

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

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