

Assessment

Chapter Test A

Populations and Communities

In the space provided, write *T* if the statement is true or *F* if it is false.

- _____ 1. Large populations are less likely to survive than small populations are.
- _____ 2. Migration is the movement of individuals into or out of a population.
- _____ 3. Diseases and parasites are abiotic factors that affect populations.
- _____ 4. The largest population that an environment can support is called the carrying capacity.
- _____ 5. Most animals can be both predator and prey.
- _____ 6. A long-term relationship in which both species benefit is known as parasitism.

Match the words on the left with the statements on the right.

- | | |
|-----------------------------|--|
| _____ 7. niche | a. all the individuals of a species that live together in one place at one time |
| _____ 8. population | b. a population growth model in which growth is unlimited |
| _____ 9. logistic model | c. a population growth model in which exponential growth is limited by carrying capacity |
| _____ 10. exponential model | d. the ecological role a species plays in its environment |
| _____ 11. population size | e. the number of individuals in a population |
| _____ 12. keystone species | f. a critically important species in an ecosystem |

Chapter Test A *continued*

In the space provided, write the letter of the term or phrase that best completes each sentence or best answers each question.

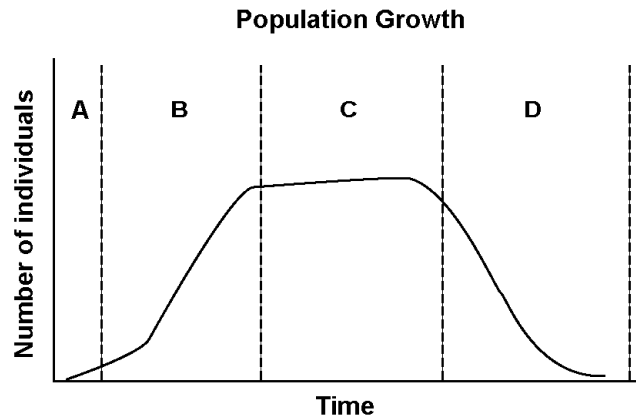
- _____ 13. Which of the following represents a population?
a. all the robins in Austin, Texas
b. all the animals in Yosemite National Park
c. all the birds in Chicago, Illinois
- _____ 14. The evolutionary changes between members of an ecosystem—such as the evolution of flowers and the insects that feed on them—is
a. stability b. coevolution c. parasitism
- _____ 15. When one organism feeds on and usually lives on or in another organism, this is called
a. mutualism. b. parasitism. c. symbiosis.
- _____ 16. Which of the following is a biotic factor that affects population size?
a. weather
b. available sunlight
c. human impact
- _____ 17. The “job” of a species in an ecosystem is its
a. niche. b. realized niche. c. biodiversity.
- _____ 18. Which of the following happens when two species require the same food and space?
a. competition
b. succession
c. symbiosis

Circle the term that best completes each sentence.

19. A deer tick feeding on a human is an example of (parasitism, biodiversity, or commensalism).
20. A bear eating a fish is an example of (commensalism, predation, or mutualism).
21. A fish cleaning the mouth of a larger fish and being protected by the larger fish is an example of (parasitism, mutualism, or commensalism).

Chapter Test A *continued*

Questions 22–25 refer to the figure below, which shows population growth over time. In the space provided, write the letter of the time period that best answers each question.



- _____ 22. Which time period shows the largest growth of the population?
 a. A b. B c. C d. D
- _____ 23. During which time period are the birth rate and death rate equal?
 a. A b. B c. C d. D
- _____ 24. During which time period does the growth of the population equal zero?
 a. A b. B c. C d. D
- _____ 25. During which time period does the population decrease?
 a. A b. B c. C d. D