

BENCHMARK SC.5.L.17.1

Reporting Category	Life Science
Standard	Big Idea 17 Interdependence
Benchmark	SC.5.L.17.1 Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycle variations, animal behaviors, and physical characteristics. (Also assesses SC.3.L.17.1, SC.4.L.16.2, SC.4.L.16.3, SC.4.L.17.1, SC.4.L.17.4, and SC.5.L.15.1.)
Also Assesses	<p>SC.3.L.17.1 Describe how animals and plants respond to changing seasons.</p> <p>SC.4.L.16.2 Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.</p> <p>SC.4.L.16.3 Recognize that animal behaviors may be shaped by heredity and learning.</p> <p>SC.4.L.17.1 Compare the seasonal changes in Florida plants and animals to those in other regions of the country.</p> <p>SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.</p> <p>SC.5.L.15.1 Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.</p>
Benchmark Clarifications	<p>Students will explain, compare, and/or contrast how adaptations displayed by animals or plants enable them to survive in different environments.</p> <p>Students will describe or explain how animals and/or plants respond to changing seasons.</p> <p>Students will distinguish plant or animal characteristics that are inherited from those that are affected by the environment.</p> <p>Students will identify characteristics of animals that are inherited or distinguish inherited characteristics from those that are shaped by learning.</p> <p>Students will compare the seasonal changes in Florida plants and/or animals to those in other regions of the country.</p> <p>Students will identify ways in which plants and/or animals can impact the environment.</p>

Benchmark Clarifications	Students will describe how, when the environment changes, differences between organisms allow some plants and animals to survive and reproduce while others die or move to new locations.
Content Limits	<p>Items referring to the adaptation of organisms to different environments may address but will not assess the different stages of the organism's life cycle.</p> <p>Items may require knowledge of how animals living in a particular environment are adapted to survive the seasonal changes in that environment.</p> <p>Items will not assess renewable or nonrenewable resources.</p>
Stimulus Attribute	The term <i>characteristic</i> should be used rather than the term <i>trait</i> .
Response Attributes	None specified
Prior Knowledge	Items may require the student to apply science knowledge described in the NGSSS from lower grades. This benchmark requires prerequisite knowledge from SC.1.L.16.1, SC.2.L.17.1, and SC.2.L.17.2.

Sample Item 24 SC.5.L.17.1

Loggerhead sea turtles are large turtles that live in the ocean and nest on the Florida coast. The female loggerhead sea turtle lays more than 100 eggs in the beach sand. How is laying so many eggs an important adaptation that helps these turtles to survive?

- A. Large nests of eggs help keep the eggs warm enough to allow more turtles to hatch.
- B. If many turtles hatch, they can help defend each other against predators in large numbers.
- ★ C. The more eggs that are laid, the greater the chance that more turtles will live to become adults.
- D. A large number of eggs in one place makes it possible for the mother to lie on the eggs until they hatch.