

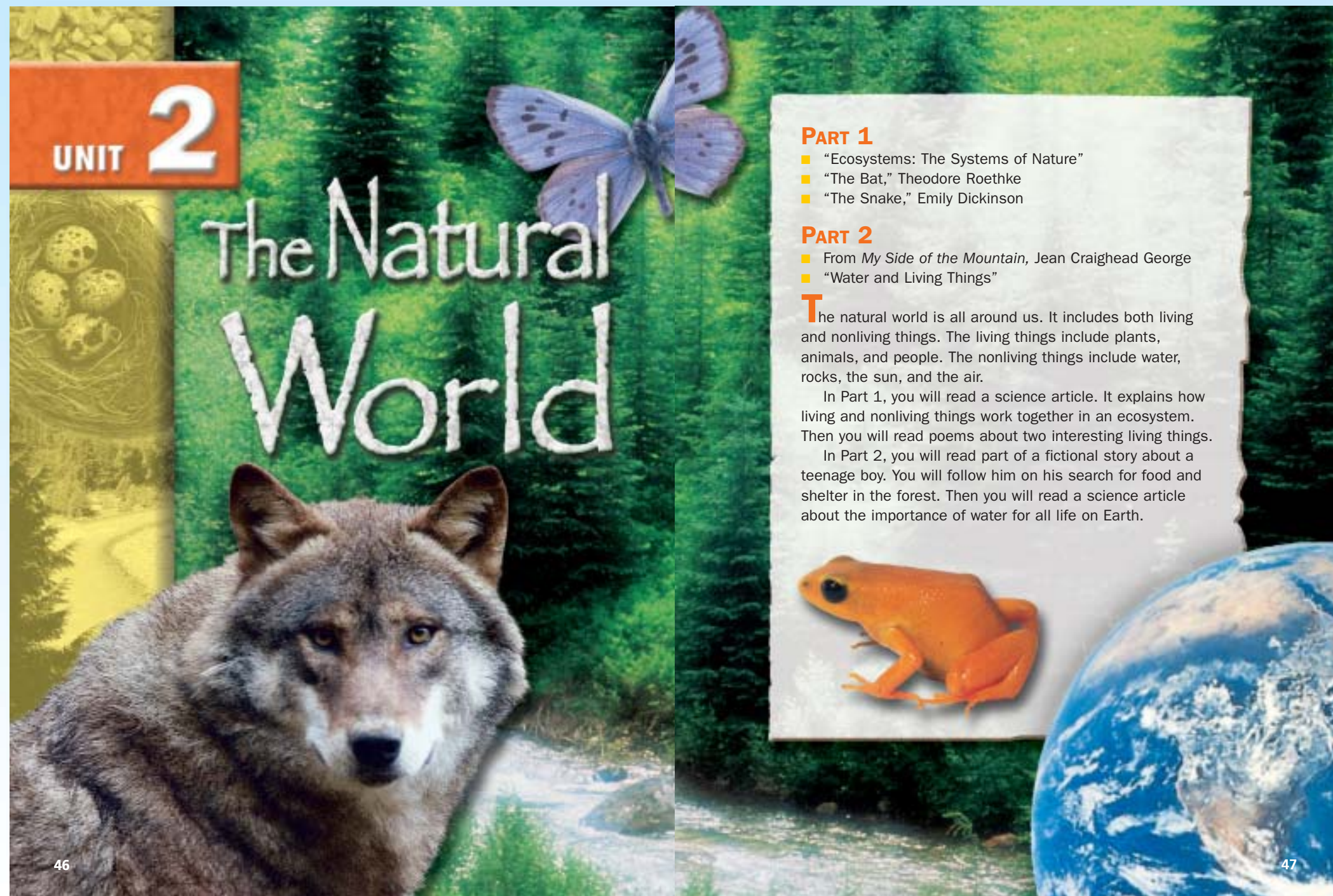
UNIT CONTENT

Part 1 of this unit includes a science article, "Ecosystems: The Systems of Nature," which explores ways in which all living things are connected to one another and to the nonliving things around them. The article is followed by two poems about two intriguing creatures: "The Bat" by Theodore Roethke and "The Snake" by Emily Dickinson.

Part 2 includes an excerpt from *My Side of the Mountain* that describes the challenges of wilderness survival for a young boy. It is followed by "Water and Living Things," an article about Earth's most valuable resource.

Viewpoint

Have students look at the art on the unit opener. Ask them to name and describe things in the collage that are living, including the wolf and the frog. Then have them name and describe things that are nonliving, such as the pebbles and the nest.



PART 1

- "Ecosystems: The Systems of Nature"
- "The Bat," Theodore Roethke
- "The Snake," Emily Dickinson

PART 2

- From *My Side of the Mountain*, Jean Craighead George
- "Water and Living Things"

The natural world is all around us. It includes both living and nonliving things. The living things include plants, animals, and people. The nonliving things include water, rocks, the sun, and the air.

In Part 1, you will read a science article. It explains how living and nonliving things work together in an ecosystem. Then you will read poems about two interesting living things.

In Part 2, you will read part of a fictional story about a teenage boy. You will follow him on his search for food and shelter in the forest. Then you will read a science article about the importance of water for all life on Earth.

DISCUSS THE THEME

Have students read the unit title. Discuss the meaning of the word *natural*. If necessary, explain that *natural* often refers to something that exists in or is made by nature, without the help of human beings. Ask a volunteer to name some things that exist in nature, such as plants, rivers, and birds. Tell students to think about the natural and artificial things they see on their way to school. Which are made by nature? Which are created by human beings? Ask students to name:

- living things
- nonliving things from the natural world
- nonliving things made by humans

QUICK WRITE



Have students list ten living things and five nonliving things.

WORKSHOP PREVIEW

Listening and Speaking

Students will give a presentation about a step-by-step process that occurs in the natural world.

Writing

Students will write an expository essay about living and nonliving things in their environment.

PROJECTS PREVIEW

Projects for this unit include:

- writing a nature poem or a skit
- making a poster to describe the local ecosystem or to compare two animals
- writing and performing a dialogue
- making a photographic display
- performing a song

TEACHING RESOURCES

Lesson Plans	pp. 17-30
Summaries	pp. 23-30
Graphic Organizers	1-20
Audio Program	CD1/6-9; Cass.1/B
Workbook	pp. 29-56
CD-ROM	Unit 2
Video	Segment 2
Tests	Part Test, pp. 37-44 Unit Test, pp. 89-97

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Describe for students general characteristics of living things, such as *grows*, *changes as it ages*, *uses nutrients*, *uses oxygen*, and *reproduces*. Name several things from nature, and have students say "living" if the thing is living, and "nonliving" if the thing is not.

Advanced: Have partners create a skit about two friends walking in a park. Explain that their conversation should focus on the living and nonliving things they see. Suggest that partners describe their reactions to what they observe. After rehearsing, pairs can present their skit to the group.

LEARNING MODALITIES

Kinesthetic: Ask a volunteer to pantomime a favorite thing from nature for group members to identify. Encourage students to name the features that helped them guess correctly, such as spreading arms to indicate the branches of a tree.

TEKS Corner
TAKS Preparation

7.1(C); 7.2(A); 7.5(C); 7.5(G); 7.15(A); 7.22(B); 7.25(D); 7.26(A)

OBJECTIVES

Explain to students that Part 1 features science information and ideas. Have students point to each objective as they read it along with you. Pause to clarify difficult words. Encourage students to use the objectives to discuss what they will learn. Additional practice activities for these objectives can be found in the **Workbook** and **CD-ROM**.

BACKGROUND

Have a volunteer read aloud the introductory paragraph. Then read and discuss the questions in the Make Connections section as a whole group. Ask students to name bodies of water that are close by; plants, trees, and crops that grow in the area; and wildlife that they have seen. Have students describe how the weather during the year affects the living things they have mentioned. Write student responses on an overhead projector, and have students copy them in their notebooks.

COOPERATIVE GROUPING

Have students review the Make Connections question about the weather in their area. Then ask them to brainstorm words related to local weather during each of the four seasons. Record the words on the board, using a web. Have students copy the web into their notebooks. Form two groups. Have one group use the words to orally describe the local weather throughout the year. Have the other group use the words to orally describe how the natural world responds to seasonal changes in the weather.

PART 1

OBJECTIVES LANGUAGE DEVELOPMENT

- Reading:
- Vocabulary building: *Greek and Latin roots*
 - Reading strategy: *Skimming*
 - Text types: *Science article, poetry*
 - Literary element: *Rhyme*

- Writing:
- Organizational diagram
 - Expository paragraph

- Listening/Speaking:
- Poetry
 - Comparing experiences
 - Asking for and giving information

- Grammar:
- Subject-verb agreement

- Viewing/Representing:
- Diagrams

ACADEMIC CONTENT

- Science vocabulary
- Natural systems and the environment
- Nature poetry

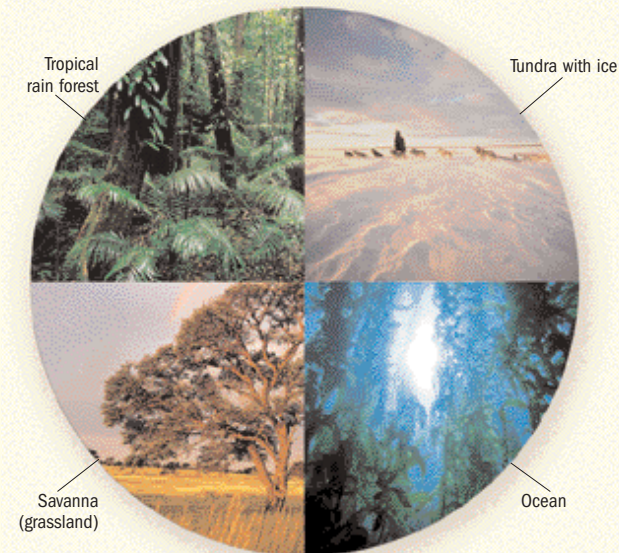
Prepare to Read

BACKGROUND

“Ecosystems: The Systems of Nature” is an informational science text. It contains facts about living and nonliving things.

Make connections What do you know about your environment—that is, the air, water, and land around you? Are there rivers or lakes? Plants or trees? Birds, fish, or other animals? What is the weather like?

Earth has several major kinds of environments. Tundra regions—treeless, nearly flat plains—cover much of the Arctic and other cold areas. Rain forests—very tall trees growing close together in places where it rains a lot—are found both in hot regions, such as Brazil, and in cooler areas, such as Washington state. Forests of trees that stay green or lose their leaves in the fall grow in regions with moderate temperatures and rainfall. Other major environments are deserts and grasslands, as well as water environments—oceans, lakes, rivers, streams, and wetlands. Which major environment do you live in?



VOCABULARY

Many English words, especially science words, have Greek or Latin roots. Learning the roots and their meanings can help you figure out the meanings of many new words.

Look at the chart. Use your understanding of the Greek or Latin roots and words to figure out the meaning of the **red** words. Write each word and its meaning in your notebook.

Greek or Latin Root	Greek or Latin Word	New Word
<i>car-</i> (flesh; meat)	<i>vorare</i> (to eat)	carnivore
<i>herba-</i> (plant)	<i>vorare</i> (to eat)	herbivore
<i>omni-</i> (everything)	<i>vorare</i> (to eat)	omnivore
<i>inter-</i> (between; together)	<i>actus</i> (to do)	interact
<i>organ-</i> (tool; part of the body; activity)	<i>-ism</i> (condition of)	organism
<i>eco-</i> (house; natural environment)	<i>systema</i> (placing together)	ecosystem

READING STRATEGY

Skimming

Skimming a text means reading it very quickly to get a general understanding of what it's about. Skimming can also help you establish your purpose for reading the text.

When you skim a text, follow these steps:

- Read the first and second paragraphs quickly.
- Read only the first sentences of the following paragraphs.
- Read the last paragraph quickly.

When you have finished skimming, you can read the whole text more carefully.

LEARN KEY WORDS

- carnivore**
- herbivore**
- omnivore**
- interact**
- organism**
- ecosystem**

TAKS prep

VOCABULARY

Pronounce each Key Word, and have students point to it and say the word after you. Then have them read the introductory text. Explain that many English words we use today come from the ancient Greek and Latin languages. Point to and pronounce each root and word on the chart. Have students repeat the roots in columns one and the words in column two and read the meanings aloud. Then have students read each new word aloud with you and use the information on the chart to tell what it means. Ask students to write each Key Word and its meaning in their notebooks.

READING STRATEGY

Have volunteers take turns reading aloud the Reading Strategy. Explain that first and last paragraphs often state the main idea in a selection. The first sentence of a paragraph often states the paragraph's main idea. Discuss how reading these paragraphs and sentences can help students get an idea of what a whole selection is about. Remind students that they should always go back and read a selection carefully after skimming. Use a section or chapter in a social studies or science text to model how to skim, reading aloud headings, opening and closing paragraphs, and topic sentences of key paragraphs. Follow the steps described in the Reading Strategy. After modeling, have students paraphrase what they think the text will be about.

TEACHING GUIDE

PRETEACH	Provide Background	Read and discuss the Background information. Complete the activity. (ATE/SB p. 48)
	Present Concepts	Introduce the Reading Strategy. (ATE/SB p. 49)
TEACH	Monitor Comprehension	Informally monitor comprehension while students read the selection independently or in groups. (ATE/SB pp. 50-55)
	Teach and Practice	Present the Grammar, Usage, and Mechanics. (ATE/SB pp. 62, 63) Complete the Writing activity. (ATE/SB p. 64) Present Grammar, Phonics, and Spelling minilessons. (ATE pp. 50, 52, 60)
CONNECT	Connect to Literature	Have students read the literature and relate it to the informational reading. (ATE/SB pp. 58-60)
	Across the Curriculum	Present curriculum links as students read. (ATE pp. 52, 54)
ASSESS	Check Knowledge	Assess students' comprehension by having them complete the Check Your Knowledge section. (ATE/SB p. 65)
	Monitor Progress	Use one or more of the print assessment resources in the Assessment Package.
EXTEND	Integrate Language and Apply Understanding	Have students complete the Workshops (ATE/SB pp. 84-87) and a project from the Unit Projects. (ATE/SB p. 88) Then have them choose a book to read from Further Reading. (ATE/SB p. 89)

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Make a three-column chart on the board and label the columns *Carnivore*, *Herbivore*, and *Omnivore*. Use the chart and give students clues to help them categorize a variety of creatures. For example, *A horse eats plants*. Encourage students to respond orally in complete sentences. (*A horse is a herbivore.*) Then have them add the name of the animal to the correct column.

Advanced: Write the words *carnivore*, *herbivore*, *omnivore*, *organism*, and *ecosystem* on index cards. Review their meanings, and have students practice reading the words. Hold the cards facedown. Students can take turns choosing a card, reading the word, and using it in a sentence. For example, *A carnivore eats meat*.

TEKS Corner

TAKS Preparation

7.1(E); 7.5(B); 7.5(G); 7.6(B); 7.10(A); 7.10(F); 7.10(M); 7.12(B); 7.25(D); 7.25(F); 7.28(F)

READING SUMMARY

This reading selection is about ecosystems. It focuses on animal habitats and communities and on the role each living thing plays in an ecosystem.

SCAFFOLDING

Have students in small groups read silently as they listen to the CD/tape. Then have them take turns reading aloud paragraphs to the group.

MODELING THE READING STRATEGY

Skimming: Before students begin reading, have them skim pages 50 and 51, including the headings, the opening paragraphs, and the topic sentences of the other paragraphs. Discuss how skimming this material can help them identify the type of information this selection will contain. Have students brainstorm a purpose for reading, based on their skimming of the text. A possible purpose might be to find out what an organism is and where specific organisms live.

GUIDED READING

1. What is a species? (*A species is a group of very similar organisms.*)
2. What do you call the place where an animal or plant lives? (*its habitat*)
3. According to the selection, what is another word for *habitat*? (*surroundings or environment*)



Science

First, preview the text. Then skim it. Read the first and second paragraphs. Then read only the first sentences of the paragraphs that follow. Finally, read the last paragraph. When you've finished skimming, read the text more carefully. Be aware of your purpose for reading it.

Ecosystems

THE SYSTEMS OF NATURE

Organisms and Species

An organism is a living thing. A huge redwood tree is an organism. A small mouse is an organism. A tiny insect is an organism. You are an organism, too. Millions of organisms are so small that you cannot see them. Bacteria and viruses are examples of very small organisms.

A group of very similar organisms is a species. The organisms in a species are so similar that they can reproduce—have offspring, or babies—together, and their offspring can reproduce, too. Horses and cows, for example, cannot have offspring together because they are different species.



Insect (water strider)



A cat and its offspring

50



Birds tend their nest.

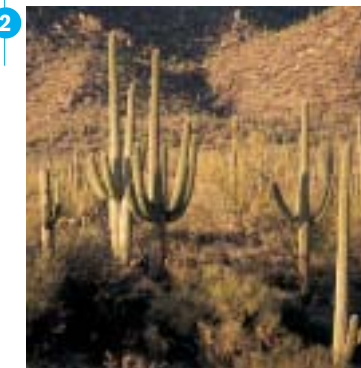
Habitats

A habitat is the place where an organism lives—its surroundings or environment. A habitat provides the things an organism needs to survive, such as food, water, a livable temperature, and shelter. A habitat can be as large as an ocean or as small as a drop of water. It can be a forest or one tree. Several species may live in the same habitat, such as a river.

Different organisms live in different habitats because they have different requirements for survival. For example, a river or lake can be the habitat of some species of freshwater fish, such as trout. Freshwater trout cannot survive in the ocean, which contains salt water. An ocean and a lake are very different habitats. Similarly, the desert in the southwestern United States and northern Mexico is the habitat of the saguaro cactus. The saguaro cactus cannot survive in a tropical rain forest.

Sometimes animals move to different places within their habitats. For example, many kinds of frogs are born in water. However, they live mostly on land when they grow up. During very cold weather, some frogs go under the ground or bury themselves in mud at the bottom of ponds to stay warm.

survive, live
shelter, protected place to live
requirements, needs
tropical, having a hot and wet climate
ponds, small lakes



Saguaro cacti

2

BEFORE YOU GO ON . . .

1. What is an organism? Give an example.
 2. What does an organism's habitat provide?
- HOW ABOUT YOU?**
- What is your habitat?

51

CRITICAL THINKING

Have students respond orally or in writing to these questions:

- Is a rock an organism? How do you know? (Possible answer: No. Rocks are not alive. They don't use oxygen. They don't grow. They don't need food and water.)
- Why might a nesting bird move from its habitat? (Possible answer: It might feel threatened by another animal.)

ACTIVE READING

Draw a two-column chart on the board. Write *Heading* at the top of the first column and *Important Facts* at the top of the second column. Have students copy the charts into their notebooks. Explain that as students read, they should write the name of each section in the first column and important facts about the section in the second column.

Viewpoint

Have students name and describe what they see in the pictures on page 51. Call attention to the heading *Habitats*. Ask students to describe the type of habitat shown in the picture on the right. Have them name some organisms that might live in that habitat, such as lizards and snakes.

GRAMMAR MINILESSON

Capitalization

Have volunteers write their full names on the board and underline the capital letters. Ask a student to explain the capitalization rule for writing proper names in English. If necessary, explain that initial letters in first, middle, and last names are capitalized in English. Have students look at the reading selection title on page 50 and point to the capital letter *E* in *Ecosystem*. Guide a student to explain the capitalization rules for story titles. Then have students skim the second paragraph on page 51 to find names of countries that are capitalized. (*United States, Mexico*) Explain that the names of specific people, places, things, and ideas are capitalized in English.

Remind students that a capital letter is also used at the beginning of every sentence. Have students skim a textbook and write an example of the following capitalized words: person's name; specific place, thing, or idea; story title; first word in a sentence. Ask each student to share his or her examples with a partner.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Have students look through a wildlife book that shows only one type of habitat, such as a desert. Prompt students to think of words that describe the habitat. Then have them point to and name or describe animals and plants in the photographs. List the words students used on the board, and then help them read the words. Ask students to use the words to write sentences.

Advanced: Ask partners to prepare a written or oral description of the perfect habitat for a human being. They should be ready to explain why they included each feature. Give them time to make a drawing or painting of their ideal habitat. When they are ready, have them share their ideas and art with the whole group. The speakers might ask their listeners: *Would you like to live here? Why or why not?*

TEKS Corner
TAKS Preparation

7.6(C); 7.7(D); 7.10(B); 7.10(F); 7.10(H); 7.10(K); 7.10(M); 7.11(A); 7.16(B); 7.22(B); 7.25(D); 7.26(D); 7.29(A); 7.30(B); 7.30(E)

MODELING THE READING STRATEGY

Skimming: Before reading, have students skim pages 52 and 53 by silently reading each heading and the topic sentence of each paragraph. Pause after each paragraph and have students tell what the paragraph is likely to be about. Explain that students can often turn headings into questions to create a purpose for reading. For example, students might read to find an answer to the question, How are populations, communities, and ecosystems interrelated?

GUIDED READING

1. According to the selection, what is a community? (*A community is all the populations that live together in one place.*)
2. What are some resources that populations in a community share? (*food, shelter*)
3. What are some natural nonliving things in an ecosystem? (*Possible answers: air, sunlight, water, soil*)

across the curriculum

GEOGRAPHY Many animals migrate long distances each year to reach breeding places or warmer climates. Provide a book that maps the migratory trails monarch butterflies follow on their way south. Display a map of North America and have students identify some of the places the monarchs pass over on their way to California or Central Mexico.

Populations and Communities

1 All the members of one species in the same area are a population. For example, all the frogs in a lake are a population. All the pine trees in a forest are a population. All the people in a city, state, or country are a population. Some populations do not stay in one place. Monarch butterflies travel south each year from parts of western Canada and the United States to Mexico. Some species of whales travel around many oceans.

A community is all the populations that live together in one place, such as all the plants and animals in a desert. In a community, the different populations live close together, so they interact with one another. One way populations interact in a community is by using the same resources, such as food and shelter. In a desert, for example, snakes, lizards, and spiders may all use rocks and holes for shelter. They may eat insects, other animals, or their own kind for food.



▲ A population of pine trees



▲ Two frogs on a mossy stone



The Parts of an Ecosystem

2 An ecosystem is made up of both the living and nonliving things in an area. Nonliving things include air, sunlight, water, rocks, and **soil**. All parts of an ecosystem, living and nonliving, interact. Plants take water from the soil, and they produce **oxygen**. Animals **breathe** in oxygen from the air. They eat plants and other animals.

soil, earth
oxygen, gas in the air that animals breathe in
breathe, take in air through the nose and mouth

▲ Oak tree ecosystem

CRITICAL THINKING

Have students respond orally or in writing to these questions:

- What or who might live in a forest community? (*Possible answers: trees, insects, birds, squirrels, people*)
- Think about your ecosystem. What natural nonliving things do you interact with? (*Possible answer: I enjoy the sunshine, drink water, breathe the air, walk on the soil.*)
- What kinds of places in a community might provide homes for animals? (*Possible answers: rocks, caves, tree branches, bushes, holes in trees, ponds*)

Viewpoint

Have students look at the art on page 53. Ask them to read the caption and describe what they see. Point out that the smaller circled drawings are enlargements of what might be found in specific parts of the ecosystem. Ask why it is helpful to see these larger pictures. (*If they were drawn to scale, they would be so small we wouldn't be able to tell what they are.*)

EXTEND THE LESSON

Cut out magazine pictures of animal homes. Form student groups. Provide one picture to each group. Ask students to discuss how the animal might find or build this home, in what habitat this home might be found, and how long they think the animal might stay here. Have groups report their ideas to the class.

PHONICS MINILESSON

Long and Short o, u

Have students repeat /ō/ after you. Explain that this is the short o sound. Read the following sentences, emphasizing the vowel sounds in the underlined words, and have students raise their hands each time they hear the short o sound: *Fish live in ponds; The nest is at the top of the tree.* Repeat this activity for long o /ō/, short u /ū/, and long u /yōō/, using the following sentences respectively: *A snake lives under that stone; Frogs and toads are similar; A bat hunts at night; Bugs live in most habitats; A human is a living thing; Horses and mules are related.* Write the following words on the board: *hole, humid, sun, rock.* Have students pronounce the words and identify the sounds. Then ask them to find and pronounce words with these vowel sounds on pages 52 and 53. Have them identify the vowel sound in each word. Is it a long or short o? Is it a long or short u?

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Explain to students that living things in a "community" can share certain resources, such as food and shelter. Have student pairs create a two-column chart with the headings *Food* and *Shelter*. Along the left side of the chart, have students write the names of creatures that might live in the same habitat, such as squirrels and chipmunks. Have pairs fill in the chart to name the type of food and shelter each creature needs.

Advanced: Provide wildlife books with features on several different animals. Have pairs of students choose an animal and, using the text and pictures, prepare a written and oral report explaining how the animal interacts with the living and nonliving things in its community. When students report to the whole group, prompt listeners to comment and ask questions.

**TEKS Corner
TAKS Preparation**

- 7.2(D); 7.5(B); 7.6(C); 7.10(B); 7.10(H); 7.10(K); 7.10(M); 7.11(A); 7.11(C); 7.13(B); 7.13(F); 7.22(B); 7.25(D); 7.25(F); 7.26(A); 7.26(C); 7.27(G); 7.28(A); 7.30(B)

GUIDED READING

1. According to the selection, what is a producer? (*an organism that can make its own food*)
2. What is an herbivore? (*a consumer that eats only plants*)
3. How do all food chains begin? (*They begin with plants.*)

Three Kinds of Organisms

1 In an ecosystem, there are three kinds of organisms: producers, consumers, and decomposers. Each kind of organism is important.

Most producers are plants. They use **energy** from sunlight to make their own food from water and carbon dioxide. (Carbon dioxide is a gas in the air. People and animals breathe it out.) This **process** of making food is called photosynthesis.

Consumers cannot make their own food. They eat, or consume, other organisms. All animals are consumers.

Consumers are **classified** by what they eat. Some consumers, such as deer, horses, and many birds, are herbivores: They eat only plants. Other consumers, such as lions, spiders, and snakes, are **carnivores**: They eat only animals. Some consumers, such as crows and bears, eat plants *and* animals: They are called **omnivores**. Some carnivores are scavengers. A scavenger eats dead organisms. Scavengers include vultures and catfish.

2 Some consumers are also decomposers. Decomposers break down dead plants and animals. The dead plants and animals are changed into **nutrients**, which go back into the soil. Producers—plants—consume these nutrients. Decomposers are very important in the ecosystem because plants need nutrients to grow.

The two main kinds of decomposers are bacteria and fungi. Bacteria are very small living things. We cannot see bacteria, but they live in soil, air, and water and on other organisms. Fungi are plantlike organisms without leaves that grow in dark, warm, wet places. Mushrooms are one kind of fungus.

energy, power that produces heat
 process, steps needed for something to happen
 classified, put into groups
 nutrients, substances that help plants or animals grow



▲ Vulture (scavenger)



▲ Bear (omnivore)



▲ Fungi (decomposers)



▲ Food chain of grass (a producer), a mouse (a small consumer), and a hawk (a larger consumer)

Food Chains

The **movement** of food through a community is called a food chain. A food chain always begins with producers—plants. In the ocean, a food chain begins with algae, which are very small plantlike organisms. Small fish eat the algae. Medium-size fish eat the small fish. Big fish eat the medium-size fish.

On land, a food chain is similar. It begins with a plant. A consumer, such as an insect, eats the plant. Then another consumer, such as a bat, eats the insect. Next, a bigger consumer, such as an owl, eats the bat. Finally, the owl dies, and decomposers break it down into nutrients.

Every part of the food chain is necessary to every other part. Without water, plants die. Without plants, animals cannot live.

movement, change in position or place

BEFORE YOU GO ON . . .

- 1 Name the three kinds of organisms in an ecosystem.
- 2 What are three kinds of consumers?

HOW ABOUT YOU?

- Are you a herbivore, a carnivore, or an omnivore? Explain.

CRITICAL THINKING

Have students respond orally or in writing to these questions:

- Think about where people fit into a food chain. Are they at the bottom, in the middle, or at the top? Why do you think so? (*Possible answer: They are at the top, because they usually eat plants, small animals, and large animals.*)
- Do you think that one part of the food chain is more important than another? Why or why not? (*Possible answer: No. All parts are equally important, because they are all connected.*)

MODELING THE READING STRATEGY

Skimming: Discuss how skimming can help students review what they have already read. Then have students skim the heading and topic sentences on page 54 and identify the main ideas.

Viewpoint

Have students look at the art on page 55. Ask:

- Why do you think this art was chosen for this page? (*It illustrates a food chain.*)
- How does the art help you better understand what you read? Explain your answer. (*Answers will vary.*)

WEBSITES

For more information, log on to <http://www.longman.com/shiningstar> for links to other interesting websites about ecosystems.

across the curriculum

HEALTH Explain to students that bacteria are all around us and inside us. Useful bacteria help us digest foods. We also use them to produce medicines (antibiotics) and to make foods like yogurt and cheese. Some bacteria are bad for people and can cause infections and illnesses. Help students prepare a written list of rules that will help them avoid bacterial illnesses and infections. The list might include these precautions: washing hands and foods before eating and cooking, avoiding swimming in or drinking unsafe water, and covering the mouth when coughing and sneezing.



People's diets vary in relation to the different plants that grow in their region of the world. Some foods that are common elsewhere in the world are not as well known in the United States, including Latin American plantains, Indian jackfruit and lotus seeds, and certain types of Japanese seaweed. Have each student draw a picture of an exotic fruit or vegetable he or she has eaten, one that is not commonly grown in the United States. Help students label their drawings with the food's name and region of origin. Then have students share their drawings with the group.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Have pairs of students work together to draw one of the two food chains described on page 55. Tell them to label each link in the chain. Then have pairs present their drawing to one another and compare them.

Advanced: Have partners look through a wildlife book, choose a wild animal, and draw a food chain in which it appears. Instruct them to keep their food chains simple and show only one of the animal's food sources and only one of its predators. When they are finished, have them show and explain their drawings to the whole group. Prompt listeners to contribute other facts about the animals depicted in the food chain.

TEKS Corner TAKS Preparation

7.6(C); 7.10(F); 7.10(H); 7.10(K); 7.10(L); 7.10(M); 7.11(A); 7.13(B); 7.25(F); 7.30(A); 7.30(E)

Review and Practice

COMPREHENSION

Reread "Ecosystems: The Systems of Nature." Think about an ecosystem near your home, such as a river, a vacant lot, a marshy area, or a backyard. Next, copy this chart into your notebook. Complete the chart by listing all the living and nonliving things in the ecosystem you selected. Then pick one living thing and one nonliving thing in the ecosystem and, in the space below the two columns, describe how they interact.

Ecosystem	
<i>Living Things</i>	<i>Nonliving Things</i>
Interaction	

COMPREHENSION

Ask a volunteer to read aloud the directions on page 56. Then have students reproduce the chart in their notebooks. Ask students to work in pairs or groups to select a nearby ecosystem and brainstorm a list of all the living and nonliving things in it. Have students use their lists to fill in the top part of the chart. Direct groups to select one living thing and one nonliving thing in the ecosystem and discuss how they interact. Then have them fill in the bottom half of the chart. As groups work on their charts, have them respond to these questions orally or in writing:

1. What producers, consumers, and decomposers live in this ecosystem? *(Answers will vary.)*
2. What kinds of food and shelter do some of the living things in this environment need? *(Answers will vary.)*
3. What resources in this ecosystem are shared by a variety of organisms? *(Possible answer: air, water, soil)*

CRITICAL THINKING



After students complete their charts, have them respond orally or in writing to these questions:

- Would a carnivore eat spinach? Why or why not? *(No, because it doesn't eat plants. It only eats meat.)*
- Which two living things on your charts share common habitats? *(Answers will vary.)*

56

Deer (herbivore) ▶



EXTENSION

Match the words in the box with their definitions. Write the words and their definitions in your notebook.

bacteria	carnivore	community
ecosystem	food chain	habitat
organism	population	

1. a living thing
2. an animal that eats only animals
3. all the populations that live together in one place
4. all the members of one species in the same area
5. the movement of food through a community
6. a place where an organism lives
7. all the communities of living and nonliving things in an area
8. a type of decomposer

DISCUSSION

Discuss in pairs or small groups.

1. How do living things in the natural world affect you? How do you affect them? Give examples.
2. How do you affect nonliving things in the natural world? How do they affect you?
3. What would happen if something destroyed a part of an ecosystem? For example, what would happen if someone cut down the trees in a forest? How would that affect other living and nonliving things?

TAKS prep

57

EXTENSION

Have students point to the words in the box as they read them aloud with you. Students can take turns reading the definitions. Match the first definition to the correct word as an example. *(organism)* Explain that students should write the correct answers on a numbered list in their notebook. Suggest that students skim the text to locate the information. When students are finished, have them share their word lists.

DISCUSSION

Have a volunteer read the first two questions aloud. Then have students take turns responding to the questions with a partner. Bring the group together to discuss their responses. Then have students answer question 3. Encourage them to refer to the charts they completed on page 56 as they identify how living and nonliving things in the ecosystem interact and how a change in one part of the ecosystem can have far-reaching effects.

METACOGNITION

Ask students:

1. How did this selection increase your awareness of the natural world?
2. How has the information in this selection changed the way you think about yourself and your place in your community?
3. How did skimming the selection help you understand and recall what you read?

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: To help students complete the Extension activity, first review the meanings of these Greek and Latin roots: *eco-*, *systema-*, *organ-*, *-ism*, *carn-*, *vorare*. Then have students match *ecosystem*, *organism*, and *carnivore* with their correct meanings. For the remainder of the words in the box, draw pictures, use gestures, and display photographs that will give students additional clues to the meaning of each word.

Advanced: Challenge students to write and illustrate a short paragraph in which they use at least five words from the box. Have them share their paragraphs with the class.

TEKS Corner TAKS Preparation

7.1(E); 7.6(B); 7.9(E); 7.10(H); 7.10(M);
7.11(A); 7.11(C); 7.15(A); 7.25(D); 7.30(E)



Poetry

A poem expresses emotions, experiences, and ideas. The lines of a poem are often short. Groups of these lines are called stanzas, or verses. Poets—people who write poems—may choose words for the way they sound. You will read two poems, one about a bat and the other about a snake.

The Bat

By day the bat is cousin to the mouse.
He likes the attic of an aging house.

His fingers make a hat about his head.
His pulse beat is so slow we think him dead.

1 He loops in crazy figures half the night
Among the trees that face the corner light.

But when he brushes up against a screen,
We are afraid of what our eyes have seen:

For something is amiss or out of place
When mice with wings can wear a human face.

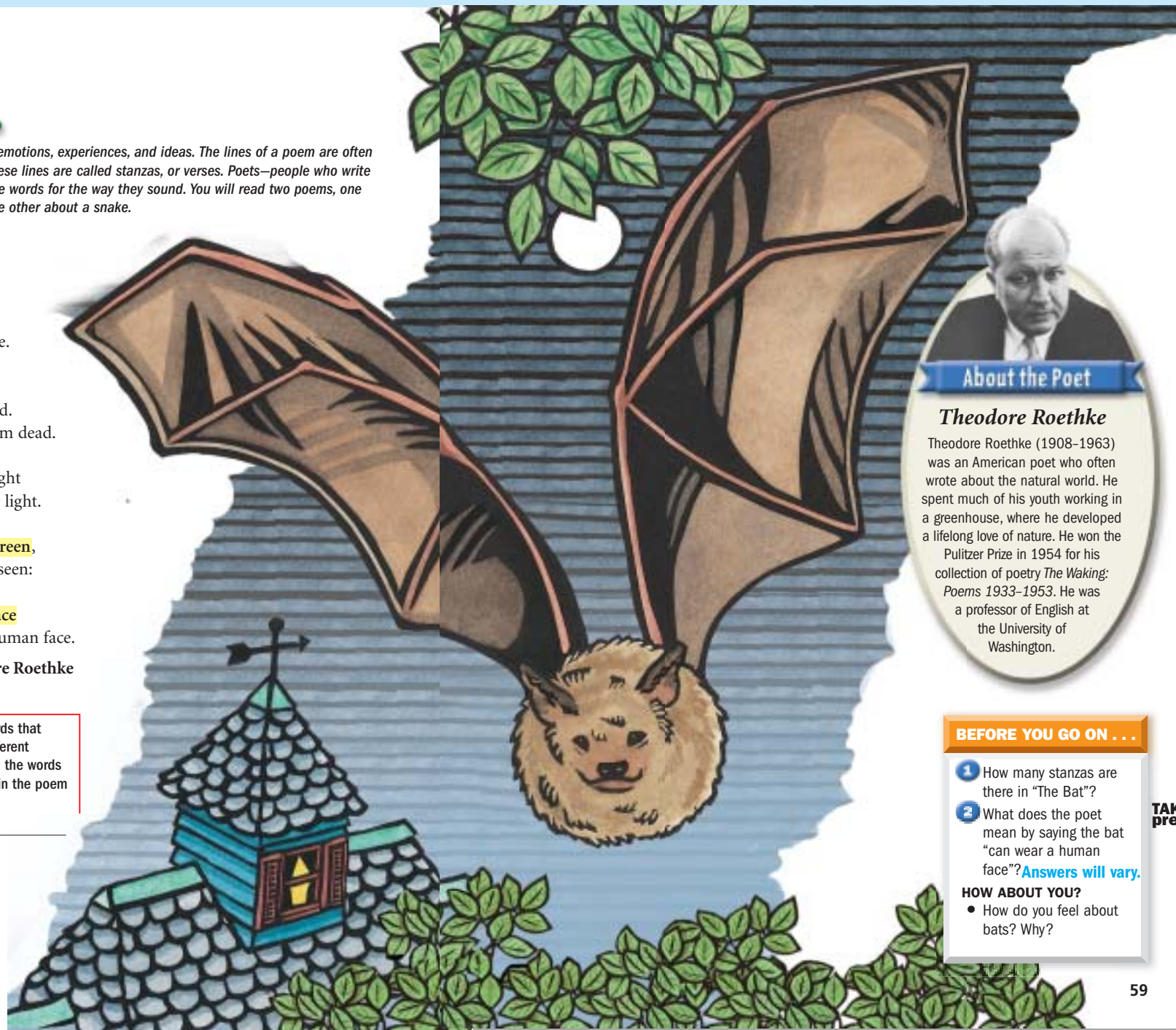
Theodore Roethke

LITERARY ELEMENT

TAKS prep Sometimes words in a poem rhyme. Two words that rhyme have the same ending sounds but different beginning sounds. For example, in “The Bat,” the words *mouse* and *house* rhyme. What other words in the poem rhyme?

- aging, becoming older
- pulse beat, heartbeat
- loops, flies in circles
- figures, patterns
- brushes up, touches lightly
- screen, wire net that covers a window
- amiss, wrong
- out of place, strange or unusual

58



About the Poet

Theodore Roethke

Theodore Roethke (1908–1963) was an American poet who often wrote about the natural world. He spent much of his youth working in a greenhouse, where he developed a lifelong love of nature. He won the Pulitzer Prize in 1954 for his collection of poetry *The Waking: Poems 1933–1953*. He was a professor of English at the University of Washington.

BEFORE YOU GO ON . . .

- 1 How many stanzas are there in “The Bat”?
 - 2 What does the poet mean by saying the bat “can wear a human face”? *Answers will vary.*
- HOW ABOUT YOU?**
- How do you feel about bats? Why?

TAKS prep

59

READING SUMMARY

Roethke’s poem “The Bat” describes a bat’s habits. It also describes its unusual and startling appearance.

MODELING THE READING STRATEGY

Skimming: Discuss with students how skimming a poem’s title and first stanza can help them make predictions about a poem’s subject and form. Explain that it can be helpful to skim to find out whether a poet has used a particular rhyming pattern. For example, skimming the last word of each line can help students find out whether the poem contains end rhymes.

SCAFFOLDING

Have students read the introductory text. Then, as a class, have them share everything they know about bats. Next, tell students to listen to the CD/tape as they read the poem twice. The first time, they should listen to the sounds and rhythms of the poem. The second time, they should pay attention to the meanings of the words and use the definitions that are provided to help them.

GUIDED READING

1. Where do the bats go during the day? (*the attic of an old house*)
2. What do the bats do at night? (*fly*)
3. How does the poet react to seeing the bat up close? (*He feels afraid.*)

CRITICAL THINKING

Have students respond orally or in writing to these questions:

- What is the meaning of the phrase “his fingers make a hat”? (*Possible answer: He sleeps with his hands over his head.*)
- How do the last two lines of the poem make you feel? (*Answers will vary.*)
- Do you think bats are really scary creatures? Explain. (*Possible answer: No, because most of them eat fruit and don’t bother humans.*)

Viewpoint

Ask students whether they think the illustration on pages 58–59 supports the poem. Have students explain their answers.

LITERARY ELEMENT

Have volunteers read aloud the text in the box. Then have students identify the other rhyming words in the poem. Next, suggest variations on the first line, such as *By day the bat is cousin to the mole (rat, squirrel)*. Students can brainstorm words that rhyme with *mole*, *rat*, or *squirrel* and choose one to create a new second line.

ABOUT THE POET

Theodore Roethke read the works of many notable poets. His reading helped him learn more about how to use words, and it inspired him to express his own feelings and experiences in poetry. Although he wrote mainly for adults, his collection *I am! Says the Lamb* is for young people.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Have pairs of students work together to read the poem and act out the actions that Roethke describes, such as covering their heads with their hands, flying in crazy loops, and reacting with fear. Have each pair present their rendition of the poem and pantomime to the group.

Advanced: Have student pairs work together to state “bat facts” using the information that Roethke provides in the poem. One student can read a stanza. The other can state the bat fact. For example, a bat fact for the first stanza could be “Bats live in attics.” You can record students’ bat facts and then have them read the list together.

TEKS Corner TAKS Preparation

- 7.1(E); 7.3(B); 7.3(C); 7.6(C); 7.9(A); 7.10(A); 7.10(G); 7.10(K); 7.10(M); 7.11(A); 7.11(B); 7.12(B); 7.12(E); 7.12(J); 7.26(D); 7.30(A)

READING SUMMARY

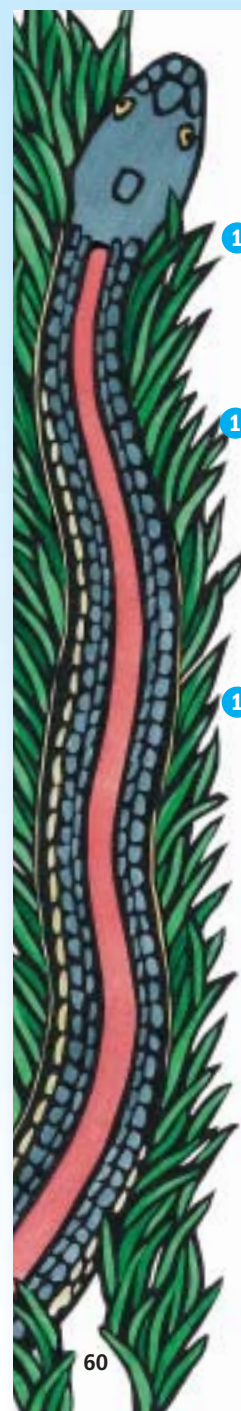
Emily Dickinson vividly describes her response to the always-surprising appearance of a snake.

GUIDED READING

1. How can you tell that a snake is moving through the grass? (*The grass divides.*)
2. What habitat does this snake like? (*a cool, boggy place*)
3. Where does the snake like to be in the morning? (*in the sun*)
4. What object does the poet think the snake is when she sees it in the sun? (*a whip*)

ABOUT THE POET

As an adult, Emily Dickinson seldom left her house and had few visitors, but she stayed connected to the outside world by writing many letters and by reading a wide range of books. She was one of the first poets to create a uniquely American literary voice.



The Snake

1 A narrow fellow in the grass
Occasionally rides; 2
You may have met him,—did you not,
His notice sudden is. 2

The grass divides as with a comb, 2
1 A spotted shaft is seen;
And then it closes at your feet 2
And opens further on.

He likes a boggy acre,
A floor too cool for corn.
Yet when a child, and barefoot,
I more than once, at morn,

1 Have passed, I thought, a whip-lash
Unbraiding in the sun,— 2
When, stooping to secure it,
It wrinkled, and was gone. 2

Several of nature's people
I know, and they know me;
I feel for them a transport
Of cordiality;

But never met this fellow,
Attended or alone,
Without a tighter breathing,
And zero at the bone.

Emily Dickinson

shaft, long, thin object
boggy acre, wet and muddy ground
barefoot, without shoes
at morn, in the morning
unbraiding, becoming straight
cordiality, friendliness



About the Poet

Emily Dickinson

Emily Dickinson (1830–1886) was an American poet. She was a quiet, shy person, and she spent much of her time writing at home. Although she wrote almost 2,000 poems, only seven of them were published during her lifetime. Most of Dickinson's poems are about serious themes, such as death, love, and eternity.

BEFORE YOU GO ON . . .

- 1 What words does the poet use to describe the snake?
- 2 How does she describe how it moves?

HOW ABOUT YOU?

- How do you feel about snakes? Why?

Link the Readings

REFLECTION

"Ecosystems: The Systems of Nature" and the two poems describe organisms that live in different habitats. Copy the chart into your notebook. Reread "Ecosystems" and the poems. Then complete the chart.

Title of Selection	Type of Text (Genre)	Fiction or Nonfiction	Purpose of Selection	One Idea from the Text	TAKS prep
"Ecosystems: The Systems of Nature"					
"The Bat"					
"The Snake"				Snakes scare the poet.	

DISCUSSION

Discuss in pairs or small groups.

1. Compare how the two poets use rhyme.
2. Which poem do you think better describes how the animal actually looks? Which poem better describes how the animal moves? Discuss how the poets help you visualize the animals.
3. List ten animals in your notebook. What type of consumer is each animal? Is it a herbivore, a carnivore, or an omnivore?



REFLECTION

Have students read the introductory text aloud. Discuss the meanings of the chart headings. Then have students copy the chart into their notebooks and complete it. When they have finished, discuss their answers.

1. What kind of text is "Ecosystems"? How do you know? (*informational; its main purpose is to provide information.*)
2. What was the author's purpose for writing "The Bat"? (*Possible answers: to express his thoughts and feelings about bats; to entertain readers*)

DISCUSSION

Form pairs or small groups to answer the Discussion questions. Then have students share their responses with the group and take turns reading their animal lists.

COOPERATIVE GROUPING

Form three student groups. Assign a different Discussion question to each group. Have each group discuss responses and then create posters to visualize their ideas. Have groups share their poster with the class as they answer their questions.

CRITICAL THINKING

Discuss how all three selections are tied to the theme of "The Natural World." Ask students whether "The Bat" and "The Snake" are good choices to follow the nonfiction reading. Have them give reasons for their opinions.

SPELLING MINILESSON

Words with Short and Long o, Short and Long u

Tell students that words with short o and short u are often spelled with just u or o and the CVC pattern. Write these words on the board, and have students read them and discuss their spellings: *fog, top, cub, fun*. Explain that there are several spellings for words with the long o and long u sounds. Some follow the CVCe pattern. In some other words, the letters ew stand for the long u sound. Repeat the above procedure with these words: *home, nose, huge, blew*. Then write the following words on the board and have volunteers circle the letters that represent the long vowel sound in each of the words.

Long o Words	Long u Words
go, roll, told	music, unit, menu
boat, road, toast	knew, few, grew
low, row, bowl	

Challenge students to find one word with each spelling in the selection.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Read "The Snake" aloud together slowly to understand the meaning of each phrase. Clarify lines in which Dickinson's word choice and word order are unlike our normal speech. ("His notice sudden is" instead of "He appears all of a sudden") Have students link Dickinson's words to specific images.

Advanced: Write the following questions on the board: *What does it look like? Where does it live? How do you feel about it?* Have students read the questions and skim each poem for information to answer them. Ask students to write two paragraphs that answer the questions.

LEARNING MODALITIES

Auditory: Have students close their eyes and listen as you slowly read each stanza of "The Snake." Pause to ask them what they are picturing in their minds as you read. Ask them to identify which words stand out. When you have finished reading, have them tell how they feel about the poem.

TEKS Corner

TAKS Preparation

7.3(B); 7.3(C); 7.5(B); 7.6(C); 7.8(A); 7.10(D); 7.10(G); 7.10(I); 7.10(K); 7.10(L); 7.10(M); 7.11(A); 7.11(D); 7.12(A); 7.12(B); 7.27(D); 7.28(A); 7.28(C); 7.28(F); 7.30(E)

Connect to Writing

GRAMMAR

Have students take turns reading aloud the introductory text, rules, and sentences at the top of the page. Then have students reread pages 54 and 55 to find and write examples for each rule. (Rule 1 example: *A scavenger eats . . .*; Rule 2 example: *Producers consume . . .*; Rule 3 example: *People and animals breathe . . .*) Have students read their example sentences aloud and tell why the verb does or does not end in -es or -s.

SCAFFOLDING



Model how to complete the activity. On the board, write *grow* and *grows*. Have volunteers come forward and point to the correct word to complete each sentence below. Have everyone repeat the entire sentence for each example.

- The plants [grow/grows] tall.*
- The tree [grow/grows] by the lake.*
- It [grow/grows] new leaves each spring.*
- Trees and brush [grow/grows] in the woods.*

GRAMMAR

Subject-Verb Agreement: Simple Present

In the **simple present**, the subject and the verb must agree in number (singular or plural).

Add **-s** or **-es** to verbs with a subject that is a singular noun or with the subject pronouns *he, she, and it*.

The owl **hunts** for food at night.
It **catches** bats, insects, and mice to eat.
He **likes** a boggy acre.
She **writes** poetry.

Do not add **-s** or **-es** to verbs with a subject that is a plural noun or with the subject pronouns *I, we, you, and they*.

Plants }
I } **need** water to live.
We }
You }
They }

TAKS prep Practice

Copy this paragraph into your notebook. Use the correct simple present form of the verbs in parentheses.

My brothers (1. spend / spends) a lot of time at the pond near our house. They (2. watch / watches) the animals in and near the pond. My sister (3. feed / feeds) the ducks. She (4. chase / chases) frogs. I (5. love / loves) to watch the frogs hop from plant to plant. We (6. think / thinks) the pond is very peaceful. You (7. come / comes) to the pond, too, don't you?



▲ Pond

SKILLS FOR WRITING

Writing an Expository Paragraph

Expository writing explains something. "Ecosystems: The Systems of Nature" is an example of expository writing. It gives factual information about the natural world.

Here are some rules for writing an expository paragraph.

- Make sure that your paragraph has one main idea about the topic. The main idea should be stated in the topic sentence.
- Use facts to support your main idea.
- Make your explanations simple and clear.

Read the paragraph. Then discuss the questions.

TAKS prep



Drew Neurgent

The Chipmunk in Its Food Chain

The chipmunk is an important consumer in the middle of the food chain. The chipmunk is an omnivore. It eats parts of plants, such as nuts, grains, seeds, and berries. It also eats small animals, such as insects. Many larger carnivores eat chipmunks. When the larger carnivores die, decomposers return the nutrients to the soil. Plants use the nutrients in the soil to grow. Therefore, the chipmunk plays an important part in the food chain.

← Topic sentence

1. What kind of paragraph is it?
2. What is the topic? What is the main idea about the topic?
3. What facts support the main idea?
4. Find the simple present verbs. What is the subject of each verb? Is there subject-verb agreement?

TAKS prep

SKILLS FOR WRITING

Have volunteers take turns reading the introductory paragraph, the list of rules, and the expository writing paragraph. Then have students discuss each question after a volunteer reads it aloud.

SCAFFOLDING



Have students read the rules at the top of the page and then copy them into their notebooks. Explain that they can refer to these rules and use the sample paragraph as a model when they do their own writing. For practice, have them reread paragraphs from the main selection and tell how the rules apply to these paragraphs.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Ask students to tell you in a few words what the sample paragraph is about. Have them point to the title and the main idea or topic sentence. Then have them count the sentences. Have them explain what signals the end of a sentence.

Advanced: Have pairs of students work together to list the main idea and three supporting details for the sample paragraph. Have students write their own paragraph and underline the main idea and three supporting sentences with colored markers or pens. Have them use one color for the main idea and another color for the details.

TEKS Corner TAKS Preparation

7.10(F); 7.15(C); 7.17(C); 7.17(F); 7.19(D); 7.29(A); 7.29(D)

WRITING ASSIGNMENT

Expository Paragraph

Have students read the text at the top of page 64. Let volunteers find and reread the paragraph about the ocean food chain on page 55. Then discuss how the paragraph about the ocean and the paragraph about the chipmunk on page 63 are alike. Have students read item 2 and discuss how they can go about finding facts. Provide time for students to do their research.

WRITING STRATEGY

Have volunteers read aloud the information about using an organizational diagram. Then read the items in the boxes. Explain that the arrows show the order in which the information will appear in the paragraph. Discuss the questions that follow. Ask students to look over their notes to identify their topic and main idea. Tell them that before they begin to write, they should draw a diagram like the one shown on page 64. Then have students use their diagrams to write a paragraph. Remind students to check their subject-verb agreement and to follow the rules for writing expository paragraphs.

USING THE EDITING CHECKLIST

Have a volunteer lead the students in reading the Editing Checklist. Then have partners use the Editing Checklist to revise their work.



WRITING ASSIGNMENT

TAKS prep

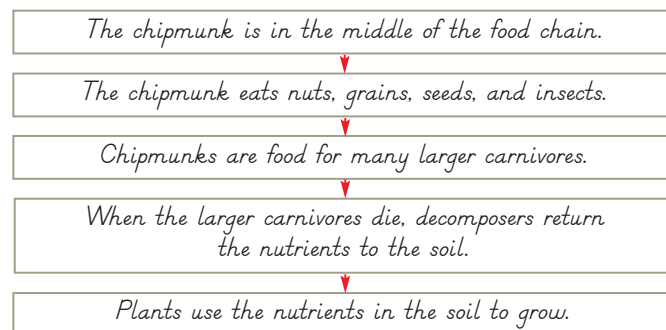
Expository Paragraph

You will write an expository paragraph. Choose an animal. Explain its place in the food chain.

- Read** Reread the paragraph about the chipmunk in its food chain on page 63.
- Look for information** Research the place of the animal you chose in the food chain. Look for information in the library or on the Internet.

Writing Strategy: Organizational Diagram

An organizational diagram can help you put your ideas in order for a paragraph. First, draw several boxes, as below. Write the main idea in the first box. Write supporting facts in the other boxes. Look at this organizational diagram for the paragraph on page 63.



TAKS prep

- What is the topic?
- What is the main idea about the topic?
- How many facts support the main idea? What are the facts?

TAKS prep

- Make a diagram** Draw an organizational diagram in your notebook. Write the main idea about the animal you chose in the first box. Write each supporting fact in another box.
- Write a paragraph** Use your diagram to write a paragraph about the place of your animal in the food chain.

EDITING CHECKLIST **TAKS prep**

Did you . . .

- include a topic sentence stating the main idea?
- include facts that support your main idea?
- write sentences that make your ideas clear?
- check subject-verb agreement?

PART 1 REVIEW

Check Your Knowledge

Language Development

- Describe how to use skimming as a reading strategy.
- What are some Greek and Latin roots? How can you use them to find out what a word means?
- What is rhyme? Give an example of two words that rhyme.
- What type of writing often uses rhyme? Why?
- What is the purpose of expository writing?
- What is subject-verb agreement? Give examples.
- How can an organizational diagram help you put ideas in order for a paragraph?

Academic Content

- What new science vocabulary did you learn in Part 1? What do the words mean?
- What is a food chain?
- What is a species?
- What are some populations that live in a desert ecosystem?



TAKS prep

TAKS prep

TAKS prep

ASSESS

You can assess students' knowledge of the unit in several different ways.

Portfolio: Have students write their Check Your Knowledge answers on a separate sheet of paper to include in their portfolios. Expository paragraphs can be included for comparison with later writing.

Traditional: Students can complete the Check Your Knowledge questions as homework. After students complete Check Your Knowledge, use the Assessment Package. Students can complete the Part Test on pages 37–40. For further practice, have students complete the Test Preparation worksheets.

Performance: Informally observe student pairs as they orally complete the Check Your Knowledge questions. Observe students for evidence of understanding, such as leading conversation and redirecting their partner to find correct answers.

TEST-TAKING TIP

Suggest that students restate the questions in their own words to be sure they understand them. See the Test Preparation pages in the Assessment Guide for additional test-taking strategies.

METACOGNITION

Tell students that before they begin writing each answer, they should think of the complete sentence in their heads. Otherwise, they may lose their train of thought in the middle of a sentence and find that they do not have a clear idea of how to finish it.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Work with students as they respond to the questions. Rephrase the questions so that they are easier to understand. Use examples from the reading to help clarify any terms that students do not understand.

Advanced: Have students write two additional questions that they think reflect important ideas in Part 1. Have them read their questions aloud for members of the group to answer and discuss.

TEKS Corner
TAKS Preparation

- 7.6(B); 7.10(F); 7.10(G); 7.10(M); 7.11(A); 7.12(A); 7.12(E); 7.12(J); 7.13(C); 7.15(C); 7.15(H); 7.17(C); 7.18(A); 7.18(D); 7.25(F); 7.29(B); 7.29(D)



Sample Section does not include Part II of this unit, pages 66–83.

Put It All Together

EXTEND THE LESSON

The Put It All Together pages review and reinforce concepts, skills, and strategies from the entire unit, with special emphasis on the skills of listening, speaking, and writing.

LISTENING AND SPEAKING WORKSHOP

Have students take turns reading aloud the introductory sentence and the four items in the workshop directions. When they have finished, ask them to summarize the activity in their own words. Provide suggestions for possible research sites. Review tips for effective poster design, such as adding a title, creating large graphics that are placed in a logical order, and writing concise labels to explain the graphics.

TEACHING THE TIPS

Speaking Tips: Have students read each tip aloud. Discuss why each tip is important. Remind students that the sequence shown on their posters should match the sequence in their presentations. Tell students to rehearse at home in front of family members.

Listening Tips: Have volunteers take turns reading the tips in the box. Explain that when they see a visual, students should ask themselves what its purpose is. They might copy the visual into their notebooks if it will help them understand and remember the presentation.

Put It All Together

OBJECTIVES

Integrate Skills

- Listening/Speaking: Individual presentation
- Writing: Expository essay

Investigate Themes

- Projects
- Further reading

LISTENING and SPEAKING WORKSHOP

INDIVIDUAL PRESENTATION

You will give an individual presentation that explains how to make or do something.

1 Think about it Reread the part of *My Side of the Mountain* that tells how Sam makes a fishhook. Then reread the part of “Water and Living Things” that explains the process of the water cycle. Work in groups. Brainstorm a list of topics for other natural processes, such as how a plant grows, how an egg becomes a butterfly, or how a forest develops from a pond or swamp. Each group member should choose a different process to explain.

2 Organize Use the Internet or a library to research your process. Then prepare your presentation: First, write each step of the process. Next, write a short introduction. Finally, make a poster to help explain the process.

3 Practice Practice your presentation within your group. Use your poster to help you explain your process.

4 Present and evaluate Give your presentation to your class. After each speaker finishes, evaluate the presentation. Did the speaker follow the speaking tips? Did the speaker answer your questions? What did you like best about the presentation? Do you have suggestions for improvement?

SPEAKING TIPS

- Speak clearly and slowly as you explain the process.
- Point to key ideas in the poster as you speak.
- Be ready to answer questions.

LISTENING TIPS

- Take notes as you listen.
- Write questions to ask after the presentation.

WRITING WORKSHOP

EXPOSITORY ESSAY

In an expository essay, the writer gives information about a topic. The writer includes details and examples to explain the information.

A good expository essay includes the following characteristics:

- an introductory paragraph that tells what the essay is about—the main idea
- details that explain and support the main idea
- clear organization
- a conclusion that summarizes the main idea about your topic

You will write a four-paragraph expository essay about your environment. Use the following steps and the model essay on page 86 to help you.

1 Prewrite Make a list of some living things in your environment. Then make a list of some nonliving things. **Organize ideas** Use a diagram—such as the organizational diagram on page 64—to put your ideas in order for a paragraph about living things in your environment. Then make another diagram to organize ideas for a paragraph about nonliving things.

WRITING TIPS

Before you write an expository essay, think about your readers.

- What do they already know about your topic?
- What questions do you think they will have?

In your essay, try to answer the questions readers might have.

84

85

WRITING WORKSHOP

Expository Writing: Essay

Remind students that an expository essay gives facts about a topic. Read the opening lines together, and have students suggest possible subjects for their essays. Additional practice activities can be found in the **Workbook** and **CD-ROM**.

PROCESS WRITING

Explain that the student sample shows the kind of expository writing students will be doing. Have students read the sample essay on page 86 as a choral reading. Ask them to point to the introductory, body, and concluding paragraphs as you describe the purpose of each paragraph. Have students refer to the sample as they answer these questions: *What kind of list might this student author have made before writing? What ideas might have been included on this student's diagram? What ideas do you have after reading the sample and the writing directions? What steps will you take to complete your essay?* Have students follow the Prewrite steps and complete their essays. Provide extra guidance and assistance with beginning students. These students can sit together at a table to work on each piece of the essay.

TEACHING THE TIP

Writing Tip: Read the Writing Tip together. Then have students look at their organizational diagrams and list some questions readers might have about the living and non-living things they have included.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Have beginning students choose a process that has only three to five steps. Help them illustrate each step and then use the illustration to create a sequence chart. For their presentation, beginning students can write each step on an index card labeled with a sequence word.

Advanced: Pair students with partners and have them rehearse their speeches together. Tell them that each speech should be rehearsed at least twice. The first time the listener should tell the speaker whether the ideas are clear and presented in an order that makes sense. The second time the listener should think of two questions to ask that will add information or clarify a particular point. Speakers should be able to answer both questions.

TEKS Corner

TAKS Preparation

7.1(D); 7.2(D); 7.2(F); 7.5(B); 7.5(F); 7.10(G); 7.13(C); 7.13(I); 7.15(C); 7.15(H); 7.18(A); 7.19(D); 7.24(A); 7.26(A); 7.29(B); 7.30(D); 7.30(E)

RESEARCH SKILLS

Print: Have students do their research in the school or classroom library. Suggest that they list three or more topic words that they might look under to find the information they need.

Sample Only

Sample Section does not include Part II of this unit, pages 66-83.

CREATING BETTER WRITERS

Organization: Have students identify the topic sentence in the writing sample, in which the writer states the main idea of the essay. Then have students list the details that explain and support the main idea.

Before students revise their essays, explain that *organization* is the plan, or structure, that writers use to present their ideas in the most effective way. In an essay, for example, a writer may decide to first state opinions and then support those opinions with facts and details. Point out that each writer should choose the type of organization that works best for his or her particular topic.

Write the following organizing tips on the board. Tell students to use the tips as they revise their writing.

- Write an opening sentence or paragraph that grabs hold of the reader's attention and suggests what is coming.
- Check that the transitions between paragraphs create a bridge, or link, from one idea to the next.
- Make sure every detail adds a little more information about the main idea.
- Write a strong concluding paragraph that brings together all the important ideas.

Before you write a first draft of your essay, read the following model. Notice the characteristics of an expository essay.

Jeremy Ng

My Environment

New York City is an interesting environment. It includes a surprising variety of living and nonliving things.

Nonliving things, such as tall buildings, cars, buses, and subways, are everywhere. Subways, bridges, and tunnels link the five boroughs of New York City.

Many people who live outside New York City don't know about the variety of living things there. Central Park has green grass, tall trees, and colorful flowers. Many small animals, such as chipmunks and squirrels, live in the park. So do many kinds of birds and insects. Of course, pests, such as rats, mice, and cockroaches, are also part of the environment.

New York has a great variety of living and nonliving things. Its unique environment includes buildings, cars, roads, and bridges as well as people and many other living things.

The introductory paragraph tells what the essay is about—the main idea.

The body paragraphs explain and support the main idea.

The conclusion summarizes the main idea.

2 Draft Use the model essay and your organizational diagrams to help you write your essay. Include an introductory paragraph, two body paragraphs, and a concluding paragraph. **TAKS prep**

- Introduce your main idea in an interesting way, so that your readers will want to know more and will read the rest of your essay. Reread the introductory paragraph of the model essay. How does the student get you interested in his topic?
- Use your organizational diagrams to write your two body paragraphs. These paragraphs should include details and examples that support your main idea. Be sure to include details about living and nonliving things.
- Conclude your essay by summarizing your main idea. Explain why your environment is special.

3 Edit Work in pairs. Trade papers and read each other's essays. Use the questions in the editing checklist to evaluate each other's work. **TAKS prep**

EDITING CHECKLIST

Did you . . .

- ▶ introduce your main idea clearly?
- ▶ include two body paragraphs?
- ▶ use details and examples to support your main idea?
- ▶ write a concluding paragraph?
- ▶ use correct subject-verb agreement?

4 Revise Revise your essay. Add information and correct mistakes, if necessary.

5 Publish Share your essay with your teacher and classmates.



A lake in Central Park, New York City ▶

USING THE EDITING CHECKLIST

Have pairs of students exchange essays and read them through silently before they use the checklist to look for anything that needs correcting.

ASSESS

Portfolio: Include the expository essays in students' assessment portfolios for comparison with later assignments.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Have students draw pictures or take photographs of their environment. Help them use the visuals to generate sentences. As students dictate information, have them categorize their sentences under the headings *Living Things* and *Nonliving Things*. Students can generate an opening sentence to identify their environment. Then they can use their sentences to build body paragraphs and write a closing sentence at the end.

Advanced: Have students use adjectives and personification to make their writing clearer and more interesting. Tell them to organize their ideas and write their first drafts. As they edit their work with a partner, encourage them to discuss descriptive words and phrases that can be added to clarify each point. Tell pairs to ask themselves, *Did I introduce my topic in a clever, interesting way? Have I included enough descriptive details to support my main idea? Does my conclusion summarize my main idea?*

TEKS Corner TAKS Preparation

7.10(F); 7.15(H); 7.17(C); 7.17(D); 7.18(B); 7.18(D); 7.18(G); 7.18(H); 7.30(E)

EXTEND THE LESSON

Home-School Connection: Have family members accompany students on a walk around the neighborhood to generate a list of living and nonliving things. Suggest that students take pictures or make sketches of what they see to illustrate the interactions on their posters.

WEBSITES

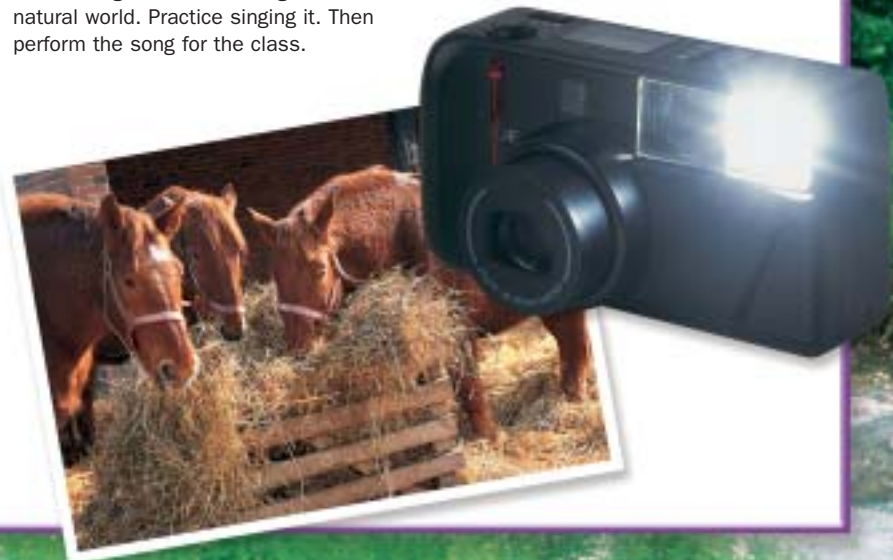
For more information, log on to <http://www.longman.com/shiningstar> for links to other interesting websites.

PROJECTS

Work in pairs or small groups. Choose one of these projects.

- 1 Write a poem about a living or nonliving thing in your area. Use rhyme, if possible. Then read your poem to the class.
- 2 Walk around your school or neighborhood. List the living and nonliving things you see. Make a poster to show how the things in the ecosystem interact. Then share your poster with the class.
- 3 Use the library or Internet to research two animals in your area. Make a poster with a Venn diagram to show how the animals are similar and different. Then share your poster with the class.
- 4 What do you think happens when Sam, the boy in the passage from *My Side of the Mountain*, returns home? What does he tell his family and friends? Write a dialogue and practice it. Then perform it for the class.
- 5 Take photographs or find pictures of the different animals or plants in a habitat. Then make a display for the class.
- 6 Find a song about something in the natural world. Practice singing it. Then perform the song for the class.

TAKS prep



88

Further Reading

To find out more about the theme of this unit, choose from these reading suggestions.



The Yearling, Marjorie Kinnan Rawlings Jody Baxter lives on a lonely farm in Florida with his poor, hardworking family. Jody longs for a friend to share his thoughts and feelings with, so when a young deer loses its mother, he takes it home. But as the deer, called Flag, grows up, he gets into so much trouble that Jody faces his hardest decision.



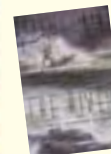
Insectlopedia: Poems and Paintings, Douglas Florian Twenty-one poems and pictures about spiders and insects will make you laugh while you learn something about the bugs—and poetry. You'll read verses featuring a praying mantis, inchworms, moths, weevils, and other creepers and crawlers.



The Beauty of the Beast: Poems from the Animal Kingdom, Jack Prelutsky More than 200 poems by poets all over the world are organized the way a zookeeper groups animals. Fish poems are grouped together, as are birds, snakes, and more. Some poems are long, some are short, some rhyme, some don't. There are watercolor pictures of the animals, too.



The Call of the Wild, Jack London Kidnappers snatch Buck, a strong, smart dog, from his California home. He joins a sled dog team in Canada. Violence is everywhere: Dogs attack weaker dogs, and men beat and starve their dogs. Buck learns to be tough. He finally finds a kind master, but the attraction of the wilderness grows stronger.



The River, Gary Paulsen Two years before this story begins, teenager Brian Robeson survived in the wilderness for fifty-four days with only a hatchet. Now he agrees to go back into the wilderness to teach a government worker ways to survive. Then things get tough. The man is injured, and Brian must build a raft to take him down a river to a doctor.

89

FURTHER READING

- *The Yearling* and *Insectlopedia: Poems and Paintings* are appropriate for beginning students.
- *The Beauty of the Beast: Poems from the Animal Kingdom* and *The Call of the Wild* are appropriate for intermediate students.
- *The River* is appropriate for advanced students.

REACHING ALL STUDENTS

LANGUAGE LEVELS

Beginning: Help students choose projects that match their abilities. For example, Project 2 is appropriate for students whose grasp of concepts is more advanced than their vocabularies. Projects 5 and 6 are the most suitable for students with limited skills. For Project 6, allow students to sing songs in their native language and then explain in English what the songs mean.

Advanced: Have students use what they have learned about processes in nature to write the dialogue for Project 4. The boy can describe one of the processes he experienced when he gets home to his family.

TEKS Corner TAKS Preparation

7.5(G); 7.8(A); 7.10(L); 7.11(A); 7.11(B);
7.13(C); 7.15(A); 7.24(A); 7.25(B); 7.25(F);
7.28(C); 7.30(E)