

6th grade Assessment Tool

| #- | Standard | Bloom | Synonyms/Verbs | Sample question starters | Assessment from Standards |
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| 2.1 | Summarize the characteristics that all organisms share (including the obtainment and use of resources for energy, the response to stimuli, the ability to reproduce, and process of physical growth and development). | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> characteristics that all organisms share; the primary focus of assessment should be to generalize the major points about characteristics that all organisms share. However, appropriate assessments should also require student <i>or exemplify</i> the characteristics of organisms; or <i>compare</i> how organisms obtain food reproduce. |
| 2.2 | Recognize the hierarchical structure of the classification (taxonomy) of organisms (including the seven major levels or categories of living things— kingdom, phylum, class, order, family, genus, and species). | A 1 | Define, duplicate, list, memorize, recall, repeat, reproduce, state, describe, identify, label, find, match, quote | <ol style="list-style-type: none"> 1. Describe what happened at... 2. List all the... 3. Name all the... 4. What is (fact /definition, etc) 5. List the attributes of.. 6. Write 10 facts about... 7. Make an A-Z list of... 8. Recall... 9. In what way are you like... | The objective of this indicator is to <i>recognize</i> the hierarchical structure of the classification of organisms; therefore, the primary focus of assessment should be to remember the classification scheme for organisms. However, appropriate assessments should also require students to <i>recall</i> characteristics of each level of organization that determines which organisms are placed within it; or <i>identify</i> an appropriate example of a scientific name. |
| 2.3 | Compare the characteristic structures of various groups of plants (including vascular or nonvascular, seed or spore-producing, flowering or cone-bearing, and monocot or dicot). | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know | The objective of this indicator is to <i>compare</i> the characteristic structures of various groups of plants; therefore, the primary focus of assessment should be to detect similarities and differences between the various groups (including vascular and nonvascular, seed and spore-producing, flowering and cone-bearing, and monocot and dicot). However, appropriate assessments should also require student to <i>identify</i> the different plant groups and their characteristics; <i>classify</i> plants into the various groups based on their characteristics; or <i>exemplify</i> various groups of plants based on their characteristics. |

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| 2.4 | Summarize the basic functions of the structures of a flowering plant for defense, survival, and reproduction. | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> the basic functions of the structures of flowering plants; therefore, the primary focus of assessment should be to generalize points about the various structures needed for defense, survival, and reproduction. However, appropriate assessments should also require student to <i>identify</i> the parts of a flower used for reproduction; <i>identify</i> structures in plants used for defense, survival, or reproduction; <i>illustrate</i> a flower or plant structures using words, pictures, or diagrams; or <i>classify</i> a structure based on its function for defense, survival, or reproduction. |
| 2.5 | Summarize each process in the life cycle of flowering plants (including germination, plant development, fertilization, and seed production). | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> each of the processes in the life cycle of flowering plants; therefore, the primary focus of assessment should be to generalize the major points about the life cycle of seed plants (including germination, plant development, fertilization, and seed production). However, appropriate assessments should also require student to <i>identify</i> the individual stages; <i>illustrate</i> the life cycle stages using words, pictures, or diagrams; or <i>classify</i> by sequencing the stages of the life cycle. |
| 2.6 | Differentiate between the processes of sexual and asexual reproduction of flowering plants. | B 4. | Appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test, categorize, critique, debate, discuss, identify | <ol style="list-style-type: none"> 1. From at least 4 peoples' viewpoint, analyze... 2. Discuss the similarities and differences of... 3. Compare and contrast... 4. Investigate all the factors that could influence... 5. Summarize the reasons for.... 6. Deduce how the parts interact in... 7. List the pros and cons of... | The objective of this indicator is to <i>differentiate</i> between sexual and asexual reproduction in plants; therefore, the primary focus of assessment should be to distinguish between processes and structures that result in asexual reproduction from those that result in sexual reproduction in plants. However, appropriate assessments should also require student to <i>identify</i> the requirements for sexual reproduction in flowering plants; <i>exemplify</i> asexual reproduction in plants; or <i>identify</i> structures that allow asexual plant reproduction to take place. |
| 2.7 | Summarize the processes required | B 2 | Classify, describe, discuss, explain, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... | The objective of this indicator is to <i>summarize</i> plant processes necessary for survival; therefore, the primary focus of assessment |

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| | for plant survival (including photosynthesis, respiration, and transpiration). | | identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | should be to generalize the major points about the processes of photosynthesis, respiration, and transpiration. However, appropriate assessments should also require student to <i>identify</i> the component plant parts necessary for photosynthesis, respiration, and transpiration; <i>illustrate</i> the movement of water, oxygen, carbon dioxide, and food through the plant; <i>compare</i> photosynthesis and respiration in terms of starting materials and what is produced; or <i>recall</i> the function of these processes in plants. |
| 2.8 | Explain how plants respond to external stimuli (including dormancy and the forms of tropism known as phototropism, gravitropism, hydrotropism, and thigmotropism). | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Explain how ... has impacted... Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | The objective of this indicator is to <i>explain</i> how plants respond to external stimuli; therefore, the primary focus of assessment should be to construct a cause-and-effect model of plants responding to external stimuli through dormancy or tropisms. However, appropriate assessments should also require student to <i>identify</i> the responses of plants including dormancy and tropisms; <i>exemplify</i> tropisms in plants; or <i>illustrate</i> the forms of tropism using words, pictures, or diagrams. |
| 2.9 | Explain how disease-causing fungi can affect plants. | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Explain how ... has impacted... Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | The objective of this indicator is to <i>explain</i> the effects of disease-causing fungi on plants; therefore, the primary focus of assessment should be to construct a cause-and-effect model of the ways that plants are affected by fungi. However, appropriate assessments should also require students to <i>recognize</i> fungi that cause disease in plants; or <i>recall</i> that not all fungi are harmful. <i>Effective August 2007 All indicators in Standard 6-2 17 / 17</i> |
| 3.1 | Compare the characteristic | B 2. | Classify, describe, discuss, explain, | <ol style="list-style-type: none"> Explain how ... has impacted... | The objective of this indicator is to <i>compare</i> the characteristic structures of vertebrates and invertebrates; therefore, the primary |

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| | structures of invertebrate animals (including sponges, segmented worms, echinoderms, mollusks, and arthropods) and vertebrate animals (fish, amphibians, reptiles, birds, and mammals). | | identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | focus of assessment should be to detect ways that these organisms are alike and different. However, appropriate assessments should also require students to <i>identify</i> specific invertebrate and vertebrate groups based on a description of characteristics; <i>illustrate</i> the different kinds of vertebrates and invertebrates by their distinctive differences; or <i>classify</i> an animal into a particular group based on its characteristics. |
| 3. 2 | Summarize the basic functions of the structures of animals that allow them to defend themselves, to move, and to obtain resources. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Explain how ... has impacted... Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | The objective of this indicator is to <i>summarize</i> basic functions of structures for defense, movement, and resource obtainment; therefore, the primary focus of assessment should be to generalize major points about the parts of an organism that allow for these functions. However, appropriate assessments should also require students to <i>identify</i> individual structures and their primary functions; <i>exemplify</i> or <i>illustrate</i> structures using words, pictures, or diagrams; or <i>classify</i> structures by their function. |
| 3. 3 | Compare the response that a warm-blooded (endothermic) animal makes to a fluctuation in environmental temperature with the response that a coldblooded (ectothermic) animal makes to such a fluctuation. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> Explain how ... has impacted... Describe in clear logical steps.... Paraphrase in your own words.... Give reasons for... Using words, pictures and icons, restate what you know about.... Use the metaphor of ... to help you understand.... State three things you know about... | The objective of this indicator is to <i>compare</i> responses of cold-blooded (ectothermic) and warmblooded (endothermic) organisms to their environment; therefore, the primary focus of assessment should be to detect similarities and differences in ectothermic to endothermic organisms. However, appropriate assessments should also require students to <i>identify</i> organisms that are cold-blooded and those that are warm-blooded; <i>exemplify</i> responses that would occur due to changes in the environment; or <i>classify</i> organisms as endothermic or ectothermic. |
| 3. 4 | Explain how environmental | B 2. | Classify, describe, discuss, explain, | <ol style="list-style-type: none"> Explain how ... has impacted... | The objective of this indicator is to <i>explain</i> how environmental stimuli cause physical responses in animals; therefore, the primary |

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| | stimuli cause physical responses in animals (including shedding, blinking, shivering, sweating, panting, and food gathering). | | identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | focus of assessment should be to construct a cause-and-effect model of the various physical responses that animals have due to environmental stimuli. However, appropriate assessments should also require students to <i>recall</i> physical responses of various animals; <i>summarize</i> responses that occur due to environmental stimuli; or <i>exemplify</i> ways that the environment affects animals. |
| 3.5 | Illustrate animal behavioral responses (including hibernation, migration, defense, and courtship) to environmental stimuli. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>illustrate</i> animal behavioral responses to environmental stimuli; therefore, the primary focus of assessment should be to give examples of animal behavioral responses (including hibernation, migration, defense, and courtship) using pictures, diagrams, or words. However, appropriate assessments should also require students to <i>recall</i> information about behavioral responses; <i>explain</i> how environmental stimuli result in animal behaviors; or <i>summarize</i> animal behaviors that result from environmental stimuli. |
| 3.6 | Summarize how the internal stimuli (including hunger, thirst, and sleep) of animals ensure their survival. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> how the internal stimuli of animals ensure their survival; therefore, the primary focus of assessment should be to generalize the main points about internal stimuli (including hunger, thirst, and sleep) and their affects on animal behavior. However, appropriate assessments should also require students to <i>identify</i> internal stimuli (cues); <i>exemplify</i> responses to internal stimuli; or <i>compare</i> animals' survival responses to internal stimuli. |
| 3.7 | Compare learned to inherited behaviors in | B 2. | Classify, describe, discuss, explain, identify, locate, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical | The objective of this indicator is to <i>compare</i> learned to inherited behaviors in animals; therefore, the primary focus of assessment should be to detect similarities and differences between |

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| | animals. | | recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <p>steps....</p> <ol style="list-style-type: none"> 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | behaviors that animals learn and those they are born knowing how to do. However, appropriate assessments should also require students to <i>identify</i> a particular behavior as learned or inherited; <i>summarize</i> behaviors that are learned and behaviors that are inherited; <i>exemplify</i> behaviors that would occur due to learning or inheritance; or <i>classify</i> behaviors as learned or inherited. |
| 4.1 | Compare the composition and structure of Earth's atmospheric layers (including the gases and differences in temperature and pressure within the layers). | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>compare</i> the composition and structure of Earth's atmospheric layers; therefore, the primary focus of assessment should be to detect similarities and differences between the layers (including the gases and differences in temperatures and pressure within the layers). However, appropriate assessments should also require students to <i>identify</i> common gases or the layer where weather occurs; <i>recall</i> where the ozone layer is located; or <i>classify</i> by sequencing the layers. |
| 4.2 | Summarize the interrelationships among the dynamic processes of the water cycle (including precipitation, evaporation, transpiration, condensation, surface-water flow, and groundwater flow). | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> the interrelationships among the processes of the water cycle; therefore, the primary focus of assessment should be to generalize major points about the parts of the water cycle (including precipitation, evaporation, transpiration, condensation, surface-water flow, and groundwater flow). However, appropriate assessments should also require students to <i>identify</i> parts of the water cycle; <i>compare</i> one part of the water cycle with another; or <i>illustrate</i> parts of the water cycle using words, drawings, diagrams, or symbols. |
| 4.3 | Classify shapes and types of clouds according to | B 2. | Classify, describe, discuss, explain, identify, locate, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical | The objective of this indicator is to <i>classify</i> shapes and types of clouds according to elevation and their associated weather conditions and patterns; therefore, the primary focus of assessment |

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| | elevation and their associated weather conditions and patterns. | | recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <p>steps....</p> <ol style="list-style-type: none"> 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | should be to determine the cloud category based on the description. However, appropriate assessments should also require students to <i>recognize</i> a cloud type based on a description; <i>illustrate</i> cloud shapes or types through pictures or words; or <i>compare</i> weather conditions associated with cloud types. |
| 4.4 | Summarize the relationship of the movement of air masses, high and low pressure systems, and frontal boundaries to storms (including thunderstorms, hurricanes, and tornadoes) and other weather conditions. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>summarize</i> the relationships of the movement of air masses, high and low pressure systems, and frontal boundaries to storms and other weather conditions; therefore, the primary focus of assessment should be to generalize the major points about these factors in their relationship to storms (including thunderstorms, hurricanes, and tornadoes) weather conditions. However, appropriate assessments should also require students to <i>interpret</i> a diagram or description of a front; <i>compare</i> the weather conditions resulting high pressure and low pressure systems; or <i>predict</i> the weather condition(s) along fronts or within air masses. |
| 4.5 | Use appropriate instruments and tools to collect weather data (including wind speed and direction, air temperature, humidity, and air pressure). | C 3. | Choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write, organize, generalize, prepare, apply, calculate, compile, complete, demonstrate, illustrate, operate, solve, dramatize, classify, categorize | <ol style="list-style-type: none"> 1. Applying previously learned knowledge, construct.... 2. Using your knowledge of Formulate 6 questions... 3. Write a letter to the editor pointing out... 4. Classify the following ... into their correct.... 5. Write a news report... 6. Construct a flow chart for... | The objective of this indicator is to <i>use</i> appropriate instruments and tools to collect weather data; therefore, the primary focus of assessment should be to apply a procedure to the tool that would be needed to measure wind speed, wind direction, air temperature, humidity, and air pressure. However, appropriate assessments should also require students to <i>identify</i> weather instruments that measure certain weather conditions; <i>interpret</i> the reading on the instrument for accurate data; or <i>interpret</i> the scale on weather instruments. |
| 4.6 | Predict weather conditions and patterns based on | B 2 | Classify, describe, discuss, explain, identify, locate, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical | The objective of this indicator is to <i>predict</i> weather conditions and patterns based on weather data collected from direct observations and measurements, weather maps, satellites, and radar; |

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| | weather data collected from direct observations and measurements, weather maps, satellites, and radar. | | recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <p>steps....</p> <ol style="list-style-type: none"> 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | therefore, the primary focus of assessment should be to take the presented material from direct observations and measurements, from weather maps, satellite images, and radar and use that information to show what might happen to local or national weather conditions. However, appropriate assessments should also require students to <i>interpret</i> a weather map, station model, or hurricane tracking map; <i>compare</i> a series of weather maps to show patterns or weather system movement; or <i>identify</i> weather symbols commonly found on weather maps. |
| 4.7 | Explain how solar energy affects Earth's atmosphere and surface (land and water). | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>explain</i> how solar energy affects Earth's atmosphere and surface (land and water); therefore, the primary focus of assessment should be to construct a cause-and-effect model of solar energy's impact on Earth's atmosphere and on the land and water surfaces. However, appropriate assessments should also require students to <i>summarize</i> the process known as the greenhouse effect; or <i>identify</i> factors in the atmosphere that would either reflect or absorb solar energy. |
| 4.8 | Explain how convection affects weather patterns and climate. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>explain</i> how convection affects weather patterns and climate; therefore, the primary focus of assessment should be to construct a cause-and-effect model of convection's impact on Earth's convection regions, global winds, ocean surface currents, and climate. However, appropriate assessments should also require students to <i>interpret</i> diagrams related to convection; <i>compare</i> convection regions to the global wind belts; or <i>identify</i> the convection regions or ocean currents that influence climate along the coasts of the United States. |
| 4.9 | Explain the influence of global winds and the jet stream on weather | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... | The objective of this indicator is to <i>explain</i> the influence of global winds and the jet stream on Earth's weather and climatic conditions; therefore, the primary focus of assessment should be to construct a cause-and-effect model of how weather and climatic |

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| | and climatic conditions. | | select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | conditions are moved by global winds and also how the jet stream moves weather systems in the Northern Hemisphere. However, appropriate assessments should also require students to <i>interpret</i> diagrams related to global winds or the jet stream; <i>compare</i> the movement of weather systems between the global wind belts; <i>identify</i> the wind belts and their prevailing wind directions; or <i>recall</i> the curving of global winds as the Coriolis effect. |
| 5.1 | Identify the sources and properties of heat, solar, chemical, mechanical, and electrical energy. | B 1. | Define, duplicate, list, memorize, recall, repeat, reproduce, state, describe, identify, label, find, match, quote | <ol style="list-style-type: none"> 1. Describe what happened at... 2. List all the... 3. Name all the... 4. What is (fact /definition, etc) 5. List the attributes of.. 6. Write 10 facts about... 7. Make an A-Z list of... 8. Recall... 9. In what way are you like... | The objective of this indicator is to <i>identify</i> the sources and properties of heat, solar, chemical, mechanical, and electrical energy; therefore, the primary focus of assessment should be to retrieve from memory sources and properties of the forms of energy listed. However, appropriate assessments should also require students to <i>recognize</i> forms of energy by their sources. |
| 5.2 | Explain how energy can be transformed from one form to another (including the two types of mechanical energy, potential and kinetic, as well as chemical and electrical energy) in accordance with the law of conservation of energy. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>explain</i> how energy can be transformed from one form to another in accordance to the law of conservation of energy; therefore, the primary focus of assessment should be to construct a cause-and-effect model of how energy transformations follow the Law of Conservation of Energy. However, appropriate assessments should require students to; <i>interpret</i> diagrams or illustrations related to energy transformations; or <i>summarize</i> energy transformations and how the Law of Conservation of Energy applies. |
| 5.3 | Explain how magnetism and electricity are interrelated by using descriptions, | B 2 | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own | The objective of this indicator is to <i>explain</i> how electricity and magnetism are interrelated by using descriptions, models and diagrams of electromagnets, generators, and simple electrical motors; therefore, the primary focus of assessment should be to construct a cause-and-effect model of how electricity and |

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| | models, and diagrams of electromagnets, generators, and simple electrical motors. | | paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <p>words....</p> <ol style="list-style-type: none"> 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | magnetism are interrelated. However, appropriate assessments should also require students to <i>interpret</i> diagrams of electromagnets, generators, or electric motors showing how electricity and magnetism are interrelated; <i>summarize</i> information about how electricity and magnetism are interrelated using diagrams, models, and descriptions of devices; <i>compare</i> devices based on how they interrelate electricity and magnetism; or <i>recognize</i> devices based on their functions. |
| 5.4 | Illustrate energy transformations (including the production of light, sound, heat, and mechanical motion) in electrical circuits. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>illustrate</i> energy transformations in electric circuits; therefore, the primary focus of assessment should be to give illustrations or use illustrations to show the concept of energy transformations (including the production of light, sound, heat, and mechanical motion) in electric circuits. However, appropriate assessments should also require students to <i>recall</i> that energy transformations can only occur when an electrical circuit is complete; <i>recognize</i> devices used to transfer electrical energy to another form of energy in an electrical circuit; or <i>infer</i> the types of energy transformations that would occur with specific devices. |
| 5.5 | Illustrate the directional transfer of heat energy through convection, radiation, and conduction. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>illustrate</i> the directional transfer of heat energy through conduction, convection, and radiation; therefore, the primary focus of assessment should be to give illustrations or use illustrations to show the concept of heat transfer through conduction, convection, or radiation. However, appropriate assessments should also require students to <i>recognize</i> the types of heat transfer based on descriptions of how particles behave; <i>classify</i> methods of heat transfer based on how particles behave; <i>infer</i> the direction of heat transfer; or <i>summarize</i> the direction of heat transfer in various types of heat transfer processes if given temperature differences. |
| 5.6 | Recognize that energy is the ability to do work (force exerted over a distance). | B 1. | Define, duplicate, list, memorize, recall, repeat, reproduce, state, describe, identify, label, find, match, quote | <ol style="list-style-type: none"> 1. Describe what happened at... 2. List all the... 3. Name all the... 4. What is (fact /definition, etc) 5. List the attributes of.. | The objective of this indicator is to <i>recognize</i> that energy is the ability to do work (force exerted over a distance); therefore, the primary focus of assessment should be to remember that work is force exerted over a distance. However, appropriate assessments should require students to <i>recall</i> that force is measured in newtons (N); <i>recognize</i> that energy can cause things to move; |

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| | | | | 6. Write 10 facts about... 7. Make an A-Z list of... 8. Recall... 9. In what way are you like... | <i>identify</i> situations that show work; or <i>recall</i> that work is an evidence for energy. |
| 5.7 | Explain how the design of simple machines (including levers, pulleys, and inclined planes) helps reduce the amount of force required to do work. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>explain</i> how the design of simple machines helps reduce the amount of force required to do work; therefore, the primary focus of assessment should be to construct a cause-and-effect model which shows how the design of simple machines (including levers, pulleys, and inclined planes) reduces the effort force or changes its direction. However, appropriate assessments should also require students to <i>recognize</i> that simple machines can be designed to reduce the force needed to move an object; <i>interpret</i> a diagram showing different designs of the same simple machine to determine which would reduce the amount of force the most based on their designs; or <i>summarize</i> the relationship between the design of the simple machine and the reduction in force required to move an object. |
| 5.8 | Illustrate ways that simple machines exist in common tools and in complex machines. | B 2. | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | 1. Explain how ... has impacted... 2. Describe in clear logical steps.... 3. Paraphrase in your own words.... 4. Give reasons for... 5. Using words, pictures and icons, restate what you know about.... 6. Use the metaphor of ... to help you understand.... 7. State three things you know about... | The objective of this indicator is to <i>illustrate</i> ways that simple machines exist in common tools and in complex machines; therefore the primary focus of assessment should be to simple machines that are part of simple tools and of complex machines using pictures, diagrams, or word descriptions. However, appropriate assessments should also require students to <i>identify</i> the types of simple machines that are found in common tools and in complex machines; <i>interpret</i> a diagram of common tools or complex machines to identify the simple machines present; <i>exemplify</i> common tools that are simple machines; or <i>exemplify</i> the use of simple machines in everyday life. |

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| (A1) | Define, duplicate, list, memorize, recall, repeat, reproduce, state, describe, identify, label, find, match, quote | <ol style="list-style-type: none"> 10. Describe what happened at... 11. List all the... 12. Name all the... 13. What is (fact /definition, etc) 14. List the attributes of.. 15. Write 10 facts about... 16. Make an A-Z list of... 17. Recall... 18. In what way are you like... |
| (B2) | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase, match, restate, give-example, illustrate, summarize, extend, outline | <ol style="list-style-type: none"> 8. Explain how ... has impacted... 9. Describe in clear logical steps.... 10. Paraphrase in your own words.... 11. Give reasons for... 12. Using words, pictures and icons, restate what you know about.... 13. Use the metaphor of ... to help you understand.... 14. State three things you know about... |
| (C3) | Choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write, organize, generalize, prepare, apply, calculate, compile, complete, demonstrate, illustrate, operate, solve, dramatize, classify, categorize | <ol style="list-style-type: none"> 1. Applying previously learned knowledge, construct.... 2. Using your knowledge of Formulate 6 questions... 3. Write a letter to the editor pointing out... 4. Classify the following ... into their correct.... 5. Write a news report... 6. Construct a flow chart for... |
| (B4) | Appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test, categorize, critique, debate, discuss, identify | <ol style="list-style-type: none"> 1. From at least 4 peoples' viewpoint, analyze... 2. Discuss the similarities and differences of... 3. Compare and contrast... 4. Investigate all the factors that could influence... 5. Summarize the reasons for.... 6. Deduce how the parts interact in... 7. List the pros and cons of... |
| (B5) | Argue (for/against), assess, critique, decide, judge, justify, prioritize, recommend, appraise, defend, select, support, value, evaluate, relate, weigh, | <p>Which of the two....would be better for...</p> <p>Choose and justify a theme song for...</p> <p>Justify the decision of...</p> <p>Determine which is the more effective...</p> <p>Evaluate the effectiveness of....</p> <p>Select which is the best option...or..</p> <p>Rank the following from...to most..</p> <p>Debate the issue...</p> <p>Defend the decision to....</p> <p>How would you prove/disprove?</p> <p>What would you cite to defend the actions?</p> <p>How could you determine?</p> |

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| | | How would you prioritize? |
| (B6) | Assemble, construct, create, design, develop, formulate, write, compose, originate, produce, invent, improve | <ol style="list-style-type: none"> 1. Design and improved... for... 2. Formulate a set of criteria to judge... 3. Compose a song, jingle or rap to illustrate... 4. Modify ... in order to create a more fair..... 5. Develop and argument to persuade people to.... 6. Generate key questions for... 7. Create an experiment to... 8. Adapt a project studied so that.. 9. Design a personal action plan 10. What changes would you make to solve? 11. What would happen if.... 12. What would you propose as an alternative method? 13. How could you change or modify the plan? 14. What could be done to simplify/minimize/maximize...? 15. Can you predict the outcome if..... |