

Ecology Quiz 1

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. All of the members of a particular species that live in one area are called a(an)
- biome.
 - population.
 - community.
 - ecosystem.
- _____ 2. Which of the following descriptions about the organization of an ecosystem is correct?
- Communities make up species, which make up populations.
 - Populations make up species, which make up communities.
 - Species make up communities, which make up populations.
 - Species make up populations, which make up communities.
- _____ 3. The lowest level of environmental complexity that includes living and nonliving factors is the
- biome.
 - community.
 - ecosystem.
 - biosphere.
- _____ 4. Green plants are
- producers.
 - consumers.
 - herbivores.
 - omnivores.
- _____ 5. What is the original source of almost all the energy in most ecosystems?
- carbohydrates
 - sunlight
 - water
 - carbon

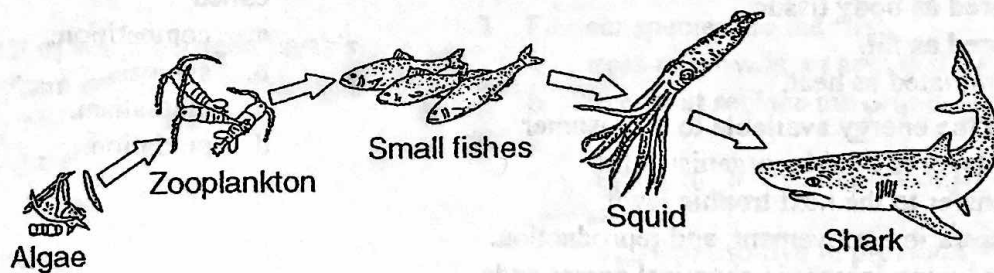


Figure 3-1

- _____ 6. The algae at the beginning of the food chain in Figure 3-1 are
- consumers.
 - decomposers.
 - producers.
 - heterotrophs.
- _____ 7. An organism that uses energy to produce its own food supply from inorganic compounds called a(an)
- heterotroph.
 - consumer.
 - detritivore.
 - autotroph.

Name: _____

8. Organisms that obtain nutrients by breaking down dead and decaying plants and animals are called
- decomposers.
 - omnivores.
 - autotrophs.
 - producers.
9. What is the term for each step in the transfer of energy and matter within a food web?
- energy path
 - food chain
 - trophic level
 - food pyramid
10. A snake that eats a frog that has eaten an insect that fed on a plant is a
- first-level producer.
 - first-level consumer.
 - second-level producer.
 - third-level consumer.
11. Only 10 percent of the energy stored in an organism can be passed on to the next trophic level. Of the remaining energy, some is used for the organism's life processes, and the rest is
- used in reproduction.
 - stored as body tissue.
 - stored as fat.
 - eliminated as heat.
12. Most of the energy available to a consumer trophic level is used by organisms for
- transfer to the next trophic level.
 - respiration, movement, and reproduction.
 - producing inorganic chemical compounds.
 - performing photosynthesis.
13. Which is a biotic factor that affects the size of a population in a specific ecosystem?
- average temperature of the ecosystem
 - type of soil in the ecosystem
 - number and kinds of predators in the ecosystem
 - concentration of oxygen in the ecosystem
14. An organism's niche is
- the way the organism uses the range of physical and biological conditions in which it lives.
 - all the physical and biological factors in the organism's environment.
 - the range of temperatures that the organism needs to survive.
 - a full description of the place an organism lives.
15. The symbiotic relationship between a flower and the insect that feeds on its nectar is an example of
- mutualism because the flower provides the insect with food, and the insect pollinates the flower.
 - parasitism because the insect lives off the nectar from the flower.
 - commensalism because the insect does no harm the flower and the flower does not benefit from the relationship.
 - predation because the insect feeds on the flower.
16. An interaction in which one organism captures and feeds on another organism is called
- competition.
 - sybiosis.
 - mutualism.
 - predation.

Ecology Quiz 2

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. What does the diagram in Figure 13.1 show?

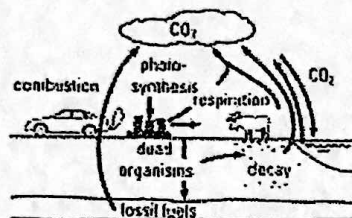


FIG. 13.1

- the nitrogen cycle
 - the water cycle
 - the oxygen cycle
 - the carbon cycle
2. Organisms need nutrients in order to
- utilize hydrogen and oxygen.
 - carry out essential life functions.
 - recycle chemical compounds.
 - carry out nitrogen fixation.
3. The repeated movement of water between Earth's surface and the atmosphere is called
- the water cycle.
 - the condensation cycle.
 - precipitation.
 - evaporation.
4. Carbon cycles through the biosphere in all of the following processes EXCEPT
- photosynthesis.
 - evaporation
 - burning of fossil fuels.
 - decomposition of plants and animals.
5. What is one difference between primary and secondary succession?
- Primary succession is slow and secondary succession is rapid.
 - Secondary succession begins on soil and primary succession begins on newly exposed surfaces.
 - Primary succession modifies the environment and secondary succession does not.
 - Secondary succession begins with lichens and primary succession begins with trees.
6. In 1988 several large forest fires occurred in Yellowstone National Park. What process occurred after these fires?
- primary succession
 - secondary succession
 - pioneer succession
 - symbiotic succession
7. Pioneer species are the first
- trees to grow in an area that has been disturbed.
 - trees that replace the original trees after a forest fire.
 - organisms to live in previously uninhabited areas.
 - organisms to live in previously inhabited areas.
8. A biotic or an abiotic resource in the environment that causes population size to decrease is a
- carrying capacity.
 - limiting nutrient.
 - limiting factor.
 - growth factor.
9. As resources in a population become less available, population growth
- declines rapidly.
 - increases slowly.
 - reaches carrying capacity.
 - enters a phase of exponential growth.

Name: _____

10. Which of the following is a density-independent limiting factor?

- a. earthquake
- b. disease
- c. emigration
- d. parasitism

11. If a population grows larger than the carrying capacity of the environment, the

- a. death rate may rise.
- b. birthrate may rise.
- c. death rate must fall.
- d. birthrate must fall.

12. Which of these would probably lead to a decrease in global warming?

- a. an increase in the amount of carbon dioxide in the atmosphere
- b. an increase in the amount of water vapor in the atmosphere
- c. a decrease in the amount of oxygen in the atmosphere
- d. a decrease in the amount of carbon dioxide in the atmosphere

13. Which has become the most important source for environmental change on Earth?

- a. climate
- b. energy
- c. human activity
- d. conservation biology

14. An increase in Earth's average temperature from the buildup of carbon dioxide and other gases in the atmosphere is called

- a. the greenhouse effect.
- b. ozone depletion.
- c. global warming.
- d. particulate dispersal.

15. Land is a resource that provides

- a. space for cities and suburbs.
- b. raw materials for industry.
- c. soil for growing crops.
- d. all of the above

16. Which material's recycling would reduce the largest portion of America's trash?

WHAT IS IN AMERICA'S TRASH?

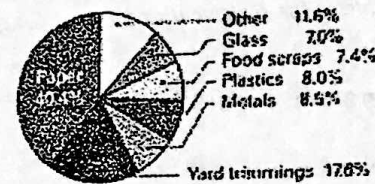


FIG. 16.2

- a. metals
- b. yard trimmings
- c. paper
- d. plastics

17. Which phrase best describes biodiversity?

- a. the number of individuals in an ecosystem
- b. the amount of biomass in an ecosystem
- c. the amount of available energy in an ecosystem
- d. the number of species in an ecosystem

18. All of the following are threats to biodiversity EXCEPT

- a. biological magnification of toxic compounds.
- b. habitat fragmentation.
- c. invasive species.
- d. species preservation.

19. One of the greatest threats today to biological diversity is

- a. old-growth forests.
- b. ozone depletion.
- c. habitat destruction.
- d. monoculture.

Ecology Quiz 1

Answer Section

MULTIPLE CHOICE

1. ANS: B	PTS: 1	DIF: B	OBJ: 3.1.1
2. ANS: D	PTS: 1	DIF: E	OBJ: 3.1.1
3. ANS: C	PTS: 1	DIF: A	OBJ: 3.1.1
4. ANS: A	PTS: 1	DIF: B	OBJ: 3.2.1
5. ANS: B	PTS: 1	DIF: B	OBJ: 3.2.1
6. ANS: C	PTS: 1	DIF: A	OBJ: 3.2.2
7. ANS: D	PTS: 1	DIF: A	OBJ: 3.2.1
8. ANS: A	PTS: 1	DIF: B	OBJ: 3.2.2
9. ANS: C	PTS: 1	DIF: E	OBJ: 3.2.2
10. ANS: D	PTS: 1	DIF: A	OBJ: 3.2.2
11. ANS: D	PTS: 1	DIF: A	OBJ: 3.2.3
12. ANS: B	PTS: 1	DIF: E	OBJ: 3.2.3
13. ANS: C	PTS: 1	DIF: A	OBJ: 4.2.1
14. ANS: A	PTS: 1	DIF: B	OBJ: 4.2.1
15. ANS: A	PTS: 1	DIF: A	OBJ: 4.2.2
16. ANS: D	PTS: 1	DIF: B	OBJ: 4.2.2

Ecology Quiz 2
Answer Section

MULTIPLE CHOICE

- | | |
|------------|--------|
| 1. ANS: D | PTS: 1 |
| 2. ANS: B | PTS: 1 |
| 3. ANS: A | PTS: 1 |
| 4. ANS: B | PTS: 1 |
| 5. ANS: B | PTS: 1 |
| 6. ANS: B | PTS: 1 |
| 7. ANS: C | PTS: 1 |
| 8. ANS: C | PTS: 1 |
| 9. ANS: C | PTS: 1 |
| 10. ANS: B | PTS: 1 |
| 11. ANS: A | PTS: 1 |
| 12. ANS: D | PTS: 1 |
| 13. ANS: C | PTS: 1 |
| 14. ANS: C | PTS: 1 |
| 15. ANS: D | PTS: 1 |
| 16. ANS: C | PTS: 1 |
| 17. ANS: D | PTS: 1 |
| 18. ANS: D | PTS: 1 |
| 19. ANS: C | PTS: 1 |