

**BENCHMARK SC.F.1.2.1**

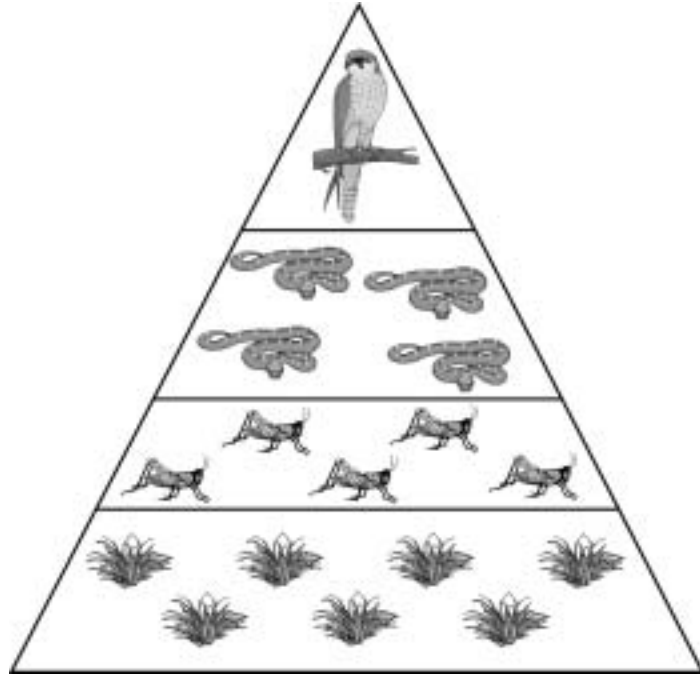
<b>Strand</b>	<b>F</b>	Processes of Life
<b>Standard</b>	<b>1</b>	The student describes patterns of structure and function in living things.
<b>Benchmark</b>	<b>SC.F.1.2.1</b>	The student knows that the human body is made of systems with structures and functions that are related.
<b>Item Type(s)</b>		MC
<b>Benchmark Clarification</b>		The student identifies, describes, and compares the functions of systems (i.e., digestive system, respiratory system, nervous system, muscular system, circulatory system, and/or skeletal system) in the human body.
<b>Content Limits</b>		Items will NOT assess the cellular level in systems.
<b>Stimulus Attributes</b>		None specified.
<b>Response Attributes</b>		Items will NOT identify, describe, or compare more than two systems.
<b>Sample MC Item</b>		<p>The skeletal system in the human body helps maintain body shape. Which of the following is another function of the human skeleton?</p> <ul style="list-style-type: none"> <li>A. making the muscles move</li> <li>*B. protecting organs in the body</li> <li>C. helping the heart pump blood</li> <li>D. producing calcium for the body</li> </ul>

**BENCHMARK SC.F.1.2.2**

<b>Strand</b>	<b>F</b>	Processes of Life
<b>Standard</b>	<b>1</b>	The student describes patterns of structure and function in living things.
<b>Benchmark</b>	<b>SC.F.1.2.2</b>	The student knows how all animals depend on plants.
<b>Item Type(s)</b>		MC
<b>Benchmark Clarification</b>		The student identifies various ways animals use plants for survival.
<b>Content Limits</b>		<p>Items may assess the student's understanding of:</p> <ul style="list-style-type: none"> <li>• the hierarchy of the energy pyramid and how the pyramid is dependent on the base level;</li> <li>• how animals (consumers) depend on plants (producers) to survive;</li> <li>• how the food chain or food web would be affected if producers were reduced or increased;</li> <li>• the predator/prey relationship; and</li> <li>• the process of photosynthesis.</li> </ul>
<b>Stimulus Attributes</b>		Items may provide the student with data in diagram or picture form.
<b>Response Attributes</b>		None specified.

## Sample MC Item

The pyramid below shows a comparison of energy available at each position or level. The available energy decreases as you move up the pyramid.



Why does the base level of the pyramid contain the greatest number of producers?

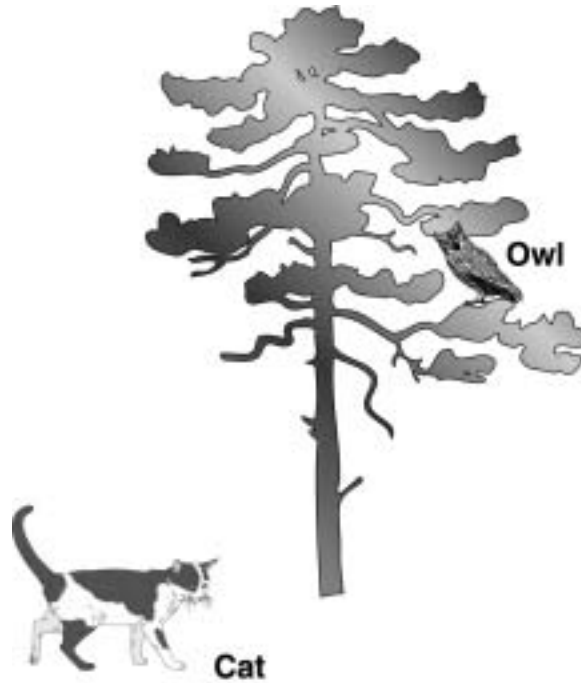
- A. The producers prey on the predators.
- \* B. The producers supply the most energy.
- C. The producers hunt the animals in the energy pyramid.
- D. The prey receive energy and pass it on to the producers.

**BENCHMARK SC.F.1.2.3**

<b>Strand</b>	<b>F</b>	Processes of Life
<b>Standard</b>	<b>1</b>	The student describes patterns of structure and function in living things.
<b>Benchmark</b>	<b>SC.F.1.2.3</b>	The student knows that living things are different but share similar structures.
<b>Item Type(s)</b>		MC, SR
<b>Benchmark Clarification</b>		The student compares and contrasts components of organisms.
<b>Content Limits</b>		<p>Items will assess the student's understanding of:</p> <ul style="list-style-type: none"> <li>• the common and distinguishing characteristics of groups of vertebrate animals;</li> <li>• the similarities and differences among plants; and</li> <li>• the common characteristics of plants and animals.</li> </ul> <p>Items will NOT assess the student's understanding of:</p> <ul style="list-style-type: none"> <li>• the structure of cells, and</li> <li>• cell reproduction.</li> </ul>
<b>Stimulus Attributes</b>		None specified.
<b>Response Attributes</b>		None specified.

## Sample MC Item

Allison could hear animals in her backyard. When she looked out her window, she saw a cat and an owl.



How are cats and owls alike?

- A. They are mammals.
- B. Their eyes are blue.
- \*C. They can see well at night.
- D. Their fur keeps them warm.

**Sample SR Item**

The Florida panther and the Florida alligator are different animals. The panther is a mammal, and the alligator is a reptile. The alligator is cold-blooded and lays eggs. As soon as the baby alligators hatch they can eat snails, frogs, insects, and small fish.

**Panther****Alligator**

How are the characteristics of the panther different from the alligator?

**Correct and Complete Response**

Panthers are mammals so instead of laying eggs like a reptile, panthers give birth to live young. Baby alligators can eat snails and frogs, but baby panthers drink milk from their mother's mammary glands. Alligators are cold-blooded. Panthers are warm-blooded and have a coat of fur.

**BENCHMARK SC.F.1.2.4**

<b>Strand</b>	<b>F</b>	Processes of Life
<b>Standard</b>	<b>1</b>	The student describes patterns of structure and function in living things.
<b>Benchmark</b>	<b>SC.F.1.2.4</b>	The student knows that similar cells form different kinds of structures.
<b>Item Type(s)</b>		MC
<b>Benchmark Clarification</b>		None specified.
<b>Content Limits</b>		Items will NOT assess the structures within cells.  Items may compare and contrast the overall structure and function of cells.  Items may assess the student's knowledge of plant and animal cells.
<b>Stimulus Attributes</b>		None specified.
<b>Response Attributes</b>		None specified.
<b>Sample MC Item</b>		Chung picks up a four-leaf clover. He holds the round stem and looks at the flat leaves.

**Four-Leaf Clover**

How are the cells in the stem and the cells in the leaf similar?

- A. They do not need water.
- B. They can live underground.
- \*C. They make energy from the Sun.
- D. They produce carbon dioxide (CO<sub>2</sub>).

**BENCHMARK SC.F.2.2.1**

<b>Strand</b>	<b>F</b>	Processes of Life
<b>Standard</b>	<b>2</b>	The student understands the process and importance of genetic diversity.
<b>Benchmark</b>	<b>SC.F.2.2.1</b>	The student knows that many characteristics of an organism are inherited from the parents of the organism, but that other characteristics are learned from an individual's interactions with the environment.
<b>Item Type(s)</b>		MC
<b>Benchmark Clarification</b>		The student identifies features or behaviors of an organism that are either acquired or inherited.
<b>Content Limits</b>		Items will NOT address more than four characteristics at a time.  Items will NOT require the student to use Punnett squares.
<b>Stimulus Attributes</b>		None specified.
<b>Response Attributes</b>		None specified.
<b>Sample MC Item</b>		Children inherit certain characteristics from their parents. Other characteristics are learned from their environment. Which characteristic is a learned characteristic?  A. blinking B. breathing C. having blue eyes *D. speaking a language