

**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. N<sub>2</sub> 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