**Chapter 29**

**Vocabulary**

- air pollution
- smog
- air quality index (AQI)
- asbestos
- radon
- noise pollution
- decibel
- biodegradable
- landfill
- hazardous waste
- deforestation
- wastewater
- conservation
- precycling
- recycling
- urban sprawl
- radon
- deforestation
- recycling
- noise pollution
- air pollution

**Directions:** Use the clues to solve the puzzle. Write one letter of each answer in each space provided. Then copy the boxed letters in order, and they will complete the sentence at the bottom of the page.

1. An odorless, radioactive gas
2. A fibrous material that has fireproof properties
3. Harmful, unwanted sound of sufficient intensity to damage hearing
4. A yellow-brown haze that forms when sunlight reacts with air pollution
5. A substance that is explosive, corrosive, highly reactive, or toxic
6. The contamination of earth’s atmosphere
7. A unit that measures the intensity of sound
8. Reducing waste before it is generated
9. The spread of city development onto undeveloped land

Understanding the causes of pollution and learning strategies to reduce waste can help protect the earth’s natural ___ ___ ___ ___ ___ ___ ___.
Pollution Solutions

Directions: When people hear the term air pollution, they often think of huge factory smokestacks billowing dirty waste into the air. While industry is responsible for some pollution, the leading sources of air pollution in the United States are forms of transportation: motor vehicles, trains, ships, and airplanes. These sources of air pollution are under our control. The same is true for furnaces, fireplaces, and heaters, as well as cleaning products and chemicals. Noise pollution, an increasingly common problem, is another type of pollution we can control. Listed below are some common objects. For each, list ways to reduce the air and noise pollution associated with its use. Sometimes the same strategy will reduce both air and noise pollution.

1. Lawn mowers
   Strategies to reduce air pollution: ________________________________
   ________________________________
   ________________________________
   Strategies to reduce noise pollution: ________________________________
   ________________________________
   ________________________________

2. Cars
   Strategies to reduce air pollution: ________________________________
   ________________________________
   Strategies to reduce noise pollution: ________________________________
   ________________________________

3. Leaf blowers/chain saws
   Strategies to reduce air pollution: ________________________________
   Strategies to reduce noise pollution: ________________________________
Spread the Word

Directions: Land and water resources are used by every person on earth. Human activity is often harmful to land and water resources. There are, however, many actions people can take to minimize their impact on both land and water. For each of the pollution sources listed below, identify related problems and suggest possible solutions.

1. Solid waste disposal
   Problem: __________________________________________
   __________________________________________
   __________________________________________
   Solutions: __________________________________________
   __________________________________________
   __________________________________________

2. Hazardous waste
   Problem: __________________________________________
   __________________________________________
   __________________________________________
   Solutions: __________________________________________
   __________________________________________
   __________________________________________
What’s Your Score?

**Directions:** There are many actions you can take to conserve natural resources. Take the following quiz to see how well you practice conservation. Answer each question by checking the space labeled *always*, *sometimes*, or *never*. At the end of the quiz follow the instructions to add up your score.

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I wear layers rather than turning up the heat.
2. I turn off the lights when I leave the room.
3. I turn off the TV when no one is watching.
4. When possible, I use the microwave rather than the oven.
5. I recycle household waste.
6. I carry cloth bags for shopping, rather than using plastic.
7. I turn off the computer when it isn’t being used.
8. I keep my windows shut when the heating or air conditioning is running.
9. I turn off the water when I brush my teeth.
10. I avoid long showers.

Score 2 points for each time you answered *always*, 1 point for each time you answered *sometimes*, and 0 points for each time you answered *never*. Enter your total score: __________

If you scored

**15–20:** Good work—you often practice conservation strategies.

**10–15:** You could improve—try to remember the conservation strategies in the chapter.

**0–10:** Conservation is not a part of your daily habits—review the chapter and make a plan to start conserving today!
STUDY TIPS: • Read You’ll Learn To for each lesson. • Look up the meaning of any unfamiliar vocabulary terms. • Read the questions below before you read the chapter.

Directions: As you read the chapter, answer the following questions. Later, you can use this guide to review the information in the chapter.

Lesson 1
1. Define air pollution.

2. What does the abbreviation AQI stand for? What is its purpose?

3. List two actions you can take to reduce air pollution.

4. Name two sources of indoor air pollution.

5. What unit is used to measure the intensity of loudness of sound?

6. Name three sources of noise pollution.

Lesson 2
7. Define biodegradable.

8. What is hazardous waste?
9. What is urban sprawl? How does it affect air and water quality?

Urban sprawl is the spreading of city development onto undeveloped land. It has a negative impact on both air and water quality.

10. What is wastewater? Why is it an environmental concern?

Wastewater is used water that comes from homes, communities, farms, and businesses. It is an environmental concern because it contains harmful substances that can cause water pollution.

11. List two strategies for reducing water pollution.

Possible answers: dispose of wastes correctly, follow disposal directions on chemicals, reduce water usage.

12. List two strategies for reducing land pollution.

Possible answers: dispose of materials properly, recycle when possible, dispose of hazardous wastes at appropriate collection sites.

Lesson 3

13. List two strategies for conserving resources in each of the following categories: heating and cooling, water, lighting and appliances.

For heating and cooling, seal leaks around doors, windows, and electrical sockets; wear extra clothes rather than turning up the heat; in heating season, keep thermostat at 68°F during the day, then turn down at night; during air-conditioning season, keep thermostat at 78°F and use a fan to cool house.

For water, wash clothes in warm or cold water (not hot); fix leaky faucets; never let water run unnecessarily; fill and place plastic water bottles in toilet tank.

For lighting and appliances, replace traditional bulbs with more efficient bulbs; switch off lights, televisions, radios, and computers when you leave a room.


Precycling is reducing waste before it is generated.

15. What are two ways to precycle?

Possible answers: buy in bulk, use cloth napkins instead of paper, reusing shopping bags, donate unneeded household goods.

17. List three common household wastes that can be recycled.

18. What are two ways you can become involved in protecting the environment?