





# PREREADING ACTIVITIES



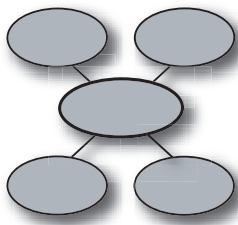
**Before distributing KIDS DISCOVER *Ecology*, activate students' prior knowledge and set a purpose for reading with these activities.**

## Discussion

To get students thinking about how this topic relates to their interests and lives, ask:

- ✓ *What are some ways people can and do help the environment?*
- ✓ *What are some ways people hurt the environment?*

## Concept map



Explain to students that they will be reading *Ecology*. Ask: *What are some words that are related to ecology?* List students' responses on the board. (See box below for some terms they may suggest.) After creating a list, ask students to

group the words into categories, such as **Life Cycles** or **Environmental Problems**. Create a concept map by writing *Ecology* on the board and circling it. Write the categories around the circle and draw lines between the ideas to show connections. Then write the words from the list around the appropriate categories. Encourage students to add more words to the concept map as they read *Ecology*.

### KEY TERMS

- |                     |               |
|---------------------|---------------|
| ✓ environment       | ✓ community   |
| ✓ greenhouse effect | ✓ population  |
| ✓ global warming    | ✓ niche       |
| ✓ biosphere         | ✓ food chain  |
| ✓ biome             | ✓ food web    |
| ✓ ecosystem         | ✓ water cycle |

## Get Set to Read (Anticipation Guide)



Copy and distribute the **Get Set to Read** blackline master (page 3 of this Teacher's Guide). Explain to students that this **Anticipation Guide** will help them find out what they know and what misconceptions they have about the topic. **Get Set to Read** is a list of statements—some true, some false. Ask students to write whether they think each statement is true or false in the **Before Reading** column. Be sure to tell students that it is not a test and they will not be graded on their answers. The activity can be completed in a variety of ways for differentiated instruction:

- ◆ **Have students** work on their own or in small groups to complete the entire page.
- ◆ **Assign pairs** of students to focus on two statements and to become "experts" on these topics.
- ◆ **Ask students** to complete the **Before Reading** column on their own, and then tabulate the class's answers on the chalkboard, on an overhead transparency, or on your classroom computer.
- ◆ **Review the statements** orally with the entire class.

If you predict that students will need assistance finding the answers, complete the **Page Number** column before copying **Get Set to Read**.

## Preview

Distribute *Ecology* and model how to preview it. Examine **titles, headings, words in boldface type, pictures, charts, and captions**. Then have students add new information to the **Concept Map**. If students will only be reading a few pages at one sitting, preview only the selected pages.

## BE WORD WISE WITH POWER VOCABULARY!

You have exclusive access to additional resources including Power Vocabulary blackline masters for every available KIDS DISCOVER title! These activities introduce students to 15 specialized and general-use vocabulary words from each KIDS DISCOVER title. Working with both types of words helps students develop vocabulary, improve comprehension, and read fluently. Follow the links from your Teacher's Toolbox CD-ROM and find your title to access these valuable resources:

- ◆ Vocabulary cards
- ◆ Crossword puzzle
- ◆ Word find
- ◆ Matching
- ◆ Cloze sentences
- ◆ Dictionary list



Name \_\_\_\_\_ Date \_\_\_\_\_

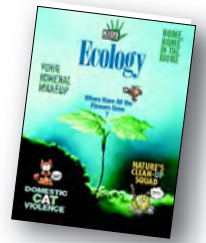
# Get Set to Read

What do you know about ecology? In “Before Reading,” write *true* if you think the statement is true. Write *false* if you think the statement is not true. Then read **KIDS DISCOVER Ecology**. Check back to find out if you were correct. Write the correct answer and the page number where you found it.

**CHALLENGE:** Rewrite each false sentence in a way that makes it true.

Before Reading		After Reading	Page Number
_____	1. Ecology is the study of living things and their environment.	_____	_____
_____	2. Tundra is an example of a water biome.	_____	_____
_____	3. Plants make their own food.	_____	_____
_____	4. Carbon dioxide helps to trap the Sun’s energy.	_____	_____
_____	5. Humans have caused the extinction of some species of plants and animals.	_____	_____
_____	6. About 99 percent of the species of plants and animals that ever lived on Earth are still alive.	_____	_____
_____	7. In an ecosystem, more than one kind of animal has the same niche.	_____	_____
_____	8. Natural disasters, such as volcanoes, have only harmful effects.	_____	_____
_____	9. Human activities have little impact on other animals.	_____	_____
_____	10. The number of amphibians on Earth is increasing.	_____	_____





Name \_\_\_\_\_ Date \_\_\_\_\_

## It's in the Reading

After reading **KIDS DISCOVER Ecology**, choose the best answer for each question. Fill in the circle.



*Find your answers on the pages shown in the book icon next to each question.*

**1. The term ecology comes from Greek words meaning \_\_\_\_.**

- A. the science of living things
- B. the study of a place to live
- C. the science of ecosystems
- D. the study of natural history



**2. Cold winters, hot summers, and few trees are characteristics of \_\_\_\_.**

- A. temperate grasslands
- B. deserts
- C. chaparral
- D. tundra



**3. One way mushrooms differ from plants is that mushrooms \_\_\_\_.**

- A. do not move around
- B. are decomposers
- C. make their own food
- D. do not grow



**4. The honey guide bird and ratel work together to find food. In this way, the honey guide bird gets the beeswax it eats and the ratel gets the honey it eats. Their relationship is an example of \_\_\_\_.**

- A. parasite relationship
- B. decomposition
- C. mutualism
- D. commensalism



**5. Carbon dioxide is taken in by \_\_\_\_.**

- A. rotting plants and animals
- B. burning fuels
- C. living animals
- D. living plants



# It's in the Reading (continued)

6. *Homo sapiens* is the species name for \_\_\_\_.

- A. plankton
- B. impalas
- C. humans
- D. African elephants



7. In an ecosystem, cheetahs may be part of the same \_\_\_\_ as lions.

- A. niche
- B. population
- C. community
- D. species



8. In the process of succession, the first plants to return to a destroyed area are \_\_\_\_.

- A. grasses and weeds
- B. bushes
- C. small trees
- D. large trees



9. Farmland is being replaced by housing and businesses because \_\_\_\_.

- A. people need less food
- B. farming the land is less profitable than providing housing and businesses
- C. more people need larger homes
- D. the land is no longer good for farming



10. What's your opinion? Are people's activities increasing the likelihood of global warming? Can people do something to prevent global warming? What can you as an individual do?

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Name \_\_\_\_\_ Date \_\_\_\_\_

## Everything Visual

Maps are useful visuals that may show countries, mountains, roadways, or land features. Together with map keys, they provide information about an area. Study the map of the continents on pages 4–5 of *KIDS DISCOVER Ecology*. Find the names of the continents on another map. Then answer the questions.

1. What is the title of the map?

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2. What information about the map does the map key provide?

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3. Which continents on the map do not have a tundra biome?

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4. What biomes does Australia have? What background knowledge do you need to answer this question?

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5. If you travel by car from a tundra, which biome will you most likely visit next?

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6. Which continent is mostly savannah and desert? What background knowledge do you need to answer this question?

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7. Study the pictures and text under the map. How do they support the map?

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Name **ANSWER KEY** \_\_\_\_\_ Date \_\_\_\_\_

## Get Set to Read

What do you know about ecology? In “Before Reading,” write *true* if you think the statement is true. Write *false* if you think the statement is not true. Then read **KIDS DISCOVER Ecology**. Check back to find out if you were correct. Write the correct answer and the page number where you found it.

**CHALLENGE:** Rewrite each false sentence in a way that makes it true.

Before Reading		After Reading	Page Number
_____	1. Ecology is the study of living things and their environment.	<u>True</u>	<u>p. 2</u>
_____	2. Tundra is an example of a <del>water biome.</del> <i>(land biome)</i>	<u>False</u>	<u>p. 4</u>
_____	3. Plants make their own food.	<u>True</u>	<u>p. 6</u>
_____	4. Carbon dioxide helps to trap the Sun’s energy.	<u>True</u>	<u>p. 9</u>
_____	5. Humans have caused the extinction of some species of plants and animals.	<u>True</u>	<u>p. 10</u>
_____	6. About 99 percent of the species of plants and animals that ever lived on Earth are <del>still alive.</del> <i>(now extinct)</i>	<u>False</u>	<u>p. 10</u>
_____	7. In an ecosystem, <del>more than one kind of animal has the same niche.</del> <i>(each kind of animal has its own unique niche)</i>	<u>False</u>	<u>p. 13</u>
_____	8. Natural disasters, such as volcanoes, have <del>only harmful effects.</del> <i>(harmful and helpful effects)</i>	<u>False</u>	<u>p. 13</u>
_____	9. Human activities have <del>little</del> impact on other animals. <i>(great)</i>	<u>False</u>	<u>p. 15</u>
_____	10. The number of amphibians on Earth is <del>increasing.</del> <i>(decreasing)</i>	<u>False</u>	<u>p. 16</u>



Name **ANSWER KEY** \_\_\_\_\_ Date \_\_\_\_\_

## It's in the Reading

After reading KIDS DISCOVER *Ecology*, choose the best answer for each question. Fill in the circle.



Find your answers on the pages shown in the book icon next to each question.

1. The term ecology comes from Greek words meaning \_\_\_\_

- A. the science of living things
- B. the study of a place to live (*word meaning*)
- C. the science of ecosystems
- D. the study of natural history



2. Cold winters, hot summers, and few trees are characteristics of \_\_\_\_.

- A. temperate grasslands (*classification*)
- B. deserts
- C. chaparral
- D. tundra



3. One way mushrooms differ from plants is that mushrooms \_\_\_\_.

- A. do not move around
- B. are decomposers (*comparison and contrast*)
- C. make their own food
- D. do not grow



4. The honey guide bird and ratel work together to find food. In this way, the honey guide bird gets the beeswax it eats and the ratel gets the honey it eats. Their relationship is an example of \_\_\_\_.

- A. parasite relationship
- B. decomposition
- C. mutualism (*generalization*)
- D. commensalism



5. Carbon dioxide is taken in by \_\_\_\_.

- A. rotting plants and animals
- B. burning fuels
- C. living animals
- D. living plants (*details*)



6. *Homo sapiens* is the species name for \_\_\_\_.

- A. plankton
- B. impalas
- C. humans (*context clues*)
- D. African elephants



7. In an ecosystem, cheetahs may be part of the same \_\_\_\_ as lions.

- A. niche
- B. population
- C. community (*classification*)
- D. species



8. In the process of succession, the first plants to return to a destroyed area are \_\_\_\_.

- A. grasses and weeds (*sequence*)
- B. bushes
- C. small trees
- D. large trees



9. Farmland is being replaced by housing and businesses because \_\_\_\_.

- A. people need less food
- B. farming the land is less profitable than providing housing and businesses (*conclusion*)
- C. more people need larger homes
- D. the land is no longer good for farming



10. What's your opinion? Are people's activities increasing the likelihood of global warming? Can people do something to prevent global warming? What can you as an individual do?

*Answers will depend on students' opinions. Most are likely to agree that individuals can help prevent global warming through conservation and other choices.*



Name **ANSWER KEY** \_\_\_\_\_ Date \_\_\_\_\_

## Everything Visual

Maps are useful visuals that may show countries, mountains, roadways, or land features. Together with map keys, they provide information about an area. Study the map of the continents on pages 4–5 of KIDS DISCOVER *Ecology*. Find the names of the continents on another map. Then answer the questions.

1. What is the title of the map?

*“Biomes of the World” is the title of the map.*

2. What information about the map does the map key provide?

*The map key identifies the biome each color on the map represents.*

3. Which continents on the map do not have a tundra biome?

*South America, Africa, and Australia do not have tundra.*

4. What biomes does Australia have? What background knowledge do you need to answer this question?

*Australia has tropical rain forest, temperate rain forest, temperate grassland, savannah, chaparral, and desert. Students need to know the location of Australia.*

5. If you travel by car from a tundra, which biome will you most likely visit next?

*From the tundra, you would enter the coniferous forest.*

6. Which continent is mostly savannah and desert? What background knowledge do you need to answer this question?

*Africa is mostly desert and savannah. Students need to know the names of the continents and their location.*

7. Study the pictures and text under the map. How do they support the map?

*The pictures and captions provide detailed information about each biome shown on the map and its characteristics.*