

Changes & Interactions within Ecosystems - Quiz

Multiple Choice

Directions: Choose the best answer for each question.

1. Which process describes a gradual change in the species composition of an ecosystem over time?
 - A. Photosynthesis
 - B. Decomposition
 - C. Predation
 - D. Ecological succession
2. A drought reduces the amount of water available to plants in a grassland. Which change is most likely to occur first?
 - A. Plant populations may decrease
 - B. All predators immediately disappear
 - C. The ecosystem gains unlimited nutrients
 - D. All organisms become producers
3. A bee obtains nectar from a flower while pollinating the flower. What type of interaction is this?
 - A. Mutualism
 - B. Parasitism
 - C. Competition
 - D. Predation
4. Two deer in the same habitat eat the same limited supply of grass. What type of interaction is occurring?
 - A. Commensalism
 - B. Competition
 - C. Mutualism
 - D. Parasitism
5. Which event is an example of a natural disturbance that can cause changes in an ecosystem?
 - A. A wildfire caused by lightning
 - B. A plant producing seeds
 - C. A rabbit eating grass
 - D. A tree carrying out photosynthesis
6. How can the removal of a top predator affect an ecosystem?
 - A. Prey populations may increase
 - B. All producers immediately disappear
 - C. Decomposers stop recycling nutrients
 - D. Sunlight becomes unavailable
7. Which interaction benefits one organism while the other organism is neither helped nor harmed?
 - A. Commensalism
 - B. Mutualism
 - C. Parasitism
 - D. Competition
8. An invasive species enters an ecosystem and has no natural predators there. What is a likely result?
 - A. It must immediately become extinct
 - B. It can no longer reproduce
 - C. Its population may grow rapidly
 - D. It automatically becomes a decomposer
9. What is one important role of decomposers in an ecosystem?
 - A. They recycle nutrients
 - B. They produce all of the ecosystem's sunlight
 - C. They prevent all organisms from dying
 - D. They eliminate all competition
10. Which statement best explains why a change in one population can affect an entire ecosystem?
 - A. Every population lives completely independently
 - B. Organisms are connected through food webs and other interactions
 - C. Only producers are affected by ecosystem changes
 - D. Ecosystems never change naturally