

Advanced Ecosystem Science

Ecology · Practice Test · 8 Questions

1. In a typical energy pyramid, what percentage of energy is generally passed from one trophic level to the next highest level?

- A) About 1%
- B) About 10%
- C) About 50%
- D) About 90%

2. Which process allows nutrients like nitrogen and phosphorus to be returned to the soil from dead organic matter?

- A) Photosynthesis
- B) Transpiration
- C) Decomposition
- D) Respiration

3. What term describes a symbiotic relationship where one organism benefits while the other is neither helped nor harmed?

- A) Mutualism
- B) Parasitism
- C) Commensalism
- D) Competition

4. Which specific layer of soil in the Tundra biome remains frozen year-round and prevents deep-rooted plants from growing?

- A) Topsoil
- B) Bedrock
- C) Permafrost
- D) Subsoil

5. What is the name for a species that has an unusually large effect on its ecosystem, such that its removal could cause the ecosystem to collapse?

- A) Keystone species
- B) Invasive species
- C) Indicator species
- D) Apex predator

6. Which group of organisms is responsible for producing approximately half of the world's oxygen through photosynthesis in the oceans?

- A) Coral reefs
- B) Seaweed
- C) Phytoplankton
- D) Mangroves

7. Ecological succession that begins in an area where no soil exists, such as on a new volcanic island, is known as what?

- A) Secondary succession
- B) Primary succession
- C) Climax community
- D) Pioneer transition

8. Some animals enter a state of dormancy similar to hibernation to survive extremely hot and dry periods. What is this called?

- A) Migration
- B) Brumation
- C) Estivation
- D) Insulation