

Study Guide

CHAPTER 4

Section 1: Population Dynamics

In your textbook, read about population characteristics.

Use each of the terms below only once to complete the passage.

carrying capacity
population density

density dependent
randomly

density independent
dispersion

growth rate

Some characteristics that all populations have include (1) _____, (2) _____, and (3) _____. Populations tend to be dispersed (4) _____, uniformly, and in clumps. Populations also tend to stabilize near the (5) _____ of their environment. Factors that limit populations are either (6) _____ or (7) _____.

In your textbook, read about population-limiting factors.

Complete the table by checking the correct column(s) for each description.

Description	Density Dependent	Density Independent
8. Earthquake-related tsunami		
9. Intense competition for a food source		
10. Influenza epidemic		
11. Flooding due to a hurricane		
12. Change in the number of predators		

If the statement is true, write true. If the statement is false, replace the italicized term or phrase to make it true.

13. *Population-limiting factors* keep a population from increasing indefinitely.

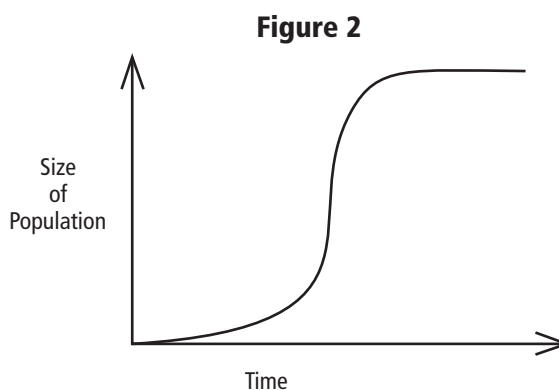
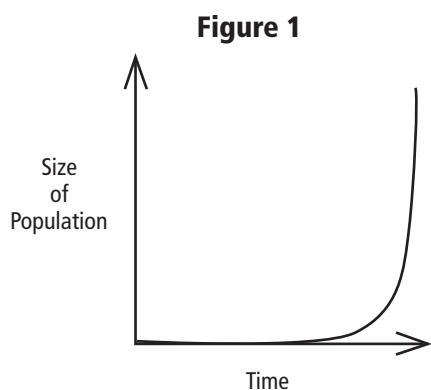
14. *Density-independent factors* include parasites and disease.

15. On Isle Royale, the population of moose decreased as the population of wolves *decreased*.

16. Competition can occur *within a species* or *between two different species*.

Study Guide, Section 1: Population Dynamics continued

In your textbook, read about population growth rate.



Refer to **Figures 1 and 2**. Respond to each statement.

17. Identify the type of growth rate demonstrated in **Figure 1**.

18. Identify the type of growth rate demonstrated in **Figure 2**.

19. Tell which type of growth rate comes first.

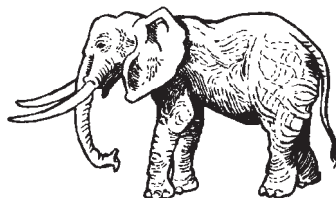
In your textbook, read about reproductive patterns.

Identify the following as being either an r-strategist or a k-strategist.



20. _____

22. _____



21. _____

23. _____

CHAPTER 4

Study Guide

Section 2: Human Population

In your textbook, read about human population.

Match the definition in Column A with the term in Column B.

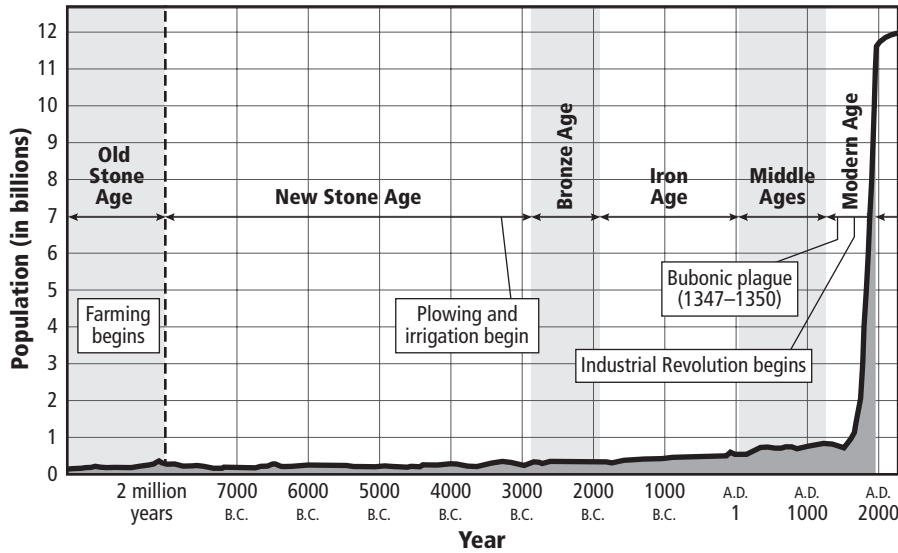
Column A

- _____ 1. when the birthrate equals the death rate
- _____ 2. the change in a population from high birthrate and death rate to low birthrate and death rate
- _____ 3. the number of males and females in each of three groups
- _____ 4. the study of the size, distribution, density, movement, death rate, and birthrate of a human population

Column B

- A. demography
- B. demographic transition
- C. age structure
- D. zero population growth

Human Population on Earth



In your textbook, read about human population growth.

Refer to the figure. Respond to each statement.

5. Find the world's population in A.D. 1000. **Find** the world's population in A.D. 2000.

6. State approximately when the Industrial Revolution began. **Tell** what effect the Industrial Revolution had on the human population on Earth.

7. Specify if the human population growth graph up until A.D. 2000 is exponential or logistic.

Study Guide, Section 2: Human Population continued

In your textbook, read about trends in human population growth.

If the statement is true, write true. If the statement is false, replace the italicized word or phrase to make it true.

8. Industrially developed countries generally have *high* population growth rates.

9. If Honduras were to experience a low birthrate and death rate in the next five years, it would be undergoing a *demographic transition*.

10. Once the world reaches zero population growth, the *age structure* will be more balanced.

11. Technology has allowed humans to temporarily increase the *carrying capacity* of Earth.

12. People in industrially developed countries use a lot *fewer* resources than people in developing countries.

In your textbook, read about age structure.

Complete the table by checking the correct column(s) for each example.

Example	Pre-reproductive	Reproductive	Post-reproductive
13. An 11-year-old boy			
14. A 65-year-old grandmother			
15. A 25-year-old man			
16. A newborn baby girl			
17. A 78-year-old man			
18. A 32-year-old woman			