.</p>
ASK	<p>Based on the data table, how does eating grass affect goose weight?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Goose weight increases when geese eat more grass.</p> <p>Goose weight decreases when geese eat more grass.</p> <p>Goose weight stays the same when geese eat more grass.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Goose weight increases when geese eat more grass.</p> <p><input type="radio"/> B. Goose weight decreases when geese eat more grass.</p> <p><input type="radio"/> C. Goose weight stays the same when geese eat more grass.</p> <p><input type="radio"/> D. No Response</p>

Items 4–9 Cluster Stimulus

Teacher Script	
SAY	<p>A school built a nature area to provide food, water, and shelter for the local birds. Levi notices young birds that visit the feeders in the nature area are becoming larger over time.</p> <p>He wonders if certain human activities around the nature area might negatively affect the birds.</p> <p>Levi examines a graph that models bird feeding behavior.</p> <p><i>Indicate and read the graph to the student.</i></p> <p>The graph is titled Bird Feeding Times. The x-axis is labeled Time, and shows times ranging from four A.M. to two P.M. The y-axis is labeled Average Number of Feeder Visits, and ranges from zero to eight. A trend line begins at five visits at five A.M., comes to a peak at six visits at six A.M. The trend line decreases to almost zero from seven A.M. until noon. After noon, the trend line increases up to a peak of six visits at one P.M., and drops off to five visits at two P.M.</p> <p>Levi also wants to restore a pond habitat near the nature area to attract ducks. He examines a graph showing the relationship between the number of ducks and the number of ponds in an area.</p> <p><i>Indicate and read the graph to the student.</i></p> <p>The graph is titled Relationship between Ducks and Ponds. The x-axis is labeled Ponds per Square Mile, and shows values ranging from zero to thirty-five. The y-axis is labeled Ducks per Square Mile, and values range from zero to one hundred. A curved line begins at zero ducks and four ponds per square mile and curves upward toward the right, ending at one hundred ducks and thirty-five ponds per square mile.</p>

Item 4

MS.LS.2.1.1: Use data or observations to identify resources (e.g., food, water, nutrients, space) that are necessary for organisms and populations of organisms to grow and survive.

Teacher Script	
SAY	Levi notices young birds that visit the feeders in the nature area are becoming larger over time.
ASK	What resource is needed to help the birds grow? <i>Indicate and read each response option to the student.</i> food dirt shoes
Student Response	
RECORD	<i>Fill in the circle for the student's response.</i> <input type="radio"/> A. food <input type="radio"/> B. dirt <input type="radio"/> C. shoes <input type="radio"/> D. No Response

Item 5

MS.LS.2.1.2: Use data or observations to describe the effects of resource availability on organisms and/or populations of organisms.

Teacher Script	
SAY	<p>Levi wants to create a plan so that the bird feeders are always full. He examines a graph that models bird feeding behavior.</p> <p><i>Indicate and read the graph to the student.</i></p> <p>The graph is titled Bird Feeding Times. The x-axis is labeled Time, and shows times ranging from four A.M. to two P.M. The y-axis is labeled Average Number of Feeder Visits, and ranges from zero to eight. A trend line begins at five visits at five A.M., comes to a peak at six visits at six A.M. The trend line decreases to almost zero from seven A.M. until noon. After noon, the trend line increases up to a peak of six visits at one P.M., and drops off to five visits at two P.M.</p>
ASK	<p>Based on this data, when is the <u>best</u> time for Levi to refill the bird feeders?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>in the middle of the night in the morning and late afternoon in the middle of the day and early evening</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. in the middle of the night</p> <p><input type="radio"/> B. in the morning and late afternoon</p> <p><input type="radio"/> C. in the middle of the day and early evening</p> <p><input type="radio"/> D. No Response</p>

Item 6

MS.LS.2.1.3: Analyze data to identify evidence for a cause-effect relationship between resource availability and growth of organisms and/or populations of organisms.

Teacher Script	
SAY	<p>Levi also wants to restore a pond habitat near the nature area to attract ducks. He examines a graph showing the relationship between the number of ponds and the number of ducks.</p> <p><i>Indicate and read the graph to the student.</i></p> <p>The graph is titled Relationship between Ducks and Ponds. The x-axis is labeled Ponds per Square Mile, and shows values ranging from zero to thirty-five. The y-axis is labeled Ducks per Square Mile, and values range from zero to one hundred. A curved line begins at zero ducks and four ponds per square mile and curves upward toward the right, ending at one hundred ducks and thirty-five ponds per square mile.</p>
ASK	<p>Which cause-and-effect relationship is <u>best</u> described by this data?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>clean pond water yields more ducks per square mile many pond habitats yields more ducks per square mile enough pond food to eat yields more ducks per square mile</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. clean pond water → more ducks per square mile</p> <p><input type="radio"/> B. many pond habitats → more ducks per square mile</p> <p><input type="radio"/> C. enough pond food to eat → more ducks per square mile</p> <p><input type="radio"/> D. No Response</p>

Item 7

MS.ESS.3.3.1: Identify an environmental problem caused by human activities/impact.	
Teacher Script	
SAY	Levi knows that human activities can affect the environment.
ASK	<p>Which environmental change is <u>most likely</u> caused by humans?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Waves remove sand from a beach.</p> <p>A volcano erupts.</p> <p>Some trees are cut down.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Waves remove sand from a beach.</p> <p><input type="radio"/> B. A volcano erupts.</p> <p><input type="radio"/> C. Some trees are cut down.</p> <p><input type="radio"/> D. No Response</p>

Item 8

MS.ESS.3.3.2: Make a claim about how a particular method would work to reduce human impact on the environment.

Teacher Script	
SAY	<p>Levi observes that the number of birds visiting the nature area has decreased over time. He thinks this is because humans have caused changes to the natural environment. There are not as many places for birds to build nests.</p> <p>Levi researches how human effects on birds could be reduced. A list of his findings is shown.</p> <p><u>Actions to Reduce Human Effects on Birds</u></p> <ul style="list-style-type: none"> • Plant native trees and bushes. • Decrease the amount of city noise.
ASK	<p>Which action would <u>best</u> help the birds in the nature area build sturdy nests?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Plant native trees and bushes.</p> <p>Decrease the amount of city noise.</p> <p>Clean the classrooms in the school.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Plant native trees and bushes.</p> <p><input type="radio"/> B. Decrease the amount of city noise.</p> <p><input type="radio"/> C. Clean the classrooms in the school.</p> <p><input type="radio"/> D. No Response</p>

Item 9

MS.ESS.3.3.3: Select or evaluate a design for a method for minimizing a human impact on the environment.

Teacher Script	
SAY	<p>Levi observes that birds are using the nature area. His science teacher tells him that human activities such as building roads have disrupted bird habitats. Without habitat for the birds to rest and have shelter, they cannot survive.</p> <p>Levi makes a list of design changes to the nature area that could help protect the birds.</p> <p><u>Possible Design Changes to Nature Area</u></p> <ul style="list-style-type: none"> • Build nesting boxes. • Add clean birdbaths. • Hang several bird feeders.
ASK	<p>Which design change would make sure that the birds have shelter?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Build nesting boxes.</p> <p>Add clean birdbaths.</p> <p>Hang several bird feeders.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Build nesting boxes.</p> <p><input type="radio"/> B. Add clean birdbaths.</p> <p><input type="radio"/> C. Hang several bird feeders.</p> <p><input type="radio"/> D. No Response</p>

Items 10–15 Cluster Stimulus

Teacher Script	
SAY	<p>Syreeta lives near a lake and likes to explore the lake in her small boat. She wears a life jacket and has two paddles to move the boat through the water. Syreeta enjoys paddling fast and watching waves move in the water.</p> <p>In the early mornings, the lake is often foggy. One day, Syreeta raises her hand into the air and feels tiny water droplets on her hand.</p> <p>Before Syreeta goes out on her boat, her friend Marcel stops by. He tells Syreeta that the water cycle helps explain how the lake was formed. Syreeta is surprised to learn that the lake affects the environment.</p> <p>Syreeta decides to draw a model that shows the lake in part of the water cycle.</p> <p><i>Indicate and read the “Drawing Model” to the student.</i></p> <p>The model is titled Drawing Model. There is a lake on the ground. An arrow points to clouds at the top of the model. This arrow is labeled Condensation. On the left side of the model, clouds are raining. An arrow points from the raining clouds toward the ground. This arrow is labeled Precipitation. An arrow on the ground points to the lake. This arrow is labeled Runoff.</p> <p><i>Indicate the “Physical Model” to the student.</i></p> <p>Syreeta also builds a physical model of part of the water cycle that includes the water and soil of the lake. Syreeta starts with an empty glass tank. She pours soil into the bottom left side of the tank. Syreeta then fills the bottom right side of the tank with water. She places a plastic cover on top of the tank. Syreeta sets a container of ice cubes on the left side of the cover.</p> <p>After drawing and building her models, Syreeta decides to take her boat onto the lake. Marcel is going to watch her from the dock.</p>

Item 10

MS.ESS.2.4.1: Use a model to trace the path of water through Earth's systems.	
Teacher Script	
SAY	<p>Syreeta draws a model that shows part of the water cycle.</p> <p><i>Indicate and read the "Drawing Model" to the student.</i></p> <p>The model is titled Drawing Model. There is a lake on the ground. An arrow points to clouds at the top of the model. This arrow is labeled Condensation. On the left side of the model, clouds are raining. An arrow points from the raining clouds toward the ground. This arrow is labeled Precipitation. An arrow on the ground points to the lake. This arrow is labeled Runoff.</p>
ASK	<p>Which list of steps describes how water moves in the model?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>bus → school → classroom imagination → travel → vacation condensation → precipitation → runoff</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. bus → school → classroom <input type="radio"/> B. imagination → travel → vacation <input checked="" type="radio"/> C. condensation → precipitation → runoff <input type="radio"/> D. No Response</p>

Item 11

MS.ESS.2.4.2: Use a model to describe the state of water or state changes in various parts of the water cycle.

Teacher Script	
SAY	<p>In the early mornings, the lake is often foggy. One day, Syreeta raises her hand into the air and feels tiny water droplets on her hand.</p> <p>Syreeta wonders where fog is represented on her drawing model that shows part of the water cycle.</p> <p><i>Indicate and read the “Drawing Model” to the student.</i></p> <p>The model is titled Drawing Model. There is a lake on the ground. An arrow points to clouds at the top of the model. This arrow is labeled Condensation. On the left side of the model, clouds are raining. An arrow points from the raining clouds toward the ground. This arrow is labeled Precipitation. An arrow on the ground points to the lake. This arrow is labeled Runoff.</p>
ASK	<p>Which part of Syreeta’s model represents fog?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>friction precipitation condensation</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student’s response.</i></p> <p><input type="radio"/> A. friction</p> <p><input type="radio"/> B. precipitation</p> <p><input checked="" type="radio"/> C. condensation</p> <p><input type="radio"/> D. No Response</p>

Item 12

MS.ESS.2.4.3: Develop a model to describe how the Sun’s energy or the force of gravity moves water through the water cycle.	
Teacher Script	
SAY	<p><i>Indicate the “Physical Model” to the student.</i></p> <p>Syreeta also builds a physical model of part of the water cycle that includes the water and soil of the lake. Syreeta starts with an empty glass tank. She pours soil into the bottom left side of the tank. Syreeta then fills the bottom right side of the tank with water. She places a plastic cover on top of the tank. Syreeta sets a container of ice cubes on the left side of the cover.</p>
ASK	<p>What should Syreeta add to her model to show how gravity moves water?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>a plant in the soil, to clean the air a rock on top of the soil, to represent a hill a lamp shining light on the soil, to heat the tank</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student’s response.</i></p> <p><input type="radio"/> A. a plant in the soil, to clean the air</p> <p><input type="radio"/> B. a rock on top of the soil, to represent a hill</p> <p><input type="radio"/> C. a lamp shining light on the soil, to heat the tank</p> <p><input type="radio"/> D. No Response</p>

Item 13

MS.PS.4.2.1: Use observations to identify whether a wave is being reflected, absorbed, or transmitted through a material.	
Teacher Script	
SAY	<p>Syreeta takes her boat onto the lake. She places a paddle in the water. She sees waves form circles around the paddle and move outward.</p> <p><i>Indicate the diagram to the student.</i></p>
ASK	<p>What happens to the water wave when Syreeta uses the paddle?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>The cover protects the food.</p> <p>The trees block the sunlight.</p> <p>The water transmits the wave.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. The cover protects the food.</p> <p><input type="radio"/> B. The trees block the sunlight.</p> <p><input checked="" type="radio"/> C. The water transmits the wave.</p> <p><input type="radio"/> D. No Response</p>

Item 14

MS.PS.4.2.2: Use a model to describe the path of a wave that is reflected, absorbed, or transmitted through different materials.	
Teacher Script	
SAY	<p>Syreeta’s friend Marcel is watching her from the dock. He sees Syreeta place her paddle in the water. Syreeta’s paddle appears to be bent under water. Marcel draws a model to show what he sees.</p> <p><i>Indicate and read the model to the student.</i></p> <p>The model shows Syreeta in her boat, holding a paddle in the water. Marcel is sitting on a dock opposite from Syreeta, looking at the paddle that is under water. A solid line extends from the end of the paddle up to the surface of the water, bends at the border between the water and air, and reaches Marcel’s eyes. A second line that is dashed extends from an image of the paddle under water, becomes solid at the border between the water and air, and reaches Marcel’s eyes.</p>
ASK	<p>Which statement describes how light moves in Marcel’s model?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>The paddle pushes the boat forward in the lake.</p> <p>The light bends as it moves from the water into the air.</p> <p>The bird eats many seeds as it walks through the grass.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student’s response.</i></p> <p><input type="radio"/> A. The paddle pushes the boat forward in the lake.</p> <p><input type="radio"/> B. The light bends as it moves from the water into the air.</p> <p><input type="radio"/> C. The bird eats many seeds as it walks through the grass.</p> <p><input type="radio"/> D. No Response</p>

Item 15

MS.PS.4.2.3: Develop a model to represent what happens to waves when they are reflected, absorbed, or transmitted through different materials.

Teacher Script	
SAY	<p>Syreeta notices that the waves from her boat are reflected off the dock. When she leaves her boat at the dock, she draws an incomplete model to show how water waves are reflected.</p> <p><i>Indicate and read the incomplete model to the student.</i></p> <p>The incomplete model shows two boxes labeled Before and After. In the Before box, a boat is in water to the lower right of a dock. Several surface water waves are shown moving along an arrow from the boat toward the dock at an angle. The After box is blank.</p>
ASK	<p>What diagram should Syreeta add to complete her model?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>An arrow points from the boat toward the dock at an angle. Where the first arrow reaches the dock, several surface water waves are moving straight downward along an arrow away from the dock.</p> <p>An arrow points from the boat toward the dock at an angle.</p> <p>An arrow points from the boat toward the dock at an angle. Where the first arrow reaches the dock, several surface water waves are moving along an arrow away from the dock at an angle to the lower left.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. An arrow points from the boat toward the dock at an angle. Where the first arrow reaches the dock, several surface water waves are moving straight downward along an arrow away from the dock.</p> <p><input type="radio"/> B. An arrow points from the boat toward the dock at an angle.</p> <p><input type="radio"/> C. An arrow points from the boat toward the dock at an angle. Where the first arrow reaches the dock, several surface water waves are moving along an arrow away from the dock at an angle to the lower left.</p> <p><input type="radio"/> D. No Response</p>

Item 16

MS.PS.1.2.1: Use observations or informational resources (e.g., charts, tables) to identify properties of a substance.	
Teacher Script	
SAY	Sanjay uses a spoon to mix baking soda with water. The baking soda cannot be seen in the water because it dissolves.
ASK	<p>Which statement describes a property of baking soda?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Grass grows in sunlight.</p> <p>Turtles hide in their shells.</p> <p>Baking soda dissolves in water.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Grass grows in sunlight.</p> <p><input type="radio"/> B. Turtles hide in their shells.</p> <p><input type="radio"/> C. Baking soda dissolves in water.</p> <p><input type="radio"/> D. No Response</p>

Item 17

MS.PS.1.2.2: Use data on the properties of two or more substances to determine if the samples are the same or different substances.	
Teacher Script	
SAY	<p>Salma reads a data table that shows the solubility of flour, salt, and sugar. Solubility measures whether a substance can dissolve in water.</p> <p><i>Indicate and read the data table to the student.</i></p> <p>The data table is titled Solubility of Substances. It lists flour, salt, and sugar and whether or not they dissolve in water. Flour does not dissolve in water. Salt and sugar do dissolve in water.</p> <p>Salma has an unknown substance that does not dissolve in water.</p>
ASK	<p>According to the data table, which substance could be Salma's unknown substance?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>flour</p> <p>salt</p> <p>sugar</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. flour</p> <p><input type="radio"/> B. salt</p> <p><input type="radio"/> C. sugar</p> <p><input type="radio"/> D. No Response</p>

Item 18

MS.PS.1.2.3: Use data or observations on the properties of substances before and after an interaction to determine if a chemical reaction occurred.	
Teacher Script	
SAY	<p>Juan adds a spoonful of solid baking soda into a beaker of liquid vinegar. Some of the baking soda falls to the bottom of the beaker. Gas bubbles form in the beaker.</p> <p><i>Indicate and read the picture to the student.</i></p> <p>The picture shows two beakers. The first beaker is labeled Before. Above the beaker is a spoon labeled Spoonful of baking soda. An arrow points down from the spoon to the beaker. In the beaker is a liquid labeled Vinegar. An arrow points from the first beaker to the second beaker. The second beaker is labeled After. In the beaker is a mixture labeled Vinegar and baking soda mixture. Bubbles are in the mixture and are labeled Gas bubbles.</p>
ASK	<p>Which observation shows that a chemical reaction occurred?</p> <p><i>Indicate and read each response option to the student.</i></p> <p>Vinegar remains a liquid.</p> <p>Gas bubbles form in the beaker.</p> <p>Baking soda falls to the bottom of the beaker.</p>
Student Response	
RECORD	<p><i>Fill in the circle for the student's response.</i></p> <p><input type="radio"/> A. Vinegar remains a liquid.</p> <p><input checked="" type="radio"/> B. Gas bubbles form in the beaker.</p> <p><input type="radio"/> C. Baking soda falls to the bottom of the beaker.</p> <p><input type="radio"/> D. No Response</p>

