

# Chapter 2

## Principles of Ecology

### Reinforcement and Study Guide

#### Section 2.1 Organisms and Their Environment

*In your textbook, read about what ecology is and about aspects of ecological study.*

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

ecology      biotic factors      nonliving      environments      atmosphere  
humans      organisms      soil      biosphere      abiotic factors

Living organisms in our world are connected to other **(1)** \_\_\_\_\_ in a variety of ways. The branch of biology called **(2)** \_\_\_\_\_ is the scientific study of interactions among organisms and their **(3)** \_\_\_\_\_, including relationships between living and **(4)** \_\_\_\_\_ things.

All living things on Earth can be found in the **(5)** \_\_\_\_\_, the portion of Earth that supports life. It extends from high in the **(6)** \_\_\_\_\_ to the bottom of the oceans. Many different environments can be found in the biosphere. All living organisms found in an environment are called **(7)** \_\_\_\_\_. Nonliving parts of an environment are called **(8)** \_\_\_\_\_. For example, whales, trees, and **(9)** \_\_\_\_\_ are biotic factors. Ocean currents, temperature, and **(10)** \_\_\_\_\_ are abiotic factors.

*In your textbook, read about levels of organization in ecology.*

For each item in Column A, write the letter of the matching item in Column B.

Column A	Column B
_____ <b>11.</b> A group of organisms of one species that interbreed and live in the same place at the same time	<b>a.</b> community
_____ <b>12.</b> A collection of interacting populations	<b>b.</b> competition
_____ <b>13.</b> Interactions among the populations and abiotic factors in a community	<b>c.</b> forest
_____ <b>14.</b> Occurs between organisms when resources are scarce	<b>d.</b> population
_____ <b>15.</b> A terrestrial ecosystem	<b>e.</b> ecosystem

**Chapter**  
**2**
**Principles of Ecology, continued**
**Reinforcement and Study Guide**
**Section 2.1 Organisms and Their Environment, continued**

*In your textbook, read about organisms in ecosystems.*

For each statement below, write **true** or **false**.

- \_\_\_\_\_ **16.** A habitat is the role a species plays in a community.
- \_\_\_\_\_ **17.** Habitats may change.
- \_\_\_\_\_ **18.** A niche is the place where an organism lives its life.
- \_\_\_\_\_ **19.** A habitat can include only one niche.
- \_\_\_\_\_ **20.** A species' niche includes how the species meets its needs for food and shelter.
- \_\_\_\_\_ **21.** The centipedes and worms that live under a certain log occupy the same habitat but have different niches.
- \_\_\_\_\_ **22.** It is an advantage for two species to share the same niche.
- \_\_\_\_\_ **23.** Competition between two species is reduced when the species have different niches.

Complete the table below by writing the kind of relationship described on the left.

<b>Relationships Among Organisms</b>	
<b>Description of Relationship</b>	<b>Kind of Relationship</b>
<b>24.</b> Organisms of different species live together in a close, permanent relationship.	
<b>25.</b> One species benefits and the other species is neither benefited nor harmed by the relationship.	
<b>26.</b> One species benefits from the relationship at the expense of the other species.	
<b>27.</b> Both species benefit from the relationship.	