

Self-test questions

Topic 4

- 1 Which organisms are capable of making their own food?
 - A saprotrophs
 - B detritivores
 - C heterotrophs
 - D autotrophs
- 2 A community is defined as:
 - A members of the same species that live together in the same area
 - B populations of different species that live together in the same area
 - C populations of species and the abiotic environment of an area
 - D members of a species that can interbreed
- 3 Which of the following is **not** a resource in an ecosystem?
 - A food
 - B nest sites
 - C temperature
 - D hiding places
- 4 What do most ecosystems rely on as a supply of energy?
 - A heat lost as organisms respire
 - B energy released during respiration
 - C energy from sunlight
 - D energy found in carbon compounds
- 5 Which of the following are both essential in any ecosystem?
 - A consumers and saprotrophs
 - B producers and herbivores
 - C producers and saprotrophs
 - D herbivores and carnivores
- 6 Mice feed on grass seeds. Which of the following terms best describe(s) the mice in a grassland ecosystem?
 - i heterotroph
 - ii primary consumer
 - iii secondary consumer
 - A i and ii only
 - B i and iii only
 - C ii only
 - D i, ii and iii
- 7 The length of a food chain depends on:
 - A the number of different organisms present at each trophic level
 - B the sizes of autotrophs and consumers
 - C the degree of competition between members of each trophic level
 - D the efficiency of energy transfer from one trophic level to the next

- 8 Plants start both aquatic and terrestrial food chains because:
- A they release oxygen into the air and water
 - B they have the greatest biomass
 - C they convert light into chemical energy
 - D they provide a habitat for animals
- 9 The carbon dioxide content inside plant cells in a natural habitat:
- A remains constant through a 24 hour period
 - B increases during hours of darkness
 - C decreases during hours of darkness
 - D increases during hours of daylight
- 10 Recent increases in atmospheric carbon dioxide are largely due to:
- A greenhouse gases allowing short wave radiation to warm the Earth
 - B increases in methane in the atmosphere
 - C changes in climate patterns
 - D increases in the combustion of fossilised organic matter