

Test: Ecology

Form Abiotic

1. Species that serve as early warnings of environmental damage are called
 - A. nonnative species
 - B. keystone species
 - C. specialist species
 - D. indicator species
 - E. generalists
2. The form of nitrogen that plants can use directly is
 - A. ammonia
 - B. nitrites
 - C. nitrates
 - D. N₂ gas
 - E. methane
3. Photosynthesis
 - A. Converts glucose into energy and water.
 - B. Requires the combustion of carbon.
 - C. Yields glucose and oxygen gas as products.
 - D. Produces carbon dioxide and oxygen gas
 - E. Yields glucose and carbon dioxide gas as products
4. In the field, you observe a lion chase, kill, and eat a gazelle. A vulture pecks away at the left over meat scraps. Beetles attack the remaining fragments. Finally, bacteria complete the breakdown and recycling of organic material. If you were to apply a general classification to the feeders, what would be the correct sequence?
 - A. decomposer -> scavenger -> detritus feeder -> carnivore
 - B. carnivore -> detritus feeder -> scavenger -> decomposer
 - C. carnivore -> scavenger -> detritus feeder -> decomposer
 - D. carnivore -> scavenger -> decomposer -> detritus feeder
 - E. scavenger -> decomposer -> carnivore -> detritus feeder
5. Aerobic respiration requires
 - A. glucose and oxygen
 - B. glucose and carbon dioxide
 - C. oxygen and water
 - D. carbon dioxide and water
 - E. ATP and carbon dioxide
6. The "ironclad" ecological pyramid with no exceptions is the pyramid of
 - A. numbers
 - B. biomass
 - C. energy
 - D. productivity
 - E. consumption
7. The pyramid which best explains why there are typically only four to five links in a food chain is the pyramid of
 - A. numbers
 - B. biomass
 - C. energy
 - D. matter
 - E. productivity
8. Which of the following ecosystems has the highest level of kilocalories per square meter per year?
 - A. open ocean
 - B. lakes and streams
 - C. agricultural land
 - D. tropical rain forest
 - E. prairies
9. Carbon is a major component of
 - A. atmospheric gases
 - B. all rocks
 - C. the oceans
 - D. organic compounds
 - E. fresh water
10. Earth's chemical cycles connect life of the present to life of the
 - A. present
 - B. past
 - C. future
 - D. present, past and future