

	Standard	Grade Level Expectation	Checks for Understanding	State Performance Indicator
Life Science	Standard 1–Cells	GLE 0507.1.1 Distinguish between the basic structures and functions of plant and animal cells.	<ul style="list-style-type: none"> ✓ 0507.1.1 Label drawings of plant and animals cells. ✓ 0507.1.2 Compare and contrast the basic structures and functions of plant and animal cells. 	<p>SPI 0507.1.1 Identify the major parts of plant and animal cells such as, the nucleus, cell membrane, cell wall and cytoplasm.</p> <p>SPI 0507.1.2 Compare and contrast basic structures and functions of plant and animal cells.</p>
	Standard 2–Interdependence	<p>GLE 0507.2.1 Investigate different nutritional relationships among organisms in an ecosystem.</p> <p>GLE 0507.2.2 Explain how organisms interact through symbiotic, commensal, and parasitic relationships.</p> <p>GLE 0507.2.3 Establish the connections between human activities and natural disasters and their impact on the environment.</p>	<ul style="list-style-type: none"> ✓ 0507.2.1 Evaluate producer/ consumer, predator/prey, and parasite/host relationships. ✓ 0507.2.2 Classify interspecific relationships within an ecosystem as mutualism, commensalism, or parasitism. ✓ 0507.2.3 Create a simple model illustrating the interspecific relationships within an ecosystem. ✓ 0507.2.4 Analyze basic information from a body of text to identify key issues or assumptions about the relationships among organisms in an ecosystem. ✓ 0507.2.5 Create a poster to illustrate how human activities and natural disasters affect the environment. 	<p>SPI 0507.2.1 Describe the different types of nutritional relationships that exist among organisms.</p> <p>SPI 0507.2.2 Distinguish among symbiotic, commensal, and parasitic relationships.</p> <p>SPI 0507.2.3 Use information about the impact of human actions or natural disasters on the environment to support a simple hypothesis, make a prediction, or draw a conclusion.</p>
	Standard 3–Flow of Matter and Energy (1/2 in this grading pd.)	GLE 0507.3.1 Demonstrate how all living things rely on the process of photosynthesis to obtain energy.	<ul style="list-style-type: none"> ✓ 0507.3.1 Identify the cell structures that enable plants to conduct photosynthesis. 	SPI 0507.3.1 Identify photosynthesis as the food manufacturing process in plants.

	Standard	Grade Level Expectation	Checks for Understanding	State Performance Indicator
Life Science	Standard 3—Flow of Matter and Energy (1/2 in this grading pd.)	GLE 0507.3.1 Demonstrate how all living things rely on the process of photosynthesis to obtain energy.	<ul style="list-style-type: none"> ✓ 0507.3.2 Design a graphic organizer that illustrates the difference between plants and animals in the movement of food energy through an ecosystem. 	SPI 0507.3.2 Compare how plants and animals obtain energy.
	Standard 4—Heredity	<p>GLE 0507.4.1 Describe how genetic information is passed from parents to offspring during reproduction.</p> <p>GLE 0507.4.2 Recognize that some characteristics are inherited while others result from interactions with the environment.</p>	<ul style="list-style-type: none"> ✓ 0507.4.1 Explain how genetic information is transmitted from parents to offspring. ✓ 0507.4.2 Create a chart that compares hereditary and environmental traits. ✓ 0507.4.3 Distinguish between a scar and a birthmark in terms of their origins. 	<p>SPI 0507.4.1 Recognize that information is passed from parent to offspring during reproduction.</p> <p>SPI 0507.4.2 Distinguish between inherited traits and those that can be attributed to the environment.</p>
	Standard 5—Biodiversity and Change	<p>GLE 0507.5.1 Investigate physical characteristics associated with different groups of animals.</p> <p>GLE 0507.5.2 Analyze fossils to demonstrate the connection between organisms and environments that existed in the past and those that currently exist.</p>	<ul style="list-style-type: none"> ✓ 0507.5.1 Classify animals according to their physical characteristics. ✓ 0507.5.2 Design a model to illustrate how an animal's physical characteristics enable it to survive in a particular environment. ✓ 0507.5.3 Identify the processes associated with fossil formation. ✓ 0507.5.4 Use fossil evidence to describe an environment from the past. ✓ 0507.5.5 Use fossils to match a previously existing organism with one that exists today. 	<p>SPI 0507.5.1 Identify physical and behavioral adaptations that enable animals such as, amphibians, reptiles, birds, fish, and mammals to survive in a particular environment.</p> <p>SPI 0507.5.2 Explain how fossils provide information about the past.</p>

Earth/Space Science

Standard	Grade Level Expectation	Checks for Understanding	State Performance Indicator
Standard 6–The Universe	<p>GLE 0507.6.1 Compare planets based on their known characteristics.</p> <p>GLE 0507.6.2 Recognize that charts can be used to locate and identify star patterns.</p>	<ul style="list-style-type: none"> ✓ 0507.6.1 Develop a chart that communicates the major characteristics of each planet. ✓ 0507.6.2 Use images of the night sky to identify different seasonal star patterns. ✓ 0507.6.3 Research a star pattern using a chart. 	<p>SPI 0507.6.1 Distinguish among the planets according to their known characteristics such as appearance, location, composition, and apparent motion.</p> <p>SPI 0507.6.2 Select information from a complete data representation to draw conclusions about the planets.</p> <p>SPI 0507.6.3 Identify methods and tools for identifying star patterns.</p>
Standard 7–The Earth	GLE 0507.7.1 Compare geologic events responsible for the earth's major geological features.	<ul style="list-style-type: none"> ✓ 0507.7.1 Create a model to illustrate geologic events responsible for changes in the earth's crust. ✓ 0507.7.2 Prepare a chart to compare how volcanoes, earthquakes, faulting, and plate movements affect the earth's surface features. 	SPI 0507.7.1 Describe internal forces such as volcanoes, earthquakes, faulting, and plate movements that are responsible for the earth's major geological features such as mountains, valleys, etc.
Standard 8–The Atmosphere	GLE 0507.8.1 Analyze and predict how major landforms and bodies of water affect atmospheric conditions.	<ul style="list-style-type: none"> ✓ 0507.8.1 Compare the climates of coastal and inland areas at similar latitudes to demonstrate the ocean's impact on weather and climate. ✓ 0507.8.2 Use land maps to demonstrate how mountain ranges affect weather and climate. ✓ 0507.8.3 Use weather maps of the United States to graph temperature and precipitation for inland and coastal regions. ✓ 0507.8.4 Use local environmental information to analyze how weather and climate are affected by landforms and bodies of water. 	<p>SPI 0507.8.1 Describe the effects of the ocean on weather and climate.</p> <p>SPI 0507.8.2 Explain how mountains affect weather and climate.</p>

	Standard	Grade Level Expectation	Checks for Understanding	State Performance Indicator
Physical Science	Standard 9–Matter	<p>GLE 0507.9.1 Observe and measure the simple chemical properties of common substances.</p> <p>GLE 0507.9.2 Design and conduct an experiment to demonstrate how various types of matter freeze, melt, or evaporate.</p> <p>GLE 0507.9.3 Investigate factors that affect the rate at which various materials freeze, melt, or evaporate.</p>	<ul style="list-style-type: none"> ✓ 0507.9.1 Compare the simple chemical properties of common substances. ✓ 0507.9.2 Investigate how different types of materials freeze, melt, evaporate, or dissipate. ✓ 0507.9.3 Use data from a simple investigation to determine how temperature change affects the rate of evaporation and condensation. 	<p>SPI 0507.9.1 Distinguish between physical and chemical properties.</p> <p>SPI 0507.9.2 Describe the differences among freezing, melting, and evaporation.</p> <p>SPI 0507.9.3 Describe factors that influence the rate at which different types of material freeze, melt, or evaporate.</p>
	Standard 10–Energy	<p>GLE 0507.10.1 Design an experiment to illustrate the difference between potential and kinetic energy.</p> <p>GLE 0507.10.2 Conduct experiments on the transfer of heat energy through conduction, convection, and radiation.</p>	<ul style="list-style-type: none"> ✓ 0507.10.1 Design and conduct an investigation to demonstrate the difference between potential and kinetic energy. ✓ 0507.10.2 Create a graphic organizer that illustrates different types of potential and kinetic energy. ✓ 0507.10.3 Describe the differences among conduction, convection, and radiation. ✓ 0507.10.4 Create a poster to illustrate the major forms of energy. ✓ 0507.10.5 Demonstrate different ways that energy can be transferred from one object to another. 	<p>SPI 0507.10.1 Differentiate between potential and kinetic energy.</p> <p>SPI 0507.10.2 Use data from an investigation to determine the method by which heat energy is transferred from one object or material to another.</p>

	Standard	Grade Level Expectation	Checks for Understanding	State Performance Indicator
Physical Science	Standard 11—Motion	GLE 0507.11.1 Design an investigation, collect data and draw conclusions about the relationship among mass, force, and distance traveled.	<ul style="list-style-type: none"> ✓ 0507.11.1 Predict how the amount of mass affects the distance traveled given the same amount of applied force. ✓ 0507.11.2 Prepare statements about the relationship among mass, applied force, and distance traveled. ✓ 0507.11.3 Design and conduct experiments using a simple experimental design to demonstrate the relationship among mass, force, and distance traveled. 	SPI 0507.11.1 Explain the relationship that exists among mass, force, and distance traveled.
	Standard 12—Forces in Nature	<p>GLE 0507.12.1 Recognize that the earth attracts objects without directly touching them.</p> <p>GLE 0507.12.2 Investigate how the shape of an object influences the way that it falls toward the earth.</p> <p>GLE 0507.12.3 Provide examples of how forces can act at a distance.</p>	<ul style="list-style-type: none"> ✓ 0507.12.1 Explain and give examples of how forces act at a distance. ✓ 0507.12.2 Demonstrate how the shape of an object affects how it falls toward the earth. ✓ 0507.12.3 Design and explain an investigation exploring the earth's pull on objects. 	<p>SPI 0507.12.1 Recognize that the earth attracts objects without touching them.</p> <p>SPI 0507.12.2 Identify the force that causes objects to fall to the earth.</p> <p>SPI 0507.12.3 Use data to determine how shape affects the rate at which a material falls to earth.</p>

****Please Note****

Standard: Inquiry and Technology & Engineering

- ✓ This is not a separate reporting category on TCAP. These SPIs are embedded within each reporting category.
- ✓ The total number of these items is 3-5 with no more than one (1) ITE standard per reporting category.