



# Environmental Health



## Chapter Preview

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### ▲ Working with the Photo

Our earth's natural resources are limited.

**What can you do to help conserve resources and advocate for a healthy environment?**



# Start-Up Activities

## Before You Read

Do you know what causes air and land pollution? Do you know which products in your home can be recycled? Take the short quiz on this page. Keep a record of your answers.

## HEALTH QUIZ Answer *true* or *false* for each of the following statements.

1. Air pollution is caused by both human activity and natural sources.
2. Land pollution affects soil and water but not air.
3. A symbol with four curved arrows indicates that an item can be recycled.

ANSWERS: 1. True; 2. False; 3. False

## FOLDABLES® Study Organizer

### As You Read

Make this Foldable® to help you organize the information about air, water, and land pollution in Lesson 1. Begin with a plain sheet of 11" × 17" paper.

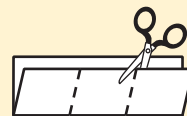
- 1 Fold the short sides of the sheet of paper along the long axis, leaving a 1" tab along the side.



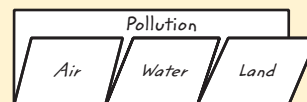
- 2 Turn the paper and fold it into thirds.



- 3 Unfold and cut the top layer along both fold lines. This makes three tabs.



- 4 Label the tabs as shown.



Under the appropriate tabs, define terms and summarize main ideas about air, water, and land pollution.

Go Online

Visit [glencoe.com](http://glencoe.com) and complete the Health Inventory for Chapter 21.

## Lesson 1

## Pollution and Health

## Guide to Reading

**Building Vocabulary**

As you read this lesson, write each new highlighted term and its definition in your notebook.

- pollution (p. 577)
- pesticides (p. 577)
- acid rain (p. 577)
- smog (p. 578)
- ozone layer (p. 578)
- greenhouse effect (p. 578)
- global warming (p. 578)
- landfills (p. 579)
- hazardous wastes (p. 580)

**Focusing on the Main Ideas**

In this lesson, you will learn to

- **explain** what pollution is.
- **identify** what contributes to air, water, and land pollution.
- **develop** strategies to reduce the ways you contribute to pollution.
- **recognize** how pollution affects the environment.

**Reading Strategy**

**Skimming** Quickly look over the headings in this lesson. For each heading, write a sentence describing what information you think will be covered in that section.

**FOLDABLES** Study Organizer Use the Foldable® on p. 575 as you read this lesson.

**Quick Write**

Give three examples of types of pollution that affect your local community.

**Your Environment**

Everything surrounding you makes up your environment. Locally, your environment includes your home, school, and community. Your environment, however, is also the air you breathe, the water you drink, the plants and animals that live nearby, and the climate you live in. It is all the living and nonliving elements that make up your world.

- The health of our natural environment has an effect on many aspects of life. **What steps can you take to preserve the beauty and health of your surroundings?**



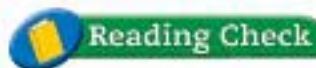


Air, water, and land make life on earth possible. However, people pollute these resources. **Pollution** includes *any dirty or harmful substance in the environment*. It **affects** everything in your environment, including the decisions you make. For example, on days when air pollution is heavy, you may have to limit the time you spend outside. Everyone's health, depends upon the environment.

## Air Pollution

Most air pollution is caused by humans. The major sources of air pollution are described below:

- **Burning fossil fuels.** Burning oil, coal, and natural gas provides the energy that people depend on to carry out their daily tasks. Burning these fossil fuels also releases toxic gases into the atmosphere. These include carbon monoxide, sulfur dioxide, and nitrogen oxides.
- **Chemicals.** Many chemicals also pollute the air. Among them are **pesticides**, which are *products used on crops to control insects and other pests*. Chlorofluorocarbons (CFCs) have damaged the layer of the earth's atmosphere that shields us from solar radiation.
- **Other sources.** Natural sources, such as forest fires, release gases into the atmosphere. Natural sources add to man-made pollution, increasing the overall amount of air pollution.



### Reading Check

**Evaluate** What personal behaviors contribute to air pollution?

## Effects of Air Pollution

The environment is suffering because of air pollution. Some of the effects are described below:

- **Acid rain.** *Rain that is far more acidic than normal* is known as **acid rain**. Sulfur dioxides and nitrogen oxides—gases that mix with water vapor to form weak acids—are produced when fossil fuels are burned. The acid in the rain can hurt everything from trees to sea life.

**What Teens THINK**

**Do you think global warming is a problem? Why or why not?**

In my opinion, global warming is a major problem and our earth is calling out for help. Our climate and atmosphere are experiencing abnormal temperatures, hurricanes, and other natural disasters. We as a society have to take action immediately to help save our environment so our generation and future generations can experience the beauty of this world.

**Darian H.**  
Pensacola, FL

### Academic Vocabulary

**affects** (a FEKTZ) (verb) to influence; to make an impression on. *How often you practice the guitar affects what kind of player you'll become.*





## Ecologist



Ecologists explore the relationships between humans, animals, and plants. They also study the effects of environmental change. Ecologists will always be in demand because the environment is constantly changing and professionals are needed to monitor and study those changes. If you are interested in becoming an ecologist, you should study environmental issues.

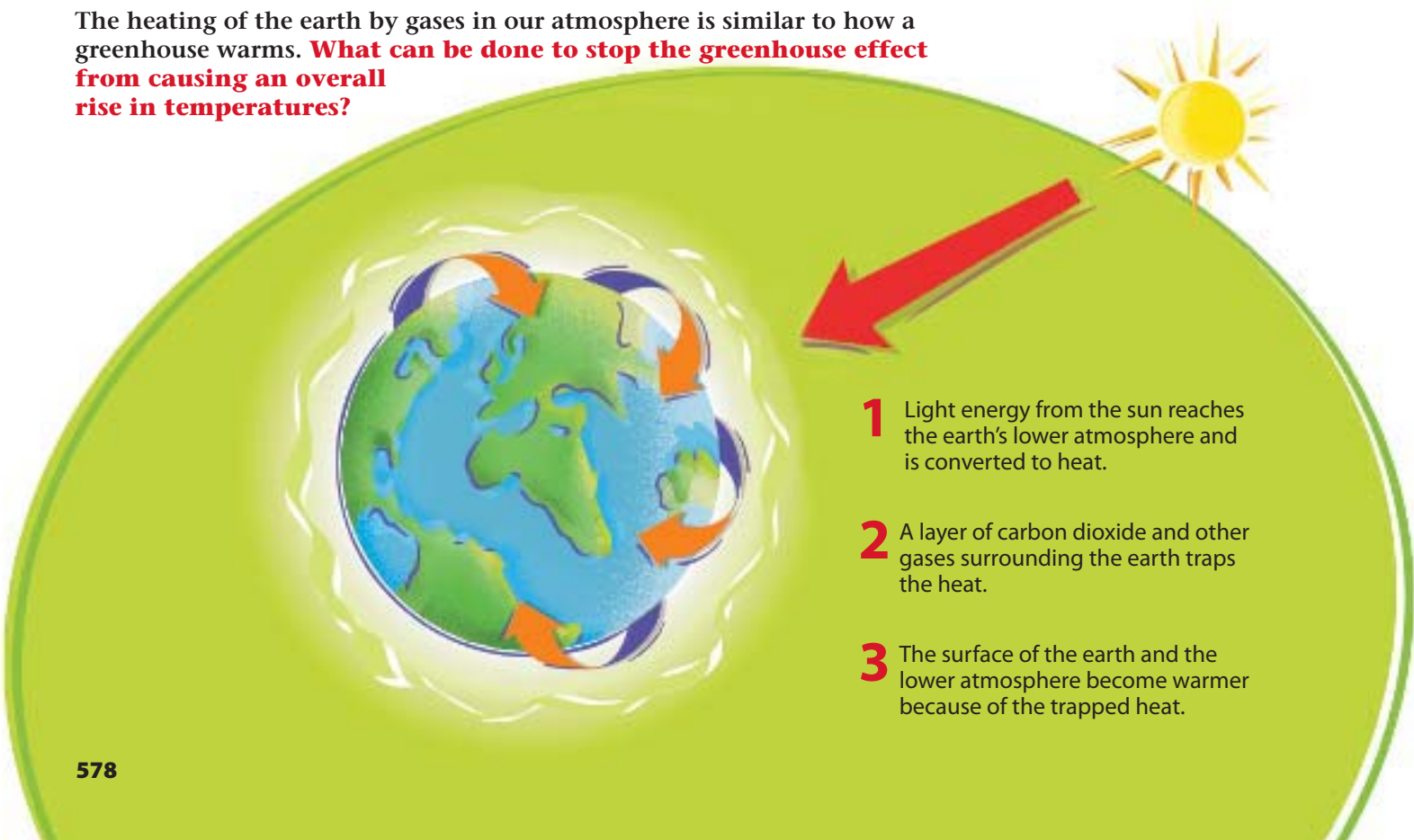
**What skills does an ecologist need? Go to Career Corner at [glencoe.com](http://glencoe.com) to find out.**

- **Smog.** A yellow-brown haze that forms when sunlight reacts with air pollution is known as **smog**. When smog levels are high, people with respiratory problems should stay indoors.
- **Destruction of the ozone layer.** The **ozone layer**, located miles above the earth's surface, acts as a *shield that protects living things from ultraviolet (UV) radiation*. Air pollution causes the deterioration of the ozone layer, allowing excessive UV radiation to reach the earth's surface. Too much UV radiation can cause skin cancer.
- **Global warming.** The trapping of heat by carbon dioxide and other gases in the air is known as the **greenhouse effect** (see **Figure 21.1**). The earth would be too cold to support life if there were no greenhouse effect. However, air pollution intensifies the greenhouse effect and may be causing increased **global warming**—a rise in the earth's temperatures. This could affect weather patterns as well as ocean water levels.

▼ FIGURE 21.1

## THE GREENHOUSE EFFECT

The heating of the earth by gases in our atmosphere is similar to how a greenhouse warms. **What can be done to stop the greenhouse effect from causing an overall rise in temperatures?**



- 1 Light energy from the sun reaches the earth's lower atmosphere and is converted to heat.
- 2 A layer of carbon dioxide and other gases surrounding the earth traps the heat.
- 3 The surface of the earth and the lower atmosphere become warmer because of the trapped heat.



- ▶ Litter is one cause of land pollution.  
**What happens to all the trash that is produced?**

## Water Pollution

Water is vital to all forms of life. However, various kinds of wastes, chemicals, and other harmful substances pollute the earth's water. One type of pollution is sewage—garbage, detergents, and other household wastes washed down drains. Sewage in the United States is treated, but many countries lack the education, money, and facilities needed to properly treat water. Industrial chemicals also contribute to water pollution. Some enter the water from factories. Agriculture also contributes pesticides, herbicides, and fertilizers that run off the land and into the water supply.

Oil spills from large tanker ships have far-reaching effects, killing plants and animals and ravaging delicate habitats. When spilled on land, oil runs off into nearby lakes, rivers, and wetlands.

Water polluted with sewage can spread horrible diseases such as typhoid fever and cholera. Eating shellfish from polluted water can cause hepatitis, a disease of the liver. Drinking water contaminated by heavy metals such as lead or mercury can damage the liver, the kidneys, and the brain. It can also cause birth defects.



### Reading Check

**Describe** How does water pollution affect your health?



## Land Pollution

Land pollution results from littering and the careless disposal of household and industrial garbage. This affects not only the soil but also the water and air. Two forms of land pollution are solid waste and hazardous wastes.

### Solid Waste

The average U.S. citizen produces about 4.4 pounds of trash, or solid waste, daily. The solid waste produced by households and businesses usually ends up in **landfills**—*huge pits where wastes are dumped and buried*. Landfills are lined with a protective barrier that prevents wastes from seeping into the surrounding soil and into groundwater.



### Go Online

#### Topic: Caring for the Environment

Visit [glencoe.com](http://glencoe.com) for Student Web Activities to learn about a variety of environmental groups that teens can take part in.

**Activity:** Using the information provided at the link above, choose an environmental issue that appeals to you. Then, create a flyer that tells other teens about the issue and what they can do to help.







◀ The household products shown in this picture are all hazardous materials and need to be disposed of safely. **How do you safely dispose of hazardous wastes in your community?**

## Hazardous Wastes

With each new industry and each new product, there is the potential of a new waste problem. **Hazardous wastes** are *human-made liquid or solid wastes that may endanger human health or the environment*. When hazardous wastes pollute the soil, water, or air, they can cause injury, illness, and even death. All hazardous wastes require careful handling and special disposal.

Many products we use daily—and discard—contain hazardous materials: batteries, bleach, insecticides, motor oil, antifreeze, paint, and certain cleaning fluids. These materials should not be discarded in your regular trash can. Your local health department or environmental agency can advise you about how to dispose of them safely and legally.

**Go Online**  
Visit [glencoe.com](http://glencoe.com) and complete the Interactive Study Guide for Lesson 1.

### Reading Check

**Recall** What are two forms of land pollution?



# Lesson 1 Review

## After You Read

**Review this lesson for new terms, major headings, and Reading Checks.**

### What I Learned

- Vocabulary** Define *pollution*. Use the word in an original sentence.
- Identify** Name five common products that contain hazardous materials that contribute to pollution.
- Recall** Name two sources of air pollution and two sources of water pollution.

### Thinking Critically

- Explain** How do fossil fuels contribute to global warming?

- Evaluate** Why do hazardous wastes pose a greater problem today than they did a century ago?

### Applying Health Skills

- Accessing Information** Use reliable sources to research the dangers of exposure to lead paint and explain how to avoid this potentially harmful substance. Report your findings to the class.

## Lesson 2

## Preventing and Reducing Pollution

## Guide to Reading

**Building Vocabulary**

Make a word diagram that shows the relationship among the terms below. Decide which term is the most general and the one all the others relate to.

- Environmental Protection Agency (EPA) (p. 581)
- biodegradable (p. 582)
- nonrenewable resources (p. 582)
- conservation (p. 582)
- recycling (p. 584)

**Focusing on the Main Ideas**

In this lesson, you will learn to

- **describe** the three Rs: reduce, reuse, and recycle.
- **explain** actions individuals can take to protect the environment.
- **identify** nonrenewable resources.
- **communicate** your concerns about the environment.

**Reading Strategy**

**Finding the Main Idea** For each major heading in this lesson, write one sentence that states the main idea.

**Reduce, Reuse, Recycle**

Governments around the world are committed to reducing and preventing pollution. Here, in the United States, the **Environmental Protection Agency (EPA)** is *the governmental agency that is committed to protecting the environment*. In addition, many states and countries maintain air and water quality by applying waste management strategies and controlling emissions (the gases, including exhaust, that vehicles release into the air). Waste management involves efforts to dispose of wastes in a way that protects the health of the environment and the people.

- ▶ Some communities provide bins for collecting different kinds of recyclable materials. **What does your community do to encourage recycling?**

**Quick Write**

Make a list of actions you already take to protect the environment.







You can help protect the environment by practicing the three Rs: reduce, reuse, and recycle. *Reduce* your consumption of energy and other resources. *Reuse* items by repairing, selling, or donating them. *Recycle* materials so they can be used again.

Many communities have introduced collection programs that make recycling convenient for people. These programs are only effective if citizens participate.



## Protecting the Air and Water

Any time you use an electrical appliance, ride in a car, or run a power lawn mower, you are burning fossil fuels to produce energy. You are also contributing to air pollution. If you want cleaner air, try these strategies:

- **Walk or ride your bike instead of having someone drive you.** You can help cut down on air pollution while getting the benefit of some physical activity.
- **Use public transportation or carpool.** Carpooling, or taking a bus, train, or subway, cuts down on the number of cars producing exhaust fumes.
- **Don't burn trash, leaves, and brush.** Let the local waste management facility dispose of your trash.

To keep from polluting the water, use detergents that are **biodegradable**—*broken down easily in the environment*. Discard all waste materials properly and legally. Take hazardous waste materials to the appropriate collection sites.

## Conservation

Fossil fuels are natural materials known as **non-renewable resources**—*substances that cannot be replaced once they are used*. A barrel of oil burned is a barrel of oil gone forever.

**Conservation** is *the saving of resources*. Using less of a resource is the best way to conserve it. Your own home offers lots of opportunities for you to save energy. When you save energy, you are also saving fossil fuels. **Figure 21.2** shows some ways to reduce your energy and water use at home.

## Recycling and Precycling

When you change an item in some way in order to use it again, that is recycling. Recycling conserves energy and natural resources while it helps reduce solid waste. Paper, aluminum, glass, plastics, and yard waste are the most commonly collected recycling materials.

- ▼ There are many alternate forms of transportation available that can help reduce air pollution. **What can you do to promote cleaner air?**



▼ FIGURE 21.2

## CONSERVATION IN THE HOUSE

The best way to conserve a resource is to use less of it. **What are some ways to save energy and water at home?**



### Heating and Cooling

- Seal air leaks around doors, windows, and electric sockets to prevent heat from escaping.
- Keep doors and windows closed during the air-conditioning season, and keep air-conditioning at about 78°F.
- Buy an energy-efficient heating/cooling system that features a thermostat with a timer.

### Lighting and Appliances

- Turn off lights when you are not using them.
- Replace traditional lightbulbs with compact fluorescent bulbs. They use less energy and last longer.
- Turn off televisions, computers, fans, and other electric appliances when you are not using them.

### Cooking

- Don't preheat a conventional oven for longer than necessary.
- Avoid opening the oven while cooking. Instead, use a timer and the oven door window to check if food is done.
- Heat small quantities of food in a microwave, toaster oven, or slow cooker.

### Water

- Never let water run unnecessarily.
- Wash clothes in warm or cold water, which uses less energy than hot water.
- Run the washing machine or dishwasher only when you have a full load, and use the short cycle when appropriate.
- If you have an older toilet, place a 1 liter bottle filled with water inside your toilet tank. This will reduce the amount of water used for flushing. Another option is to replace an older toilet with a newer model that requires less water per flush.

To understand how recycling conserves energy and natural resources, think about aluminum soda cans. It takes energy to mine the ore used to make the aluminum, to **process** the ore, and to manufacture the cans. When aluminum cans are recycled, they are changed back into sheets of aluminum that can be used to make new cans or other products. When less ore is taken from the ground, less energy is needed.

A symbol with three curved arrows appears on many kinds of products. It indicates that an item can be recycled, or that it is made of recycled materials. A number appears in the center of the symbol on plastic items. This is a code identifying the specific type of material. Plastic objects are sorted according to number at recycling facilities.

More and more people are becoming involved in recycling through drop-off centers and curbside programs. However, plastics have not kept pace with other recycling efforts (**Figure 21.3**). Most recycling programs accept plastics but not necessarily all types of plastics.

### Academic Vocabulary

**process** (PROS es) (*noun*)  
a series of actions that lead to a conclusion; how something is done. *If you want to get a part in the school play, you'll have to go through the audition process.*

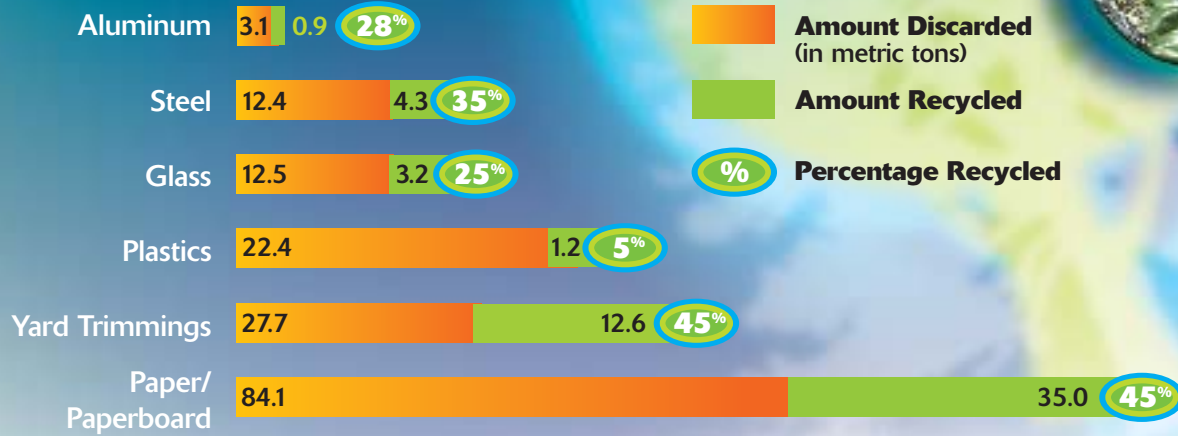




▼ FIGURE 21.3

## RESULTS OF RECYCLING EFFORTS

As awareness of environmental health grows, people take a more active role in recycling. **What else can you infer from this graph?**



Source: U.S. Environmental Protection Agency, 2000.

**Precycling**—*reducing waste before it occurs*—is another way to put the brakes on consumption of resources. Below are some basic guidelines for precycling:

- Buy products in packages made of glass, metal, or paper (all materials that can be reused or recycled).
- Look for products in refillable containers.
- Carry store-bought purchases home in your own reusable cloth sack or plastic bags.



## Protecting the Environment

Everyone needs to play a part in protecting the environment. Here are some suggestions:

- **Lead your family's recycling effort.** Find out which recyclables are collected in your community and set up a system that your family can follow.
- **Practice environmental awareness.** Evaluate advertising, labels, contents, and packaging to determine their environmental friendliness.
- **Support a conservation organization.** Request information about current environmental issues, attend meetings, and help to make a difference.

**Go Online**

Visit [glencoe.com](http://glencoe.com) and complete the Interactive Study Guide for Lesson 2.



# Health Skills Activity

## Practicing Healthful Behaviors

### Environment-Friendly Shopping

You have an opportunity to help the environment every time you shop. Below are some tips on how to be an environment-friendly consumer.

- **Plan.** Make a shopping list and buy only what you need.
- **Buy in bulk.** Select larger packages of foods such as cereals and snacks. Buying in larger quantities cuts down on the amount of packaging that you'll ultimately discard.
- **Be aware of packaging.** Choose products packaged in materials that easily break down or are recyclable. For example, buy beverages in glass or aluminum containers.
- **Read labels carefully.** Some common household products such as oven cleaners and paint thinners contain substances harmful to humans. Look for safer commercial products or research alternatives.

### In a Group

List all the ways you can think of to save energy, packaging, and waste. Combine the ideas on one list and post it on a bulletin board.

## Lesson 2 Review



### After You Read

Review this lesson for new terms, major headings, and Reading Checks.

### What I Learned

1. **Vocabulary** What is a *nonrenewable resource*?
2. **List** What are three ways that you can conserve energy and water at home?
3. **Identify** Name the three Rs and tell how they are related to your health.

### Thinking Critically

4. **Synthesize** Explain why recycling and pre-cycling are keys to a cleaner environment.

5. **Apply** Briefly describe how each of the following strategies helps protect the environment: emission control, monitoring water quality, and waste management.

### Applying Health Skills

6. **Goal Setting** Working with family members, evaluate your current approach to the three Rs and set specific goals to improve your household record for reducing, reusing, and recycling.



# Building Health Skills

Accessing Information  
Practicing Healthful Behaviors  
Stress Management  
Analyzing Influences  
Communication Skills  
Refusal Skills  
Conflict Resolution  
Decision Making  
Goal Setting

Advocacy

## What Is Advocacy?

Advocacy is working to bring about a change by taking a stand for the common good. If you are an environmental advocate, you are taking a stand for the environment in your home, school, and community.

### In order to be a good advocate, you should:

- Take a clear stand on an issue.
- Persuade others to make healthy choices.
- Be convincing.

## Make the Most of It

Follow the **Model, Practice, and Apply** steps to help you master this important health skill.

### 1 Model

*Read how Oliver uses advocacy skills to combat global warming.*

Oliver is studying the effects of global warming in his health class at school. He decides that he wants to take action and talks to his dad about how his family can make the earth a healthier place.

Oliver: We've been studying ways to combat global warming in health class. I'd like our family to do our part. **(Take a clear stand on an issue.)** By making small changes, we can make the earth a healthier place. It's really important and will help keep our family healthy! **(Persuade others to make healthy choices.)**

Dad: What are some of these "small changes"?

Oliver: We need to get more serious about recycling. Also, if we replace regular lightbulbs with compact fluorescent bulbs, we'll use two-thirds less energy. These are small changes, but they help. **(Be convincing.)**



## 2 Practice

*Use the skill of advocacy to help improve your school's recycling program.*

In small groups, evaluate your school's recycling habits. Check the availability and location of recycling bins for paper and other items. For example, are the bins available to every classroom? Are they located in the cafeteria? Are the bins clearly labeled for paper, plastic, and glass?

1. Develop a report on the school's recycling habits. In your report, include at least three suggestions for improving recycling in the school.
2. Share your report with other groups in your class. How is your report similar to or different from theirs?



## 3 Apply

*Apply what you have learned about advocacy by completing the activity below.*

Develop a 30-second public service announcement to persuade other teens to take action to reduce global warming. In your announcement, explain why global warming is harmful. Describe at least three actions students should take to ensure a healthier world.

### Self-Check

- Did I explain why global warming is harmful?
- Did I describe three actions students should take?
- Is my announcement persuasive and convincing to teens?



# Pitch In for the **PLANET**



Five ways for you to be an Earth Day hero.

**W**hen then Wisconsin senator Gaylord Nelson developed the idea for the first Earth Day in 1970, little did he know how that idea would take root and bloom. Earth Day was meant to draw attention to environmental problems. America's enthusiasm for Earth Day helped persuade lawmakers to pass the 1970 Clean Air Act and to create the Environmental Protection Agency.

More than 30 years after the first Earth Day, people around the world gather to show that they care about our planet. Earth Day is celebrated on April 22, but you can celebrate Earth Day every day. Here are some easy things you can do to protect the air, water, and soil:

## **1. RECYCLE BATTERIES**

The batteries used in toys, cell phones, and other devices can be harmful to the environment. If your batteries contain cadmium, nickel, lead, or mercury, don't throw them in the garbage. Take used batteries to a recycling or collection center in your community.

## **2. CUT DOWN ON GARBAGE**

Prevention is the best way to fight pollution! If you don't create garbage, then no one has to clean it up. Buy products that don't have a lot of packaging. Reuse containers instead of throwing them out. Try to make Earth Day a garbage-free day.

## **3. AVOID CHEMICALS**

Plant marigolds, mint, garlic, or onions in a garden instead of spraying pesticides. Insects don't like these plants and will stay away. Use natural ingredients like vinegar, baking soda, and salt to make cleaners in place of store-bought chemical cleansers.

## **4. DON'T WASTE ENERGY**

Just think how much electricity you could save if you always turned off lights and appliances when not using them. Remind your parents and friends to conserve energy.

Is the heat in your classroom on high with the window open? Do you let the faucet or shower run longer than needed? It takes energy to make hot water. Use less and you'll save precious resources.

## **5. GET INVOLVED**

Is there a place in your community that needs to be cleaned up? Get the job done by organizing an event. Working with others is fun, and teamwork will get it done faster.



## Reading Review



Visit [glencoe.com](http://glencoe.com) to download quizzes and eFlashcards for Chapter 21.


**FOLDABLES® Study Organizer**

**Foldables® and Other Study Aids** Take out the Foldable® that you created for Lesson 1 and any other study guide you created. Find a partner and quiz each other using these study aids.

**Lesson 1 Pollution and Health**

**Main Idea** Pollution can have negative health effects on all living things.

- Your environment is all the living and nonliving things that make up your world. It is also the air you breathe, the climate, the animals nearby, and the water you drink.
- Pollution affects your environment as well as the decisions you make.
- Air pollution is caused by burning fossil fuels, chemicals, and natural sources, like forest fires.
- Air pollution causes acid rain, smog, destruction of the ozone layer, and global warming.
- The greenhouse effect is the trapping of heat by carbon dioxide and other gases in the air.
- Global warming is a rise in the earth's temperatures.
- Sewage and oil spills are two examples of water pollution.
- Land pollution comes from littering and improper disposal of household and industrial garbage.
- Hazardous wastes pollute the soil, water, and air. They require careful handling and special disposal.

**Lesson 2 Preventing and Reducing Pollution**

**Main Idea** You have the power to prevent and reduce pollution.

- The Environmental Protection Agency is a government agency committed to protecting the environment.
- Waste management involves efforts to dispose of wastes in a way that protects the health of the environment and the people.
- You can protect the air and water by walking or riding your bike to nearby places. You can also use public transportation or carpool. Do not burn trash, leaves, or brush.
- Nonrenewable resources are substances that can't be replaced once they are used.
- Conservation is the saving of resources.
- Recycling conserves energy and natural resources. It also reduces solid waste.
- Precycling is reducing waste before it is used. You can precycle by buying products in recyclable packaging, looking for products in refillable containers, and reusing grocery bags.



## After You Read

## HEALTH QUIZ

Now that you have read the chapter, look back at your answers to the Health Quiz on the chapter opener. Would you change any of them? What would your answers be now?

## Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–10. After each number, write the term from the list that best completes each sentence.

- precycling
- fossil fuels
- greenhouse effect
- hazardous wastes
- biodegradable
- smog
- pollution
- conservation
- nonrenewable resources
- global warming

### Lesson 1 Pollution and Health

1. The \_\_\_\_\_ is the trapping of heat near the earth's surface.
2. \_\_\_\_\_ is a yellow-brown haze formed when sunlight reacts with air pollution.
3. The burning of \_\_\_\_\_ contributes greatly to air pollution.
4. \_\_\_\_\_ is any dirty or harmful substance in the environment.
5. \_\_\_\_\_ is a rise in the earth's temperatures.



### Lesson 2 Preventing and Reducing Pollution

6. You can help keep the water clean by using detergents that are \_\_\_\_\_.
7. The practice of reducing waste before it occurs is called \_\_\_\_\_.
8. Advances in science and technology have led to the problem of \_\_\_\_\_, or waste products that can cause illness, injury, or death.
9. \_\_\_\_\_ are substances that cannot be replaced once they are used.
10. The saving of resources is \_\_\_\_\_.

### Thinking Critically

Using complete sentences, answer the following questions on a sheet of paper.

11. **Apply** What changes could you make in your life to conserve energy and reduce air pollution?
12. **Analyze** Why is the disposal of hazardous wastes more of a challenge than the disposal of other solid wastes?
13. **Evaluate** Why is it important for people to become actively involved in protecting the environment? What might happen if people ignore environmental problems?



## Applying Technology

### Write About It

- 14. Expository Writing** Imagine that you are writing an article for a newsletter of the Environmental Protection Agency (EPA). In your article, define and discuss the different forms of pollution. Tell what factors contribute to each form of pollution. Explain how pollution affects the health of our environment.
- 15. Persuasive Writing** Write a public service announcement (PSA) that encourages teens to recycle and conserve resources. In your PSA, state facts about the need to recycle and conserve, and opinions about the benefits of taking these actions. Give examples that show how teens can recycle and conserve resources and how they, too, can advocate for environmental health.

### Your Community Environment PSA

You and a partner will use Microsoft Word® and iMovie® to create a public service announcement about your community's environment.

- Open a new Microsoft Word® document. Using one of the many topics discussed in this chapter, write a five-minute script about your community's environment. Make sure to use and define relevant vocabulary terms and include local agencies that deal with environmental protection.
- Open a new iMovie® project. Record and save your PSA.
- Edit for time, clarity, and accuracy of information.
- Save your project.

## Standardized Test Practice

### Reading and Writing

Read the passage and then answer the questions.

Air, water, and land pollution affect your health and that of your environment. Air pollution can worsen symptoms in people with respiratory problems. Water pollution can contaminate the water we drink, swim, and fish in, causing health problems and negatively affecting aquatic life. When discarded improperly, hazardous substances in common products such as batteries can leak into the surrounding soil. These facts make it clear that it is worth your while to work to reduce pollution.

There are, however, ways to reduce pollution. Use mass transit when it's available and properly dispose of household products, such as bleach and motor oil.

1. Which sentence from the passage represents the author's opinion?
  - A. Air, water, and land pollution affect your health and that of your environment.
  - B. Air pollution can worsen symptoms in people with respiratory problems.
  - C. These facts make it clear that it is worth your while to work to reduce pollution.
  - D. Water pollution can contaminate the water we drink, swim, and fish in, making us ill and killing aquatic life.
2. The author probably wrote the editorial
  - A. to explain why pollution occurs.
  - B. to criticize people who litter.
  - C. to describe the steps he or she takes to reduce pollution.
  - D. to persuade readers to take steps to reduce pollution.