

# Directed Reading

## Section: How Populations Grow

Complete each statement by writing the correct term or phrase in the space provided.

1. A(n) \_\_\_\_\_ consists of all the individuals of a species that live together in one place at one time.
2. The statistical study of all populations is called \_\_\_\_\_ .
3. The way individuals of a population are arranged in space is called \_\_\_\_\_ .
4. Demographers are interested in predicting how the \_\_\_\_\_ of a population will change.

Read each question, and write your answer in the space provided.

5. Why is size an important feature of a population?

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6. Why is density an important feature of a population?

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**Directed Reading** *continued*

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**7.** What is a population model?

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**8.** How is the growth rate of a population calculated?

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**9.** What are density-dependent factors? Give an example of a density-dependent factor.

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**10.** What is the logistic model of population growth?

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**Directed Reading** *continued*

**Complete each statement by writing the correct term or phrase in the space provided.**

11. In a(n) \_\_\_\_\_ , the rate of population growth is constant.
12. The population size that an environment can sustain is called the \_\_\_\_\_ .

**In the space provided, write the letter of the description that best matches the term or phrase.**

- |                                       |  |
|---------------------------------------|--|
| _____ 13. density-independent factors | a. grow exponentially when environmental conditions allow them to reproduce            |
| _____ 14. <i>r</i> -strategists       | b. environmental conditions  |
| _____ 15. <i>K</i> -strategists       | c. their population density is usually near the carrying capacity of their environment |
| _____ 16. density-dependent factors   | d. amount of limited resources   |

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

- \_\_\_\_\_ 17. Which of the following are mosquito populations?
- |                          |                           |
|--------------------------|---------------------------|
| a. <i>r</i> -strategists | c. <i>N</i> -strategists  |
| b. <i>K</i> -strategists | d. <i>pq</i> -strategists |
- \_\_\_\_\_ 18. Many *r*-strategists are found in a
- |                                  |
|----------------------------------|
| a. stable environment.           |
| b. rapidly changing environment. |
| c. humid environment.            |
| d. slowly changing environment.  |
- \_\_\_\_\_ 19. In general, *r*-strategists have all of the following characteristics EXCEPT
- |                                  |
|----------------------------------|
| a. a short life span.            |
| b. reproduction early in life.   |
| c. parental care of offspring.   |
| d. production of many offspring. |
- \_\_\_\_\_ 20. Populations that grow slowly are
- |                                    |
|------------------------------------|
| a. <i>K</i> -strategists.          |
| b. endangered.                     |
| c. genetically similar.            |
| d. decreasing in allele frequency. |