# **Ecology**

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#### TABLE OF CONTENTS

Oikos • Home	OEkologie <b>▶</b> Ecology	1
Ecology Glossary		2
Ecology Vocabula	ary	3
Word Search Puzzle4		
Water and You		5
The Water Cycle6		
Water Cycle		7
Review8		
Life Depends on	the Sun	9
Capturing the Sun's Energy: photosynthesis10		
The Flow of Ener an Ecosystem	gy Through	11
Decomposers		12
Carbon and Nitrogen Cycles13		
Decomposition14		

Review	15
Crossword Review	16
An Introduction to Food Webs	17
Food Webs	18
The Forest Pond1	9, 20
Biomes	21
A Polar Biome	22
A Desert Biome	23
A Temperate Biome	24
A Tropical Biome	25
Biome Activities	26
Decision-Making Activity (Role Playing)	27
Review	28
Ecology Background Material	29
Answers	31

The activities in this book reinforce basic concepts in the study of ecology, including the water cycle, dependence on energy from the Sun, photosynthesis, food chains and webs, and biomes.

General background information, suggested activities, questions for discussion, and answers are included. Encourage students to keep completed pages in a folder or notebook for further reference and review.

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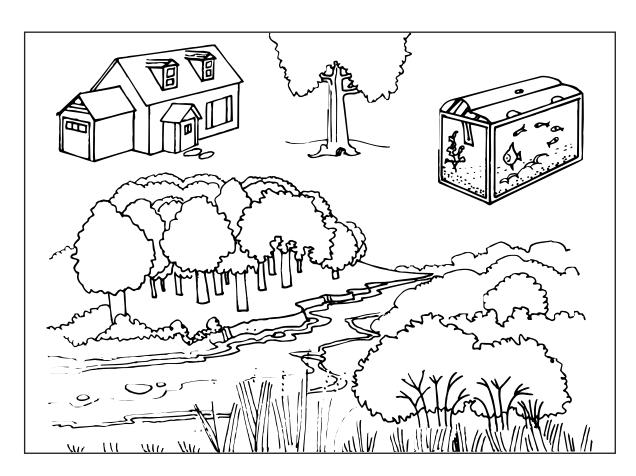
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#### **ECOLOGY**

# OIKOS HOME OEKOLOGIE ECOLOGY



Each illustration above represents an *oikos*, the Greek word for home. About 80 years ago, biologist Ernst Haeckel took the Greek word *oikos* and developed the word *oekologie*. He used that word to define the study of the relationships of living things to each other and to their environment. Later, this word was simplified to the term, **ecology**.

#### ACTIVITY

house	tree
aquarium	forest
Define in your own words what the term ecolog	gy means.

#### **ECOLOGY**

## **ECOLOGY GLOSSARY**

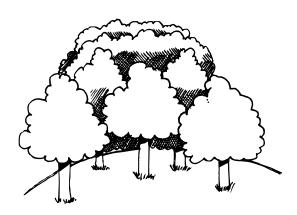
Keep this glossary page in a notebook or folder. Add new words to your vocabulary as you study ecology.

- **Atmosphere**—The mass that surrounds the Earth.
- **Biome**—A large land community in which conditions of life are more or less uniform.
- **Desert Biome**—A land community having less than ten inches of rainfall each year, hot days, cool nights, and scattered vegetation.
- **Tropical Biome**—A land community having much rainfall and warm temperatures; usually located near the equator.
- **Polar Biome**—A land community having permanently frozen subsoil and little vegetation; located near the polar regions.
- **Temperate Biome**—A land community having definite seasons and wet and dry periods. The central and eastern United States are part of this biome.
- **Carnivore**—A meat-eating animal.
- **Chlorophyll**—The green coloring matter of green plants.
- **Conservation**—The wise use of natural resources.
- **Consumer**—Any organism that uses, rather than produces food.
- **Decomposer**—An organism that breaks down the substance of dead organisms.

  Mushrooms and bacteria are decomposers.
- **Ecology**—The study of living things in their environment.
- **Ecosystem**—The interlocking life in an area.
- **Environment**—All the influences, including the location, which affect a living thing.
- **Evaporate**—To change from liquid water to water vapors.

- **Food Chain**—A transfer of food energy from one organism to another.

  Producer/Consumer/Decomposer
- **Food Web**—A group of interlinked food chains.
- **Habitat**—The physical place where an organism lives.
- **Herbivore**—A plant-eating animal or insect.
- **Omnivore**—An animal that eats both plants and other animals.
- **Photosynthesis**—The food making process of green plants.
- **Precipitation**—Water droplets or ice particles condensed from water vapor, massive enough to fall to Earth's surface.
- **Producer**—A living thing that makes food. Green plants are producers.
- **Scavenger**—An animal or insect that feeds on the remains of dead animals. Vultures and ants are scavengers.
- **Transpiration**—Giving off air or vapor through pores of skin or leaves.



#### **ECOLOGY**

### **ECOLOGY VOCABULARY**

Use the words from your ecology glossary to complete the following sentences.

- 1. \_\_\_\_\_\_ is the study of living things in relationship to their environment.
- 2. An animal that eats only other animals is a \_\_\_\_\_\_.
- 3. An \_\_\_\_\_\_ is an animal that eats both plants and other animals.
- 4. A plant-eating animal or insect is a(n) \_\_\_\_\_\_.
- 5. A plant makes food for itself by means of \_\_\_\_\_\_.
- 6. Food chains in a community make up a \_\_\_\_\_\_
- 7. Plants and animals of the \_\_\_\_\_\_ survive with very little water.
- 8. A mushroom is a \_\_\_\_\_ in a food chain.
- 9. A \_\_\_\_\_\_ performs a clean-up task by removing the remains of dead animals.
- 10. Desert, temperate, jungle, and polar are four types of \_\_\_\_\_\_.
- 11. A \_\_\_\_\_ consists of a producer, a consumer, and a decomposer.
- 12. An \_\_\_\_\_\_ is a plant and animal community together within its environment.
- 13. The physical place where an organism lives is its \_\_\_\_\_\_.
- 14. Our surroundings are called our \_\_\_\_\_\_.
- 15. Man is a \_\_\_\_\_ in a food chain.
- 16. The \_\_\_\_\_ has hot summers and cold winters.
- 17. The \_\_\_\_\_\_ is wet, warm, and near the equator.
- 18. The snowshoe rabbit changes to a winter-white color to blend in with the snow in the
- 19. \_\_\_\_\_ makes plants green.
- 20. We must practice \_\_\_\_\_\_ to make our natural resources last.

