

Fifth Grade Science
Chapter 4 Ecosystems and Biomes
Study Guide

1. The continuous movement of water between Earth's surface and the air is the water cycle.
2. The process of an ecosystem changing into a different ecosystem is called succession.
3. The carbon cycle involves the continuous exchange of carbon among living things.
4. A species becomes an extinct species when the last member dies.
5. A major land ecosystem of Earth is known as the biome.
6. An estuary is an ecosystem that is part salt water and part freshwater.
7. The first species to live in an otherwise lifeless area is a pioneer species.
8. The nitrogen cycle involves trapping a gas into compounds in the soil.
9. A cool, forest biome containing coniferous evergreen trees is the taiga.
10. The category of organisms in a water ecosystem that includes the larger, active swimmers is called nekton.
11. The changing of a liquid into a gas is evaporation.
12. The formation of a new community where few living things exist is called primary succession.
13. The final stage of succession is the climax community.
14. The biome that contains mostly sand and rocks is known as the desert.
15. The ocean zone that is home to sharks and squids is called the bathyal.

1. Be able to explain the water cycle using a model. Reference page p. 185

Example: Heat causes water to evaporate from oceans, rivers, lakes, streams, and ponds.

Evaporating water rises and cools. Cooling causes condensation which causes water to form droplets. The droplets gather and form clouds. When the droplets become too heavy they drop out of the clouds, or precipitate. The water collects and the cycle starts over again.

2. Answer questions in complete sentences, give details, and specific examples. Describe the taiga, the world's largest biome. What animals and plants live there.

Example: The Taiga is a cool forest biome found in northern regions. Trees such as pines and firs grow in the taiga, and wolves and snowshoe hares live there.

- a. Describe the characteristics of a grassland home. What is an African grassland called?

Example: Grasses are the main plant life of the grassland biome. The grasses are producers providing food for many animals, especially herbivores. Fires are common in this dry grassland biome. An African grassland is often called a savannah.

- b. What is the difference between an endangered species and a threatened species?

Example: An endangered species is in danger of becoming extinct. A threatened species has low numbers but not low enough to be considered endangered.

- c. Why is an estuary a good place for a newly developing animal to live?

Example: The waters of an estuary are calm. The area is fairly well protected from wind and predators.

- d. Describe the type of freshwater ecosystem a cattail plant comes from. Be able to explain why and give examples.

Example: The cattail plant grows in a standing-water ecosystem. The standing water is good for the cattail because moving water may pull the roots out of the ground.