

## Illinois Alternate Assessment Science Frameworks Priorities Grade 7

In the spring of 2006, a team of Illinois educators created the new Illinois Alternate Assessment (IAA) Frameworks. The purpose of the frameworks is to prioritize the skills and knowledge from the Illinois Learning Standards for students with the most significant cognitive disabilities, in order to develop a new Illinois Alternate Assessment. The Illinois State Board of Education (ISBE) contracted Pearson Educational Measurement (PEM), and their subcontractor partners, Beck Evaluation and Testing Associates, Inc. (BETA), and the Inclusive Large Scale Standards and Assessment (ILSSA) group, to develop the new IAA in grades three through eight and 11 for Reading and Mathematics; in grades four, seven, and 11 for Science; and in grades three, five, six, eight, and 11 for Writing. BETA's responsibilities include providing event-based assessment activities linked to the IAA Frameworks, developing the assessment rubric, and incorporating principles of Universal Design for Learning. ILSSA's responsibilities include facilitating the development of the IAA Frameworks and providing state-wide staff development on how to access grade-level curriculum. Pearson Learning Group (PLG) is a division of PEM, and their responsibilities include providing a customized on-line scoring tool along with training to use this feature.

During the framework development meetings, educators were divided into development teams based on both content area and grade level focus. Addressing reading, writing, mathematics and science, each content area had one development team for grades three through five, one for grades six through eight, and one for grade 11. Each team consisted of at least one general education teacher, one special education teacher, and one content expert. The process used by the development teams to create the Illinois Alternate Assessment Frameworks is as follows:

The development teams reviewed each of the assessment objectives (statements coded with numbers such as 11.7.01) in grade seven. For each assessment objective, the teams:

- Identified the critical function, or the main idea, of the objective;
- Wrote an instructional activity that could be used to teach the skills needed to meet the assessment objective in the general education classroom;
- Wrote a modified instructional activity that could be used to teach students with the most significant cognitive disabilities the same skills; and
- Identified two to three assessment activities that could be used to assess students with the most significant cognitive disabilities on the skills described in the modified activity.

After the development teams examined the assessment objectives and wrote both instructional and assessment activities for each grade level, the teams prioritized the assessment objectives, and selected the assessment objectives which are most suitable for students with the most significant cognitive disabilities. The leadership team at ISBE reviewed these priorities for further refinement. These pilot priorities will form the basis for the new IAA performance test items. Following the completion of the spring 2007 science pilot, a review may be necessary in order to determine if the new IAA mathematics priorities are appropriate and provide a comparable assessment to the regular statewide assessment.

Using grade-level curriculum as the focus, the development teams described the instructional and assessment supports, accommodations, and assistive technology required to ensure access to quality instruction. The descriptions produced by the development teams were summarized into a set of statements designed to provide consistency across the content frameworks.

These statements are as follows:

- Appropriate instruction must occur prior to the assessment activity.
- All activities must provide appropriate support, accommodations, and/or assistive technology during both the instructional activities and the assessment process. This may include the following:
  - The use of prompting strategies, ranging from minimum prompts to full physical assistance in order to create a learning continuum for correct responses.
  - The use of assistive technology, ranging from low tech to high tech.
  - The reduction of breadth, depth, and/or complexity.
- Specific instructional strategies and the instructional environment for the individual student vary and should be determined by the student's IEP team.
- During assessment activities, the students should use the mode of communication that they used to learn and practice the skills during instructional activities.

## Illinois Alternate Assessment Science Frameworks Priorities Grade 7

- Instruction should be presented to the student in a way that is authentic, accessible, and meaningful (e.g., tactile objects, picture symbols, or use of a text reader), to ensure the student has multiple opportunities to learn and demonstrate knowledge.
- Instruction should take place within the context of grade-level content, using age appropriate activities and materials, regardless of the placement of the student.
- Instruction must incorporate age-appropriate activities and materials which represent the same grade level content as their peers without disabilities. However, the activities and materials may be adapted to meet the individual needs of the student (e.g., reduce the language requirements or difficulty of the task) as long as the context of the materials used by same age peers remains intact.

All instructional practices should occur using available resources and materials familiar to the learners.

Communication skills are essential to the assessment of students with significant cognitive disabilities. Symbolic communication skills form the foundation for reading, mathematics, and writing. Students with significant cognitive disabilities are very diverse in their communication ability. Some students communicate symbolically, while others communicate in highly individualized ways. There are some important considerations in the development of symbolic communication skills which include the following:

- All students communicate regardless of their level of symbolic language use.
- Students with the most significant cognitive disabilities can acquire generalized use of objects (or object selection) to communicate preferences (Hetzroni, Rubin, Konkol, 2002).
- Language learners must use symbols repeatedly, interactively, and generatively during meaningful and ongoing activities in language-rich environments (Goossens, Crain, & Elder, 1992; Cafiero, 1998; Goossens, et al., 1992; Romiski & Sevcik, 1996; Miller & Eller-Miller, 2002; Mirenda, 2003).
- Competent use of language for multiple purposes, audiences, and contexts facilitate the metalinguistic skills required for reading comprehension (Rankin, Harwood, & Mirenda, 1994).

The assessment activities in this document reflect three types of students who represent the continuum of communication skills within this student population.

- The first activity is designed for students who inconsistently respond to communication and inconsistently use words, objects, or gestures to communicate expressively.
- The second activity is for learners who are beginning to use understandable communication through gestures, pictures, objects/textures, points, etc., to clearly express a variety of intentions.
- The third activity is for students who are using verbal or written words, sign language, Braille, or any language-based augmentative system to request, initiate, and respond to questions, describe things or events, and express refusal.

Throughout the frameworks document, the suggested general education instructional and modified instructional activities are written in plural form, as instruction is typically provided to a whole class. However, the instruction for these activities may be provided in the context of whole class instruction, small group instruction, or individually based on student needs. Conversely, the assessment activities are written in the singular form, as the IAA is a standard assessment measuring individual performance.

The process of reviewing the frameworks and aligning the new IAA to the Illinois Learning Standards and regular assessment is an ongoing process. The activities in this document were created by Illinois teachers and are only suggested activities that may be used to teach the assessment objectives listed. The activities, materials, and techniques listed in the frameworks are just one possible way to teach these assessment objectives and should not to be considered the state-mandated strategy for teaching any given assessment objective. Teachers should feel comfortable in using other strategies, materials, or activities that may already be in place or familiar to the teacher. The IAA Frameworks and the IAA itself will continue to be reviewed and adjusted as changes occur with the Illinois Standards and/or the regular assessment.

## **Grade 7 Priorities**

### **State Goal 11**

#### **Scientific Inquiry (Standard A)**

11.7.02 Distinguish among and answer questions about performing the following: observing, drawing a conclusion based on observation, forming a hypothesis, conducting an experiment, organizing data, constructing and reading charts and graphs, and comparing data. Recognize the common units of the metric system.

#### **Technological Design (Standard B)**

11.7.07 Identify a design problem and establish criteria for determining the success of a solution.

### **State Goal 12**

#### **Living Things (Standard A)**

##### **Classification**

12.7.01 Understand how scientists classify organisms. Identify common insects, flowers, birds, reptiles, and mammals using a dichotomous key.

##### **Botany**

12.7.15 Identify the common characteristics of plants and plant growth. Understand the purpose of various plant parts such as roots, stems, and leaves.

#### **Environment and the Interaction of Living Things (Standard B)**

12.7.28 Distinguish the various members of a food web and identify the order of dependence among these members.

#### **Matter and Energy (Standard C)**

##### **Energy**

12.7.49 Understand that energy appears in many forms, such as heat, light, sound, chemical, mechanical, solar, nuclear, and electromagnetic energy. Understand the basic characteristics of each of these kinds of energy. Understand the nature of kinetic and potential energy.

##### **Light**

12.7.53 Understand that light travels in straight lines as long as it is traveling through one uniform medium. Understand that light travels at different speeds in different materials. Understand that this is why light refracts – or changes direction – namely because it goes from one material in which it moves at one speed into another material through which it moves at a different speed.

**Force and Motion (Standard D)**

- 12.7.69 Distinguish between mass and weight. Know that the mass of a body remains the same regardless of where it is, but that the weight of it depends on how strong the force of gravity is in its current location.

**Earth Science (Standard E)**

**The Earth's Dynamic Processes**

- 12.7.76 Compare seasonal climates in major regions of the globe, considering effects of latitude, altitude, and geography (e.g., 1. Higher altitude generally means colder temperatures and lower air pressure; 2. Places along the equator have a 12-hour day and a 12-hour night every day of the year and do not have strict seasons; 3. Places along latitudes between the equator and one of the Earth's poles have seasons and differing amounts of daylight throughout the year: they have a longest day, a shortest day, and two equinoxes on which the daylight lasts for 12 hours; 4. Places along the Arctic and Antarctic circles have one day of exactly 24-hour daylight and one day of exactly 24-hour darkness each year).

**The Atmosphere**

- 12.7.85 Understand that clouds, formed by the condensation of water vapor, affect weather and climate. Understand that clouds cause precipitation and lightning and that they insulate heat and moisture in the air.

**Water**

- 12.7.88 Understand the stages in the water cycle on Earth: evaporation, condensation, and precipitation.

**Astronomy (Standard F)**

- 12.7.91 Understand that objects in the solar system are for the most part in regular and predictable motion. Know that those motions explain such phenomena as the day, the year, the phases of the moon, and eclipses.

**State Goal 13**

**Safety and Practices of Science (Standard 13A)**

- 13.7.01 Identify potential hazards in the laboratory and the means of reducing them.

**Science, Technology, and Society (Standard B)**

- 13.7.11 Compare the effectiveness of reducing, reusing, and recycling in actual situations.

<b>State Goal 11</b>						
<b>Scientific Inquiry (Standard A)</b>						
<b>11.7.02 Distinguish among and answer questions about performing the following: observing, drawing a conclusion based on observation, forming a hypothesis, conducting an experiment, organizing data, constructing and reading charts and graphs, and comparing data. Recognize the common units of the metric system.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Distinguish among the steps in the process of scientific investigation.	The teacher will review a scientific experiment journal and identify all the parts of the experiment. The teacher will use direct instruction to teach the component of charts and graphs and how to read them. The students will identify the hypothesis, procedure, data, and conclusions when reading a scientific journal from an experiment. When given a chart or graph, students will answer questions about the data.	The teacher will review a scientific experiment journal and identify all the parts of the experiment. The teacher will use direct instruction to teach the component of charts and graphs and how to read them. The students will identify the hypothesis, procedure, data, and conclusions when reading a scientific journal from an experiment. When given a chart or graph, students will answer questions about the data.	Given a scientific experiment journal, the student will identify the data from the experiment.	Given a scientific experiment journal, the student will identify the hypothesis and the data from the experiment.	Given a scientific experiment journal, the student will identify the hypothesis, procedure, data, and conclusions from the experiment.

<b>State Goal 11</b>						
<b>Scientific Inquiry (Standard B)</b>						
<b>Technological Design</b>						
<b>11.7.07 Identify a design problem and establish criteria for determining the success of a solution.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Identify a problem and determine how to solve it.	The teacher will distribute paper airplanes that will not fly to students. The teacher will walk through the problem solving process with the students to determine why the planes didn't fly. The students will define what they consider to be "successful" flying.	The teacher will distribute paper airplanes that will not fly to students. The teacher will walk through the problem solving process with the students to determine why the planes didn't fly. The students will define what they consider to be "successful" flying.	Given two pictures of airplanes, one flying normally and one nose diving, the student will identify the airplane with a problem.	Given two pictures of airplanes, one flying normally and one nose diving and three possible reasons for the problem, the student will identify the airplane with a problem and the answer that is the most reasonable for the problem.	Given two gliders, one that flies and one that does not, the student will identify what is causing the non-flying glider to not fly.

<b>State Goal 12</b>						
<b>Living Things (Standard A)</b>						
<b>Classification</b>						
<b>12.7.01 Understand how scientists classify organisms. Identify common insects, flowers, birds, reptiles, and mammals using a dichotomous key.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Classify living things.	The teacher will review the characteristics used to classify organisms and the dichotomous key. The students will classify given organisms into plants/animals, then continuing to vertebrates (with backbone)/invertebrates (without backbone) to mammals/non-mammals and insects/non-insects; fruit bearing/non-fruit bearing to trees/bushes and seeds dispersed by wind/non-wind seed dispersal.	The teacher will review the characteristics used to classify organisms and the dichotomous key. The students will classify given pictures of organisms into plants/animals, then continuing to vertebrates (with backbone)/invertebrates (without backbone) to mammals/non-mammals and insects/non-insects; fruit bearing/non-fruit bearing to trees/bushes and seeds dispersed by wind/non-wind seed dispersal.	Given four organisms, the student will classify the organisms as plant or animal.	Given eight organisms, the student will classify the organisms as plant/animal and the animals as vertebrate (with backbone)/invertebrate (without backbone).	Given multiple and various organisms, the student will classify the organisms into plants/animals, then continuing to vertebrates (organisms with backbones)/invertebrates (organisms without backbones) and fruit bearing/non-fruit bearing.

<b>State Goal 12</b>						
<b>Living Things (Standard A)</b>						
<b>Botany</b>						
<b>12.7.15 Identify the common characteristics of plants and plant growth. Understand the purpose of various plant parts such as roots, stems, and leaves.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Identify and understand the purpose of roots, stems, and leaves of plants.	The teacher will provide direct instruction on the characteristics of plants and their growth; including the role of the roots, stems and leaves. The students will identify, label, and explain the functions of roots, stems, and leaves of a tree.	The teacher will provide direct instruction on the characteristics of plants and their growth; including the role of the roots, stems and leaves. The students will identify, label, and explain the functions of roots, stems, and leaves of a tree using a graphic organizer.	Given pictures of roots, stems, and leaves, the student will identify each picture.	Given pictures of roots, stems, and leaves, the student will indicate the appropriate order to make a proper plant and explain the function of one part.	Given pictures of roots, stems, and leaves, the student will place them in order to make a proper plant and explain the function of all three parts.



<b>State Goal 12</b>						
<b>Environment and the Interaction of Living Things (Standard B)</b>						
<b>Botany</b>						
<b>12.7.28 Distinguish the various members of a food web and identify the order of dependence among these members.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Identify the various members of a food web.	Ask students to draw a food web containing ten organisms pertaining to their biome.	Ask students to draw a food web containing 5 organisms pertaining to their biome.	Given various animals, the student will identify each as predator or prey.	Given an animal, the student will identify a predator and prey for that animal.	Given a prompt, the student will identify a food web containing five organisms pertaining to their biome.

<b>State Goal 12</b>						
<b>Matter and Energy (Standard C)</b>						
<b>Energy</b>						
<b>12.7.49 Understand that energy appears in many forms, such as heat, light, sound, chemical, mechanical, solar, nuclear, and electromagnetic energy. Understand the basic characteristics of each of these kinds of energy. Understand the nature of kinetic and potential energy.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Understand the nature of kinetic and potential energy.	The teacher will demonstrate and explain the difference between potential (stored-not in motion) and kinetic (in motion) energy (i.e. a marble sitting still has potential energy, a marble rolling on the floor has kinetic energy). The students will sort various items or pictures of items into two categories, kinetic and potential energy.	The teacher will demonstrate and explain the difference between potential and kinetic energy as stored energy and energy in motion (i.e. coal is potential; heat generated is kinetic). The students will sort various items or pictures of items into two categories, kinetic and potential energy.	Given two objects, one demonstrating kinetic energy and one demonstrating potential energy, the student will identify which object is demonstrating which energy.	Given multiple objects, the student will categorize each object as either kinetic or potential energy.	Given multiple objects, the student will categorize each object as either kinetic or potential energy and provide characteristics of each type of energy.

**State Goal 12**

**Matter and Energy (Standard C)**

**Light**

**12.7.53 Understand that light travels in straight lines as long as it is traveling through one uniform medium.**

Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Understand that light refracts or changes direction namely because it goes from one material in which it moves at one speed into another material through which it moves at a different speed (light travels in a straight line as long as it is traveling through one uniform medium).	The teacher will discuss and explain how light travels and what causes it to refract. In a teacher directed demonstration, the teacher will use a targeted light source with a narrow beam (i.e. flashlight,) and students should observe that light travels in a straight line. Then the teacher sprinkles baby powder into the air through the light source. The teacher will then put a pencil in a clear cup of water, and the students will observe the way the pencil appears to “break” at the water level. Students will provide an explanation for the results of both activities. Students should be able to recognize that as light	The teacher will discuss and explain how light travels and what causes it to refract. In a teacher directed demonstration, the teacher will use a targeted light source with a narrow beam (i.e. flashlight,) and students should observe that light travels in a straight line. Then the teacher sprinkles baby powder into the air through the light source. The teacher will then put a pencil in a clear cup of water, and the students will observe the way the pencil appears to “break” at the water level. Students will provide an explanation for the results of both activities. Students should be able to recognize that as light passes from one medium to another, it changes speed.	Given statements about the instructional activities and a choice of two possible answers, the student will complete the statements with the appropriate response.	Given statements about the instructional activities and a choice of three possible answers, the student will complete the statements with the appropriate response.	Given statements about the instructional activities, the student will complete the statements to make them true.

Illinois Alternate Assessment Science Frameworks Priorities Grade 7

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<b>State Goal 12</b>						
<b>Force and Motion (Standard D)</b>						
<b>12.7.69 Distinguish between mass and weight. Know that mass of a body remains the same regardless of where it is, but that the weight of it depends on how strong the force of gravity is in its current location.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Distinguish between mass and weight.	The teacher will review and describe the effect of gravitational force on weight. Given the gravitational forces of planets and Earth's moon, the students will determine the weight of the same object on Earth, on the moon or on other planets. Students will determine that while weight changes, mass does not. Mass is the amount of matter that makes up any object.	The teacher will review and describe the effect of gravitational force on weight. Given the gravitational forces of planets and Earth's moon, students will determine the weight of the same object on Earth, on the moon or on other planets. Students will determine that while weight changes, mass does not. Mass is the amount of matter that makes up any object.	Given an object and its weight on earth and on the moon, the student will answer questions about the weight of another object.	Given the gravitational forces of the planets and Earth's moon and a calculator, the student will be able to calculate the weight of the objects on the various planets. Given questions about weight and mass, the student will understand that weight and mass are not the same thing.	Given the gravitational forces of planets and Earth's moon, the student will calculate the weight of a 120 pound student's mass and weight if the student traveled to the moon, Mars and Jupiter and explain why. The student will be able to calculate the mass of an object on Earth and understand that the mass of an object does not change.

**State Goal 12**

**Earth Science (Standard E)**

**The Earth's Dynamic Processes**

**12.7.76 Compare seasonal climates in major regions of the globe, considering effects of latitude, altitude, and geography. (e.g., 1. Higher altitude generally means colder temperatures and lower air pressure; 2. Places along the equator have a 12-hour day and a 12-hour night, every day of the year and do not have strict seasons; 3. Places along latitudes between the equator and one of the Earth's poles have seasons and differing amounts of daylight throughout the year: they have a longest day, a shortest day, and two equinoxes on which the daylight last for 12 hours; 4. Places at the north and south poles have days of 24-hours of daylight and days of 24-hours of darkness each year.**

Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Compare and contrast seasonal change (if any) and length of daylight and darkness throughout the year; at north and south poles, equator, and latitudes between the poles and equator.	Using a globe and direct instruction, the teacher will model and explain how the tilt of the axis and the rotation of the Earth affect seasons, length of day and the equinox. The students will label seasons at four locations at four different times of the year on one diagram and length of daylight on another.	Using a globe and direct instruction, the teacher will model and explain how the tilt of the axis and the rotation of the Earth affect seasons, length of day and the equinox. The students will label seasons at four locations at four different times of the year on one diagram and length of daylight on another.	Identify where the north pole, south pole and equator are located on a globe or picture of Earth.	Given a diagram of the earth, the student will determine when the northern hemisphere receives the most and least amount of light.	The student will be able to draw the diagram of the sun and earth and show when the northern and southern hemispheres receive the most light from the sun.

<b>State Goal 12</b>						
<b>Earth Science (Standard E)</b>						
<b>The Atmosphere</b>						
<b>12.7.85 Understand that clouds, formed by the condensation of water vapor, affect weather and climate. Understand that clouds cause precipitation and lightning and that they insulate heat and moisture in the air.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Understand how clouds are formed, the types of clouds, and understand that clouds cause precipitation and lightning.	Teacher will explain how clouds are formed and explain the different types of clouds (cirrus, cumulus, and stratus). The teacher will also explain that positive and negative charges can build within clouds and form lightning.	Same as General Education Activity with necessary supports.	Given a picture of description of a type of cloud, the student will be able to identify one type of cloud.	Given a picture of description of a type of cloud, the student will be able to identify all three types of clouds.	Given a prompt, the student will explain how clouds are formed and how clouds form lightning.

<b>State Goal 12</b>						
<b>Earth Science (Standard E)</b>						
<b>The Atmosphere</b>						
<b>12.7.88 Understand the stages in the water cycle on Earth: evaporation, condensation, and precipitation.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Understand that clouds, formed by the condensation of water vapor, effect weather and climate. Understand that clouds cause precipitation and lightning. Understand that oceans have a major effect on climate, because water in the oceans hold and distributes a large amount of heat. Understand the stages in the water cycle on Earth: evaporation, condensation, and precipitation.	The teacher will provide direct instruction on the water cycle, including its effect on whether and climate. The students will: diagram and explain the water cycle (evaporation, transpiration, condensation, and precipitation), explain how clouds are formed and effect weather, and explain the effect oceans have on climate.	The teacher will provide direct instruction on the water cycle, including its effect on whether and climate. The students will: label a diagram of the water cycle and explain the water cycle (evaporation, transpiration, condensation, and precipitation), explain how clouds are formed and effect weather.	Given a completed diagram of the water cycle, the student will match a representation of condensation, evaporation and precipitation to the model.	Given a partially completed diagram of the water cycle, the student will fill in the blanks to complete the diagram.	Given a diagram of a water cycle, the student will label the diagram and write one sentence that explains evaporation, condensation, and precipitation. Explain how clouds are formed.



<b>State Goal 12</b>						
<b>Astronomy(Standard F)</b>						
<b>12.7.91 Understand the objects in the solar system are for the most part in regular and predictable motion. Know that those motions explain such phenomena as the day, the year, the phases of the moon, and eclipses.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Understand the objects in the solar system are for the most part in regular and predictable motion. Know that those motions explain such phenomena as the day, the year, the phases of the moon, and eclipses.	The teacher will provide direct instruction on the motions of the solar system. The students will explain how scientists can predict the length of the day, the year, moon phases, and eclipses based on these motions.	The teacher will provide direct instruction on the motions of the solar system. The students will answer specific questions to help them draw a conclusion as to how scientists can predict the length of the day, the year, moon phases, and eclipses.	Given a representation (i.e. picture/globe), the student will answer simple questions about the length of day and night.	Given a representation (i.e. picture/globe), the student will answer specific questions about the length of day and night, and why it is predictable.	Given a picture of Earth rotating and revolving around the sun, the student will answer specific questions to help them draw a conclusion as to how scientists can predict the length of the day, the year, moon phases, and eclipses.

<b>State Goal 13</b>						
<b>Safety and Practices of Science (Standard A)</b>						
<b>13.7.01 Identify potential hazards in the laboratory and the means of reducing them.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Identify potential hazards in the laboratory and the means of reducing them.	The student will pick out unsafe laboratory practices from five different scenarios on a worksheet.	The student will pick out unsafe laboratory practices from five different scenarios on a worksheet with varying degrees of support.	Given pictures of laboratory environments, the student will sort safe/unsafe practices using pictures into safe and unsafe categories.	Given pictures of laboratory environments, the student will sort safe/unsafe practices using pictures into safe and unsafe categories, and label the safe and unsafe practices in the given pictures.	Given pictures of laboratory environments, the student will sort safe/unsafe practices using pictures into safe and unsafe categories, and label the safe and unsafe practices in the given pictures, and write one to two sentences about what are unsafe practices in the given pictures.

<b>State Goal 13</b>						
<b>Science, Technology, and Society (Standard B)</b>						
<b>13.7.11 Compare the effectiveness of reducing, reusing, and recycling in actual situations.</b>						
Level	Critical Function	Suggested General Education Activity	Suggested Modified Instructional Activity	Possible Assessment Activity 1	Possible Assessment Activity 2	Possible Assessment Activity 3
Grade 7	Compare the effectiveness of reducing, reusing, and recycling in actual situations.	The teacher will describe the differences and similarities of reducing, reusing, and recycling and lead a class discussion about the benefits. The students will list, compare, and contrast different recycling projects in the school, home, and community. Focus on one aspect of reuse of one common item.	The teacher will describe the differences and similarities of reducing, reusing, and recycling and lead a class discussion about the benefits. The students will list, compare, and contrast different recycling projects in the school, home, and community. Focus on one aspect of reuse of one common item.	Given a choice of two materials, the student will identify which material can and cannot be recycled.	Given a prompt, the student will identify three materials that can be recycled and state alternative uses for the recycled materials.	Given a prompt, the student will identify five materials that can be recycled and state alternative uses for the recycled materials.