

Rhode Island Alternate Assessment Commonly Assessed AAGSEs
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This document provides information for a complete science investigation. This describes the four components of the SPT/science inquiry investigation (observe/question, plan, conduct and analyze) as they are embedded in the instruction of the AAGSE. The high-lighted sections indicate the inquiry construct choices for each grade level and provides clarification on how and what to assess the inquiry construct. Although all four components are needed for a scientific investigation, students participating in RIAA are assessed on one of the two highlighted components for their grade level that best matches their abilities.

Grade	SCIENCE AAGSE	Observe/Question Make and describe observations to ask questions, and/or make predictions related to the science investigation.	Plan Identify information/evidence that needs to be collected and/or tools to be used to answer a question and/or check a prediction.	Conduct (Grade 4) Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data.	Analyze Use evidence to support and/or justify interpretations and/or conclusions or explain how the evidence refutes the hypothesis.
4	LS1.1.1 Distinguish between living and non-living things.	Students will examine a given collection of living and non-living things and will make a hypothesis (e.g., "all living things are furry" or "all living things grow") about the differences between the two. Assessment: The student could be assessed either on their ability to make and describe observations to ask a question or their ability to make a prediction. An accurate answer for the first possibility is one where the student asks an appropriate question, based on their observations, that will be used as the foundation of the science investigation. An accurate answer for the second possibility is one where the student makes a prediction that is related to living and non-living things.	Students will identify the items in the collection (living and non-living things) to test.	Students will test their hypothesis by following procedures to identify a characteristic. They will check off whether each item has a specified characteristic (e.g. furry, grow, needs food, reproduce) of living and non-living things. Assessment: For this sample activity, the student would be assessed on following the procedures for identifying the characteristics of the given collection and recording of data for each item in the collection. An accurate answer for following procedures is that the student follows the three step procedure including a data collection component (1. Choose an item to test, 2. observe the item's characteristics, 3. record the observation by checking off living and non-living characteristics on the student recording sheet). The student is assessed on his/her ability to follow procedures and record the data in the correct column on the student recording sheet.	Student will analyze the data gathered from their student recording sheet to determine whether the hypothesis was correct.
4	LS1.1.2a Given an external feature of an organism, match organisms with the same feature.	Students will observe the hair color (the external feature) of their classmates and create a prediction about which hair color is most common. Assessment: The student is assessed on his/her ability to make a prediction. An accurate answer is one where the student makes a hypothesis related to the topic. For example, the student is presented with three statements: 1. I predict that the most common hair color is brown, 2. I predict the most common hair color is red, 3. hair is short. The student is assessed on whether he/she can make a prediction using one of the three statements.	Given the external feature of hair color, students will specify the data to be collected (e.g., hair colors - red, blonde, black, brown) to check their prediction.	Students will visit three science classes to collect data using the following procedure. 1- Identify a student, 2- identify the hair color, 3 - record on the data tally sheet. Assessment: The student is assessed on completing the three steps of the procedure.	Students will analyze their results by stating if their hypothesis was correct and citing evidence from their data tally sheet to support it (e.g., My hypothesis was not correct. Only four students had black hair. Most students had brown hair.).
4	LS1.2.1 Describe the things that plants need in order to grow and survive.	Students will observe different plants and read a book about seeds and plants. They will develop a research question based on what they observed. Assessment: The student is assessed on making observations and using that information to create a related research question that will be used in the scientific investigation. For example, after observing the plants and reading a book about plants the student asks the research question "do plants need light and water to grow?". This is an accurate answer because the question is related to the observation and the AAGSE.	Students will plan a science investigation that involves growing plants. Students will identify the tools needed to plant the seeds they want to grow. The students will identify locations for their plants that match the light/no light conditions. Students will also plan which plants will be watered.	Students will plant six seeds and label the plants with light, no light and water, no water. The students will use a light meter to record the amount of light in the spaces the plants are growing. They will also use a measuring cup to record the amount of water the plants are given. The findings will be recorded twice a week in their plant log. Assessment: The student will be assessed on using the measuring cup to water the plants, using the light meter to determine the amount of light in an area and recording that information in the plant log. Each day the student needs to follow these procedures to make the entry into their log.	Students will discuss the findings from their investigation and describe the things (light, no light and water, no water) that plants need to grow.

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4	ESS1.1.1 Describe soils using their physical properties.	Students will look at different types of soil and will describe them by one of their physical properties, (e.g., size or shape of particles) to develop a research question. Assessment: The student is assessed on making the observations and developing a research question related to the observations and AAGSE. For example, after looking at pictures of soils around a playground and around a pond, the student develops the research question "is the soil found around a pond different from the soil found around the playground?"	Using the physical property of size or shape of particles, students will plan which tools (e.g., a hand lens) they will need in order to examine and describe the various types of soil, (e.g., soil from a pond and soil from the playground).	Students will use a hand lens and touch to examine the make-up of the soil and will write a description about each type of soil. Assessment: The student will be assessed on using the hand lens, touching the soil and writing a description about the soil. For each soil they will have three actions they need to complete to conduct the experiment.	Students will talk about their observations including descriptions of the types of soil and determine whether their observations support or refute their research question.
4	ESS1.1.2 Describe rocks and minerals using their physical properties.	Students will look at different types of rocks and develop a hypothesis. Assessment: The student is assessed on making a hypothesis that is related to the observation of the rocks and minerals. An example of related hypothesis is that "most rocks are hard".	Students will select one physical property (e.g., hardness/softness) to test and will prepare the recording sheets needed in this experiment.	Students will follow procedures to test rocks and minerals for hardness/softness using a scratch test and will record the data. Assessment: The student will test ten rocks using the scratch test and record the data that will be used to in a lab report. An accurate response for this inquiry construct is one where the student tests rocks and records the data.	Students will review the data to determine if their hypothesis was correct.
4	ESS1.2.1 Identify the forms of water in the water cycle.	Students will look out the window and make an observation about the melting icicles. After a discussion about what they see, the students create a research question related to the different forms of water. Assessment: The student is assessed on developing a research question that is related to their observation and the water cycle. An accurate answer would be that the student develops the research question "what are forms of water are in the water cycle?"	Students will plan how to use a thermometer (equipment) to collect the temperatures of each form of water to describe/identify the forms in the water cycle (ice, water, steam).	To conduct the experiment, students will use the thermometer to identify the temperature at which the water cycle changes occur. Students will record the temperatures in science journals. Assessment: The student is assessed on using the thermometer and recording the data in the science journal during the science experiment. The student will use the thermometer to record the temperatures for each of the three phases of the water cycle. The student has three opportunities to measure and record during the conducting portion of the investigation.	Students will review their data to determine what the forms of water are in a water cycle to answer their research question.
4	ESS1.2.13a Use observations and data collection tools to describe daily weather.	Students will use a newspaper to observe the week's forecast and will create a hypothesis about what the temperature and precipitation will be each day for that week, e.g., Monday 40 and dry; Tuesday 38 and dry; Wednesday 30 and snow; Thursday 35 and rain; Friday 40 and dry. Assessment: The student will be assessed on making a hypothesis about the temperature and rainfall for the week. An accurate answer is that the student makes a hypothesis for each day.	Students will determine what tools, e.g., thermometer, rain gauge, and recording sheets, they will use to keep a daily record of the weather.	Students will use observations, a thermometer and a rain gauge to record the data about the daily temperature and precipitation each day of the week. Data will be recorded on the weather chart the students developed. Assessment: The student is assessed on making an observation, using a thermometer, recording the amount of rain in the rain gauge and recording the data on their student weather chart. This is a four step procedure that the student follows to conduct the investigation. An accurate answer is when the student follows and completes each of the four steps to the procedure.	Students will analyze their data to determine if their hypothesis was correct or incorrect.
4	PS3.2.1a Identify objects that are or are not attracted to magnets.	Students will observe various objects and create a prediction about objects that stick to (attract) magnets. Assessment: The student is assessed on making a prediction about what objects will be attracted to magnets.	To verify that their predictions are correct, the students plan an investigation to test objects to determine which objects attract to magnets and which do not.	Students will test 10 objects using equipment (e.g., magnets) and will record data about the objects' attraction to the magnet on their lab report documentation. Assessment: This investigation has the students testing and recording data on 10 objects. It gives the student 10 opportunities to test and record information about which objects attract to magnets.	Students will analyze their data and discuss their common findings about "what objects stick to (attract) magnets?". They will use their data to justify their predictions.

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Grade	AAGSE	Observe/Question Make and describe observations in order to ask questions, and/or make predictions related to the science investigation.	Plan Identify information/evidence that needs to be collected and/or tools to be used in order to answer a question and/or check a prediction.	Conduct (Grade 8) Use data to summarize results.	Analyze Use evidence to support and/or justify interpretations and/or conclusions or explain how the evidence refutes the hypothesis.
8	LS1.1.1 Distinguish between living and non-living things (example 2).	Students will examine a given collection of living and non-living things and will make a hypothesis (e.g., "all living things breathe" or "all living things grow") about the differences between the two.	Students will identify information that needs to be collected in order to answer their questions. Assessment: For this sample activity, the student is assessed on generating a list of characteristics that describe living and non-living things that will be used to test items in the experiment. An accurate response is one where the student identifies two characteristics that distinguish between, and are directly related to living and non-living things.	Students will gather data by examining living and non-living things, record their characteristics on a chart and summarize their findings. Assessment: For this sample activity, the student is assessed on summarizing the data. An accurate response is one where the student points to the data and makes a summary statement about living and non-living things.	Students will review their summary and develop a conclusion regarding their research question. For example, given the question, "do all living things grow?", the student will conclude yes living things grow and use his/her data chart to show, books do not grow, animals do.
8	LS1.1.5 Use observations and data collection tools to identify external features common to familiar plants.	Students will observe familiar plants such as classroom plants, grass etc. Students will create a research question about the external features (e.g., "what are three common external features of household plants?")	Students will choose which plants they will use in their investigation. Students will also identify the features they will focus on based on the research question. Assessment: For this activity sample, the student would be assessed on planning which plants they will use to answer the research question. An accurate example is one where the student is able to choose and identify the names of the plants that will be used in the investigation.	Students will conduct their investigation by observing and recording data about the external features of the identified plants. Once completed, the students will compare the data to draw conclusions about what the three common external features of a houseplant are. Assessment: The student will be assessed on using the data to create a summary that answers the research question. An accurate answer would be a summary identifying three common external features while citing data that supports why the features are considered common (e.g., because all of the house plants have the same features).	Students will review their data and summary and develop a conclusion regarding their research question. They will support their conclusion with the data from their investigation.
8	LS1.2.1a Identify one or more conditions a plant needs in order to grow and survive.	Students will observe various plants and create a hypothesis about what they need to grow and survive (e.g., "all plants need water, all plants need plant food").	Students will identify the tools they need to plant seeds and take data on how much each plant grows. They will also identify settings they will place their plants in to see if the plants will grow and survive. Assessment: Students will be assessed on identifying three pieces of information that the students will need to collect during the investigation. An accurate answer would be that the students will collect information related to the amount of water the plant received, the amount of light the plant was exposed to, and the amount of plant growth.	Students will conduct their investigation by growing their plants under various conditions and setting (light, no light; water, no water, etc.) and watching them over a series of days to see what they need to grow and survive. They will measure each plant using a ruler each day and record the data in their science lab report. Students will summarize their findings by drawing conclusions about which plants grew more. Assessment: The student will be assessed on using the data to summarize the results. An accurate answer is one where the student creates a summary about what plants need to grow by citing examples from the plant growth data to support the summary.	Students will check their hypothesis by reviewing the data and deciding if the data supports or refutes their hypothesis.

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8	LS1.3.3 Identify the life cycle of a familiar plant or animal.	Students will observe frogs. Students will create a questions regarding the life cycle of frogs (e.g., "what does a baby frog look like", "does a frog lay eggs")	The teacher will explain that the class will be observing a frog as it grows to learn about frogs lifecycle. The students will identify what they need to complete this investigation (e.g., frog/tadpole, container, water, etc.). Assessment: The student will be assessed on identifying the tools needed to conduct the investigation that will answer the questions they developed. The student will describe/list six tools that will be used to collect the information/data on the life cycle of a frog.	Students will conduct the investigation by purchasing tadpoles and recording data on the changes in the frogs over time. The students will record their findings in their lab reports. Students will summarize their findings by describing the changes they saw (e.g., using or sequencing pictures or words). Assessment: The student will be assessed on using the data to summarize his/her findings that answers the questions developed about the life cycle of the frog.	Students will answer their research question using data from their lab report (e.g., A baby frog is a tadpole that swims in the water).
8	LS3.1.2a Match animals to their environment.	Students examine pictures of different animals and create a hypothesis about the environment in which they live.	Students will identify tools needed to locate the information regarding the animals environment Assessment: For this sample investigation, the student identifies a predetermined number of tools that will be used to answer the hypothesis. Some tools that would be used include: books, videos, internet, and observations.	Students will read and/or listen to information about the animals and chart their findings about the environment of different animals on the class data table. Students will use their findings (data) to summarize their results. Assessment: The assessment for this activity is one where the student uses the information on the charts to provide a summary. A correct answer could be "Three animals lived in the ocean and two lived in the forest and one lived in the arctic".	Students will analyze their findings to see if they support or refute their predictions (e.g., My hypothesis was incorrect. Some turtles live on land and others in the ocean.)
8	ESS1.1.1b Describe soil using one or more physical properties.	Students make observations of various soil samples (e.g., beach sand, potting soil, etc.). Students will develop research questions (e.g., "are all soils the same color," "do they feel the same?").	Students will identify one physical property they will collect data on and will identify the tools they will need (e.g., soil samples, tray for soil, data chart, pencil) to collect their data. Assessment: The student is assessed on identifying one physical property and the identification of the tools used to collect data related to the physical property.	Students will conduct their investigation by organizing each type of soil by the physical property they identified (e.g., sort the soils by color). Students will summarize their data by identifying how many soil samples were identified with the characteristic (e.g., one soil was orange, two were black, one was tan). Assessment: The student is assessed on using the data to make a summary statement regarding the different soils. A correct response is one in which the student uses data to develop the summary statement.	Students will draw conclusions about one or more physical properties of soil given the data they collected (e.g. Soils can be different colors. One soil was orange, two were black, one was tan.)
8	PS1.1.1 Distinguish the physical properties of matter.	Students will make observations and describe various objects size, shape, color, and texture.	Students will identify which physical property to collect data on the objects (e.g., size, color, etc). Assessment: The student is assessed on determining which physical property they will be making observations about and what materials they will making the observation on.	Students will conduct their investigation by examining each object and collecting data regarding the physical property (e.g. texture - rough or smooth). The student will organize the data in a bar graph. The student will summarize the data by describing the bar graph (e.g., "there were more smooth objects than rough objects"). Assessment: The student is assessed on using the bar graph and creating a summary statement about the data.	The students will use the data from each student's investigation on different physical properties to draw conclusions about the physical properties of objects and support their findings (e.g., "the rock is small, gray, rough, and round") .

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8	PS1.1.1e Use observation and data collection tools to sort objects into groups using one or more physical properties.	Student will make observations of the physical properties of different types of rocks (igneous, sedimentary and metamorphic). The students will make a hypothesis about the physical properties of rocks in each category.	Student will plan what tools will be required to test the rocks physical properties and then organize them into categories. Assessment: The student is assessed on determining what tools will be used to test the rocks. For example, the student will generate a list including a scale to weigh the rocks, a cup of water to see if the rocks float, and a color wheel identify the color of the rocks.	Students will conduct the investigation by examining the rocks, testing the rocks and organizing the rocks. They will record their observations in their science notebook. Assessment: The student reviews the data that has been collected on the physical properties of the rocks in each category and then makes a summary statement. The statement contains specific information from the data that supports the validity of the statement.	Using their data the students will draw conclusions about the physical properties of the objects (e.g., Only one rock was soft. Only one was marked when it was scratched.)
8	PS 1.4.1d Identify one or more physical changes (e.g., tearing paper, breaking a pencil, food color in water, evaporation, condensation, freezing, or melting.)	Students will make a prediction about the physical change of evaporation. They predict the melting point of different substances "the substance will melt at __degrees Fahrenheit .	To test their prediction, students will identify a process (e.g., melting) and tools (thermometer, heat source, and recording sheets) to collect the information. Assessment: Students are assessed on identifying the process and tools that they will use to test their prediction. An accurate answer is one where the student lists the process and tools that they will use for the experiment.	Students use the tools to collect the information to check their predictions. They will summarize their results by making a statement about the substances melting point (e.g., "the ice cube melted faster than the chocolate"). Assessment: Students are assessed on using the results to make a summary statement.	Students will analyze the data on their recording sheets to check their prediction. They will state whether their prediction was correct or not and cite evidence from their data to support or refute their prediction.
8	PS3.2.1a Identify objects that are and are not attracted to magnets.	Students will observe various objects and create a hypothesis about which objects will and will not be attracted to the magnet.	Students will identify a list of items to test with their magnet. Assessment: The student will be assessed on their planning of a list of items to test for magnetism. An accurate answer is one that provides a list of materials that could be used in a test for magnetism. (e.g., pencils, ruler, stapler, etc.)	Students will conduct the investigation by testing each of their objects with the magnet and recording whether or not it was attracted to the magnet on the correct place on their chart. Students will summarize their results by identifying how many objects were attracted and how many were not. Assessment: The student is assessed on how they use the information they collect and record to develop a summary about magnetism.	Students reviewed their data chart and stated whether their hypothesis was correct or not. (e.g., My hypothesis was correct. The paperclip was attracted to the magnet.)
8	PS3.2.1c Predict whether an object into those that are attracted to a magnet.	Students will observe objects made from various materials (e.g., wood, plastic, metal, cloth) and make a prediction about which type of objects will and will not be attracted to the magnet.	Students will identify the tools they need to use in order to conduct this investigation as well as which objects they wish to test. Assessment: The student will be assessed on planning the tools they will need to determine if their prediction was correct. Examples of these tools include: the materials to be tested and various magnets that will be used to test the materials.	Students will conduct the investigation by testing each of their objects with the magnet. Items will be placed into two separate containers, one for objects that are attracted and another for those that are not. Students will summarize their results by identifying how many objects were attracted and how many were not. Assessment: The student will be assessed on using the observations they collect to make a summary statement about magnetisms and various materials.	Students will determine if their prediction was correct by looking at the items in each container that were attracted to and not attracted to the magnet (e.g., My prediction was not correct. The wood items were not attracted to the magnet.)

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11	LS1.1.1 Distinguish between living and non-living things.	Students will research the characteristics of living things (grow, move and reproduce) and non-living things by looking on the internet. The students will observe photos of five objects on a website, discuss the characteristics they observed and ask a question about the difference between living and non-living things.	The students select the objects/photos of objects they will "test" and characteristics they will observe to answer their research question. Using this information they will develop a recording sheet to be used in the conducting portion of the experiment.	Using characteristic cards, students conducted the experiment on their objects by organizing the cards that described each tested object. Assessment: For this sample activity, the student is assessed on organizing the data. An accurate response is where the student places the data on the correct place on the recording sheet.	Students will analyze their data and use their data to answer the research questions. Assessment: For this sample activity, the student is assessed on using the information to answer the question. An accurate answer is one where the student answers the research question and identifies two pieces of data that supports the answer.
11	ESS1.1.3b Describe soil using two or more physical properties.	Students will examine and describe the make-up of soil to create a research question involving two of soil's physical properties (e.g., "can soil have more than one color?" "are all soils bumpy (stony)?").	The student will identify a microscope and a texture chart as tools needed to examine color and feel of soil. These descriptors (color and texture) are needed to answer the research questions.	Students tested five soil samples and recorded their data (on a student recording sheet) on the color and the texture of each sample. Assessment: For this sample activity, the student is organizing the test results (data) by putting data onto the student recording sheet. An accurate response is where the student places the data on the correct place on the chart.	Students will analyze their data and use their data to answer the research questions. Assessment: For this sample activity, the student is assessed on using the information to answer the question. An accurate answer is one where the student answers the research question and identifies two pieces of data that supports the answer.
11	ESS1.1.6 Identify the four basic materials of the earth (i.e., water, soil, rocks, and air).	Students observe different types of earth (e.g., using a globe, a visit to areas around the school, or pictures in a book) to learn about the four basic materials of the earth. They will develop research questions about what types of earth materials they will identify in their samples (e.g., "what earth materials will be found in our samples?").	Based on their observations, students will identify the four basic materials of the earth and will create a student recording sheet to collect their data.	To conduct the investigation, each student will receive a packet of information that matches their abilities or strengths. Packets include actual water, soil, rocks and air or photographs of these materials. Students will record which of the four basic materials of the earth are in each sample. Assessment: After recording data, the student creates a graph to represent which of the four basic materials are represented in their samples. An accurate response is a graph produced by the student that (1) accurately conveys the information and (2) is organized to answer the research question.	Students will analyze the organized data and the graphs to answer their research question. Assessment: Students are assessed on whether they answered the research question and whether they could show the parts of their data that answered the question.
11	ESS1.2.13a Use observations and two or more data collection tools to describe daily weather.	Students observed the weather for a week and discussed their observations. Based on their observations, students developed the predictions that "It will rain four times in the next two weeks" and "Every day will be above 60 degrees for the next two weeks."	The student will identify the key information they will need to observe to answer the research questions (i.e., temperature and amount of rain). The student also identifies the tools needed to collect the data (thermometer and rain gauge).	Students will use the tools (thermometer and rain gauge) to collect information to describe the daily weather. Students will make observations (daily temperature and inches of rain) and chart their data each day for two weeks. Assessment: For this sample activity, the student is organizing the data by putting their observations (data) onto the student recording sheet. An accurate response is where the student places the data on the correct place on the chart.	Students will analyze their data and use their data to answer the research questions. Assessment: For this sample activity, the student is assessed on using the information on the data chart to answer the questions about rain fall and temperature. An accurate answer is one where the student answers the research question and identifies the data that supports the answer.

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11	ESS2.1.3c Identify at least one characteristic of two or more planets other than Earth.	Students will look at a model of the solar system and will study Earth and its characteristics. After studying common characteristics (e.g., size, distance from the sun, number of moons, color) they will develop a research question about other planets (e.g., "How many moons will Neptune and Venus have?" or "Are all planets the same distance from the sun?")	Students will identify the information they need to collect (e.g. which planets have moons) and the sources of information (e.g., science books, charts of planets, internet websites) needed to answer their research question.	Students will conduct their investigation by researching their selected planets. As students locate the information, they will record their information on a recording sheet. Assessment: For this sample activity, the student is organizing the data by putting their information (data) onto the student recording sheet. An accurate response is where the student places the data on the correct place on the chart.	Students will analyze their data and use their data to answer the research questions. Assessment: For this sample activity, the student is assessed on using the information on the data chart to answer the questions about the number of moons and distance from the sun. An accurate answer is one where the student answers the research question and identifies the data that supports the answer.
11	PS1.2.1 Classify states of matter.	Students will study various states of matter (i.e., gas, liquid, and solid) and will make a prediction about the characteristic properties that distinguish one state of matter from another. Students will develop two research questions, (e.g., "What makes something solid?" and "What makes something liquid?").	Students will identify the items they want to test to classify the states of matter. They brainstormed the characteristics they want to test to determine the item's state (e.g., "Does it keep shape?", "Is it hard?", "Is it cold?", "Is it runny?").	Students will conduct their investigation by classifying the states of matter of various items (e.g., water, apples, silly putty, ice, pencil) and will place the information about that item in the correct classification column on their chart. Assessment: For this sample activity, the student is organizing the data by putting the classification information (data) onto the student recording sheet. An accurate response is where the student places the data on the correct place on the student recording sheet.	After the experiment is completed, the students will review, discuss, and analyze the results of their finding. They complete a lab report that captures their findings. Assessment: For this sample activity, the student is assessed on completing the portion of their lab report on the answer lines of each research question and the section that indicates "What tested items support this answer?". An accurate answer is one where the student answers the research question and identifies the data that supports the answer.
11	PS 1.4.1d Identify two or more physical changes (e.g., tearing paper, breaking a pencil, food color in water, evaporation, condensation, freezing, or melting.)	Students will view a demonstration of different types of physical changes (e.g., breaking a glass, and combining two drinks together). The students will develop a research question about four different experiments they will conduct (" Will the items break when dropped?" by testing a ball and an ice cube, "Will the items change color?" by (1)combining orange juice and cranberry juice and (2)combining milk and chocolate syrup).	The students will plan the information they will need to collect when they observe the changes during each experiment (i.e., breakage and color change) . The students will develop a recording sheet to capture their observations.	The students will conduct the experiment and record the changes that they saw using a table format. Assessment: For this sample activity, the student is organizing the data by putting the changes (data) onto the student recording sheet. An accurate response is where the student places the data on the correct place on the student recording sheet	After the experiment is completed, the students will review, discuss, and analyze the results of their finding to determine what changes they saw. Assessment: For this sample activity, the student is assessed on completing the portion of their lab report on the answer lines to each research question and the section that indicates "What data supports this?". An accurate answer is one where the student answers the research question and identifies the data that supports the answer.
11	PS3.1.1. Identify the relationship between force and motion.	Students will use a ramp, different weight balls as a "striker" and a block to explore the relationship between force and motion. The student will observe one ball launch and will develop a research question (e.g., "Will lighter balls push the block farther?").	The students will plan the evidence they will need to collect to conduct the experiment. The students will identify a scale (tool used to measure the weight of the ball) and a measuring tape (tool used to measure the distance from the strike point and the final resting place of the block). The information and the tools are needed to answer the research question.	The students will conduct the experiment and record the distance results of the force (ball hitting the striker ball) and the resulting motion (block being pushed). Assessment: For this sample activity, the student is organizing the data by putting data onto the student recording sheet. An accurate response is where the student places the data on the correct place on the student recording sheet	Students will analyze their data and use their data to answer the research questions. Assessment: For this sample activity, the student is assessed on using the information on the data chart to answer the research question, "Will lighter balls push the block farther?". An accurate answer is one where the student answers the research question and identifies the data that supports the answer.