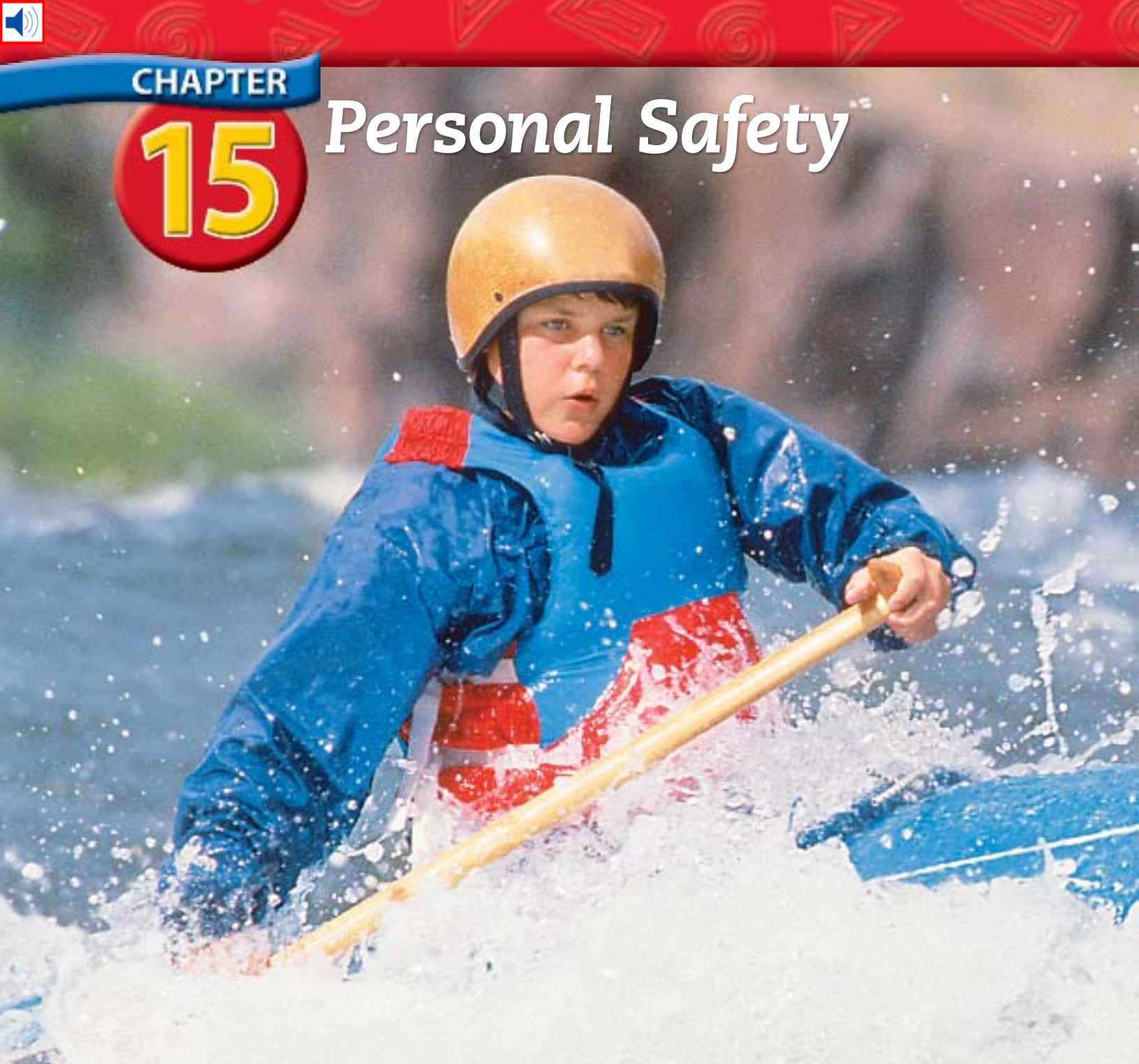




Personal Safety



Chapter Preview

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▲ Working with the Photo

Performing activities safely allows you to spend less time dealing with problems and more time having fun.

What is this teen doing to avoid injury?

Start-Up Activities

Before You Read

Do you know how to recognize dangerous situations? Answer the Health eSpotlight question below and then watch the online video. Keep a record of your answer.



Health eSpotlight

Personal Safety



Recognizing a dangerous situation and staying out of harm's way isn't always easy. Have you ever had to make quick decisions to stay safe? Could the situation have been avoided? Explain your answer in detail.

Go to glencoe.com and watch the health video for Chapter 15. Then complete the activity provided with the online video.

FOLDABLES® Study Organizer

As You Read

Make this Foldable® to organize what you learn in Lesson 1 about the causes and prevention of an accident chain. Begin with three plain sheets of 8½" × 11" paper.

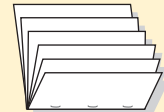
- 1** Collect three sheets of paper and place them 1" apart.



- 2** Fold up the bottom edges, stopping them 1" from the top edges. This makes all the tabs the same size.



- 3** Crease the paper to hold the tabs in place. Staple along the fold.



- 4** Turn and label the tabs as shown.

The Accident Chain	
1.	The Situation
2.	The Unsafe Habit
3.	The Unsafe Action
4.	The Accident
5.	The Result

Under the appropriate tab, write down what you learn about each link in the accident chain.



Visit glencoe.com and complete the Health Inventory for Chapter 15.

Lesson 1

Preventing Injury

Guide to Reading

Building Vocabulary

Write each term below. As you read the lesson, write the definition of each term.

- safety conscious (p. 473)
- hazards (p. 473)
- accidental injuries (p. 473)

Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** what it means to be safety conscious.
- **identify** causes of accidental injuries.
- **describe** how to prevent accidental injuries.

Reading Strategy

Skimming Look over all 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. 471 as you read this lesson.



Quick Write

What are some examples of accidental injuries that people experience? Write down two or three examples.

Safety First

“Buckle up!” “Look both ways before you cross the street!” You’ve probably been hearing warnings like these for as long as you can remember. You might have helped teach these safe habits to a younger brother or sister. Accidents do happen, but you can prevent many of them. When you stay safe and avoid accidents, you help yourself and those around you stay healthy.

You might not think serious accidents can happen to you. However, the National Safety Council reports that about 85,000 people die from accidental injuries every year. The highest number of teen deaths occur in auto accidents. Other safety risks for teens include drowning, bicycle injuries, and burns.

- ◀ Keeping books and other items off the stairs can help prevent accidental injuries.

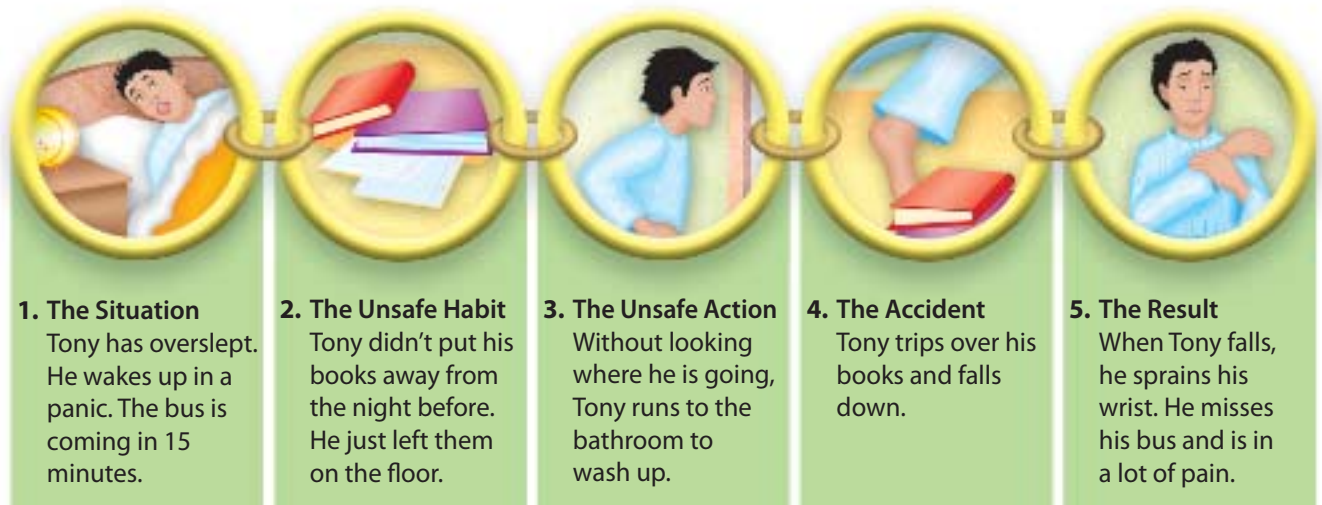
What are accidental injuries?



▼ FIGURE 15.1

THE ACCIDENT CHAIN

Many accidents can be avoided. You may find yourself getting into patterns that lead to accidents. If so, you can change your habits. **What habits could Tony change to help him avoid accidents?**



The first step in staying safe is to be safety conscious. To be **safety conscious** means *being aware that safety is important and being careful to act in a safe manner*. It is easier to prevent injuries than to treat them. Think ahead. Pay attention to your surroundings. Look for hazards around you. **Hazards** are *potential sources of danger*. Avoid or fix possible hazards. For example, water spilled on the floor is a hazard. If you see a spill on the floor, clean it up. Keep your environment safe to help prevent accidental injuries. **Accidental injuries** are *injuries caused by unexpected events*.

You can also be safety conscious by resisting negative peer pressure. Take responsibility for your own safety. Do what you think is right even if it goes against what your friends might want you to do.

Reading Check

Identify What is the first step in preventing accidents?

How Accidental Injuries Happen

Safety-conscious people are less likely to have accidents. Accidents usually happen when people stop being safety conscious and become careless. Think back to the last accident you had. You can probably see the accident chain that led up to it. **Figure 15.1** shows what an accident chain looks like.

Reading Check

Explain Why do accidents usually happen?



DEVELOPING

Good Character

Responsibility

When you put your belongings in their proper place, they're not in the way, so they're less likely to cause accidents. Putting away clothes and equipment also helps cut down on clutter.

What else can you do to help prevent accidents?



Breaking the Accident Chain

Tony's accident did not have to happen. Look at the links in Tony's accident chain. Breaking just one link would have kept Tony from being injured.

- **Change the Situation.** Tony could have gotten up earlier. He could have set his alarm for a reasonable time. He could have asked a family member to wake him if he overslept.
- **Change the Unsafe Habit.** Tony could have put his books on a bookshelf or in his book bag.
- **Change the Unsafe Action.** Tony could have paid attention to where he was going. He could have slowed down and watched his step. Being safety conscious might have kept Tony from tripping and falling.

By changing the situation, the unsafe habit, or the unsafe action, Tony could have prevented his accident. By becoming more safety conscious, Tony can take responsibility for preventing accidents in the future.



Visit glencoe.com and complete the Interactive Study Guide for Lesson 1.



Reading Check

Explain What changes can break the accident chain?



Lesson 1 Review



After You Read

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

What I Learned

1. **Vocabulary** Define *hazard*, and use it in a sentence that shows its meaning.
2. **Identify** What are the five links in the accident chain?
3. **Give Examples** What are three ways to break the accident chain?

Thinking Critically

4. **Analyze** Describe how rain can make riding a bike hazardous.
5. **Apply** Beth has always had a bookshelf on the wall next to her bed. Now that she is

taller, the bookshelf has become a problem. In fact, this year Beth has bumped her head on the shelf three times. What should she do to be safer?

Applying Health Skills

6. **Decision Making** Oscar sees a small pile of sticks left on the sidewalk in front of his house. He knows someone might trip on the sticks. Still, he didn't put them there, so he's not sure if he should move them. Use the decision-making steps on page 40 to help Oscar decide what to do.

Lesson 2

Staying Safe at Home

Guide to Reading

Building Vocabulary

As you read this lesson, write each new highlighted term and its definition. Then write a short paragraph that uses all four terms.

- flammable (p. 475)
- electrical overload (p. 475)
- smoke alarm (p. 476)
- fire extinguisher (p. 476)

Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** how to protect yourself and others from fires.
- **identify** ways to prevent accidental injuries at home.

Reading Strategy

Sequencing As you read this lesson, write down the sequence of actions that can help you stay safe in a fire.

Fire Safety

Fires happen in more than 370,000 homes in the United States each year, killing more than 3,300 people. Fires often involve materials that are **flammable**, or *able to catch fire easily*. These materials may catch fire due to a spark, an open flame, or a burning object such as a lighted cigarette. Other fires start from **electrical overload**, *a dangerous situation in which too much electric current flows along a single circuit*. See **Figure 15.2** on page 476 for some common causes of fires.

Quick Write

What is the first thing that you should do if you think the building you are in is on fire? Write a sentence or two describing the action you would take.

Reading Check

Identify What is one cause of home fires?

Preventing Fires

Here's a list of actions you can take to prevent fires:

- Keep stoves and ovens clean. Keep flammable materials away from burners.
- Never let a smoker toss a cigarette into a trash can before making sure it is completely extinguished. You can also remind people not to smoke in bed.
- Store matches and lighters out of the reach of children. Never play with matches or lighters. Don't leave candles burning unattended.



▼ FIGURE 15.2

CAUSES OF FIRES IN THE HOME

Fires in the home usually result from one of the situations described here. Almost all people killed in fires are children and older adults. **Why do you think that children and older adults are the most likely to die in house fires?**



Careless cooking. Spattered grease and oil can cause kitchen fires. Unattended cooking pots can spill onto burners or in the oven.

Careless smoking. Cigarettes can start fires if people leave them unattended or fall asleep while they are still burning. Cigarettes can also start fires if people toss them into the trash when they are still burning.

Incorrect storage of flammable materials. Examples of flammable materials are paint, chemicals, oil, rags, and newspapers.

Damaged electrical systems or electrical overload. Fires can start due to too much current flowing through overloaded circuits. Shredded wires or torn cords can also lead to fires. Broken appliances can cause fires as well.

Gas leaks. Gas lines can leak and catch fire. Natural gas is odorless and colorless, so it has an additive that makes it smell. If you smell gas, first get out of the house, then call 911.

- Check appliances regularly for loose or damaged cords. Never pull on the cord to unplug an appliance. Never run cords under rugs or carpets. If you notice worn or shredded cords, tell an adult about them.

Being Prepared in Case of Fire

The earlier you receive warning of a fire, the better your chances of getting out of the building safely. A **smoke alarm** is a **device** that sounds an alarm when it senses smoke. Every level of a house should have smoke alarms. Smoke alarms are especially useful when you are sleeping and might not notice the early signs of a fire. As a result, you should install them as close to sleeping areas and bedrooms as possible. Test smoke alarms every month. If batteries power them, put in fresh batteries at least once a year.

Water will put out fires in which paper, wood, or cloth is burning. However, you should never use water to put out a fire that involves grease, oil, or electricity. That will actually make the fire worse. Instead, use a **fire extinguisher**, a device that sprays chemicals that put out fires. Every home should have a fire extinguisher. Read the fire extinguisher's directions, and make sure that you know how to use it properly.

Academic Vocabulary

device (dee VYS) (noun)
a machine or piece of equipment designed to perform a task. *Alex was using a remote control device to turn on the television.*

Create a fire escape plan with your family. Most fires happen at night, so be sure to know escape routes from each bedroom. Choose a meeting point outside where everyone can gather in the event of a fire. Practice the escape plan with your family every six months. **Figure 15.3** on the next page shows what to do if a fire happens in your home.

Reading Check

Recall What type of fires cannot be put out with water?

Preventing Injuries at Home

Other dangers at home include falls, poisonings, electrical shocks, and gun accidents. Help prevent these unsafe situations by being safety conscious.

Preventing Falls

Most falls in the home occur in the kitchen, the bathroom, or on the stairs. These safety rules can help you prevent falls.

- **Safety in the kitchen.** Clean up spills right away. Use a stepstool, not a chair, to get items that are out of reach.
- **Safety in the bathroom.** Put a nonskid mat near the tub or shower. Use rugs that have a rubber backing to prevent the rug from slipping. Keep personal products in plastic bottles.
- **Safety on the stairs.** Keep staircases well lit and clear of all objects. Apply nonslip treads to slippery stairs. Make sure handrails are secure and stable. If small children live in the house, put gates at the top and bottom of the stairs.

Preventing Poisonings

Many common household products are poisonous. To help keep the people in your home safe from poisoning, never call a child's medicine or vitamins "candy." Be sure that all medicines are in bottles with childproof caps. Make sure that labels on containers of household products are clearly marked, and keep them out of children's reach.

What Teens THINK

What are some ways to stay safe when you are home alone?

Some ways to stay safe when you are home alone are do not open the door to anyone, even if they are your friends, and try not to answer calls that are unknown to you. Be sure to keep all doors and windows locked. If you have an alarm system, activate it!

Kiara H.
Canyon Country, CA

Go Online

Visit glencoe.com and complete the Interactive Study Guide for Lesson 2.

FIGURE 15.3

WHAT TO DO IN CASE OF FIRE

If you are in a fire, you need to know what to do to escape safely. Memorizing these tips can help you to stay safe. **Why should you get outside first and then call 911?**

- 1** If possible, leave quickly. Get out of the building before calling 911 or the fire department.



- 2** Before opening a closed door, feel it to see if it is hot. If it is hot, do not open it. There may be flames just outside the door.



- 3** If you must exit through smoke, crawl along the floor. Smoke and hot air rise, so it is important to stay as low as possible. The air you breathe will be cleaner. The smoke will not be as likely to overcome you.



- 4** If you can't get out, stay in the room with the door closed. Roll up a blanket or towel and put it across the bottom of the door to keep out smoke. If there is a telephone in the room, call 911 or the fire department. If possible, open the window and yell for help.



- 5** If your clothing catches fire, stop, drop, and roll. Rolling on the ground will smother the flames. Never run; the rush of air will fan the flames.



- 6** Once outside, go to the prearranged meeting point. Let everyone know that you are safe. Then someone should call 911 or the fire department. Never go back into a burning building.





Michael Newman/PhotoEdit

Preventing Electrical Shocks

Improper use of electrical appliances or outlets can cause dangerous electrical shocks. To prevent electrical shocks, never use an electrical appliance around water or if you are wet. Unplug small appliances such as hair dryers when they are not in use. To unplug electrical appliances, gently pull the plug, not the cord. In homes with small children, cover unused outlets with plastic outlet protectors.



Gun Safety

If you are in a house where someone keeps a gun, observe all gun safety rules. In many states it is illegal for most teens to own a gun. If you find a gun, do not touch it. Call a parent, guardian, or other trusted adult immediately. Always treat a gun as if it were loaded. Never play with a gun or point it at someone. If you know that someone at school is carrying a gun or any other weapon, tell a school authority right away.

▲ Some schools have metal detectors to help keep guns and other weapons out of schools. **Whom should you tell if you think that a student has brought a weapon to school?**



Lesson 2 Review



After You Read

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

What I Learned

1. **Vocabulary** Define *flammable*.
2. **Describe** How can you be prepared for a fire that might happen in your home?
3. **Identify** List three strategies for preventing poisoning.
4. **Give Examples** How can you help keep stairways safe?

Thinking Critically

5. **Synthesize** Explain why it is important to follow rules against bringing a weapon

to school and what you should do if you think a classmate has a weapon.

6. **Analyze** Why is it a bad idea to call medicine “candy” to get children to take it?

Applying Health Skills

7. **Refusal Skills** Mark wants to see the hunting rifle that Juan’s dad just bought. The rifle is in a locked case, but Juan knows where the key is. How could Juan refuse Mark’s request?

Lesson 3

Staying Safe Outdoors

Richard Anderson

Guide to Reading

Building Vocabulary

Many words in English have their roots in other languages. Look up the root language of *pedestrian*.

- pedestrian (p. 480)

Reading Strategy

Compare and Contrast Create a chart like the one shown here. As you read this lesson, use the chart to note the similarities and differences between pedestrian and bicycle safety.

Focusing on the Main Ideas

In this lesson, you will be able to

- describe how to stay safe on the roads.
- describe how to stay safe in your neighborhood.
- identify ways to stay safe in hot and cold weather.
- access valid information about drowning prevention.
- describe how to be safe in and around water.
- explain safety measures for hiking and camping.

	Helmet		
Pedestrian safety			
Bicycle safety	Yes		

Quick Write

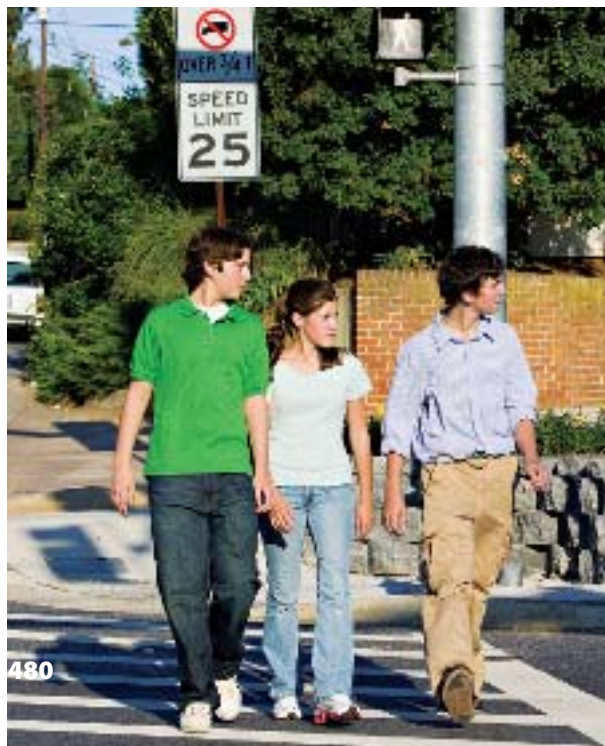
Write down three actions you take to stay safe when participating in outdoor activities.

Safety on Foot

Ever since you learned to walk, you have been a pedestrian. A **pedestrian** is a person who travels on foot. Safety is important for pedestrians. Start by paying attention to what is happening around you. Follow these rules to become a safer pedestrian.

- Walk on sidewalks when you can or walk on the side of the road facing oncoming traffic.
- Cross in crosswalks when they are available.
- Look both ways several times before crossing, and keep looking and listening for oncoming cars.

◀ Always look both ways before crossing a street. **Why is it dangerous to cross a busy street wearing headphones?**



- If you cross in front of a stopped vehicle, be sure the driver can see you. Make eye contact with him or her before stepping in front of the vehicle.
- If you walk at night, take a well-lit route. Wear light-colored or reflective clothing.
- Do not talk on a cell phone or wear headphones as you walk. Be aware of your surroundings.



Reading Check

Explain If no sidewalk is available, which side of the road should you walk on?

Safety on Wheels

Always play it safe when riding a bike, skateboard, or scooter or going in-line skating. Wear a helmet when you take part in these activities. A helmet can protect you from serious head injury if you fall. When using in-line skates, scooters, and skateboards, your gear should also include wrist guards, elbow and knee pads, and light gloves. Make sure your clothing fits well and does not interfere with your activities. Always follow your community's rules on where you can ride your skateboard or scooter. If you are skating, learn how to stop and fall safely.

Before you ride a bike, check the seat and handlebars to make sure they are secure. Test the wheels to see if they spin freely. The tires should be fully inflated, and they should have a large amount of tread. Reflectors on a bike help drivers see you. In some states, all bikes must have them. If you ride at night, your bike should also have a light. Finally, make sure your bike is the right size for you.

Stay alert when you ride. Obey all traffic laws. Ride a bike *with* the flow of traffic. When you ride in a group, ride single file, not side by side. Learn hand signals, and use them before you turn. Avoid riding in bad weather, and keep your speed under control.



Reading Check

Describe How do you ride a bike safely?

Safety in Vehicles

Motor vehicle crashes are the leading cause of death for children ages 2 to 14. To be a safety-conscious passenger, wear a safety belt whenever you ride in a vehicle. Safety belts help keep you in your seat if your vehicle gets into a crash. Many cars have air bags, too. Air bags

- ▼ Helmets, pads, and other safety equipment can help protect you when you bike, skate, or ride a scooter or skateboard. **What is the most important piece of safety equipment to wear while riding a scooter?**





Richard Anderson

can help keep people in the front seats from colliding with the steering wheel and dashboard. However, the force of air bags can hurt small children. The safest place for children to ride is in the back seat. Infants and small children should ride in an appropriate car seat or booster seat until they are large enough to use a safety belt.

If you take the bus to school, don't bother the bus driver while he or she is driving. Don't get up while the bus is moving or put your arms out the window. When you get off the bus, make sure the bus driver and all drivers of the

vehicles around the bus can see you clearly. Don't cross behind the bus. If you are in a bus during an emergency, cooperate with the driver so that you and everyone else on the bus will remain safe.

▲ Everyone riding in a car needs to be buckled up. Younger children must be in a car seat. **Why are children safest in the back seat?**



Reading Check

Describe What should you do to be safe when you are riding in a school bus?



Academic Vocabulary

potential (poh TEN shuhl) (*adjective*) the possibility of something becoming actual, or real. *Wearing a safety belt can help you avoid potential injury when riding in a car.*

Neighborhood Safety

Violence is physical force used to harm people or damage property. Here are some strategies to help you protect yourself from violence in your neighborhood.

- **Avoid potential trouble.** Don't travel alone at night or go into an area that you know is unsafe. Tell a parent or guardian where you are going. Explain who will be with you and when you will be home. Walk in well-lit places. Leave expensive items at home and carry identification. Also carry a cell phone, money, or a calling card for a pay phone, along with the number of someone you can call for help.
- **Be aware.** Notice the people around you and what they are doing. Move away from anyone who makes you feel uncomfortable.
- **Get help.** If someone tries to touch you or hurt you, scream and get away any way you can. Run to the nearest public or safe place. Find someone who can help you. Call 911. Explain the details of what happened to anyone who can help.



Reading Check

Identify What are two things you can do to stay safe in your neighborhood?



Health Skills Activity

Accessing Information

Preventing Drowning

Use library and Internet resources to research drowning and how it can be prevented. Take notes on what you learn. With your teacher, invite a water safety instructor to visit your class. Have the instructor explain ways to avoid drowning in both warm and cold water.

On Your Own

Create a video or poster that shows and describes the different drowning-prevention techniques for warm and cold water.

Safety at Play

Chances are, you like to spend time outdoors. To stay safe, follow these tips:

- **Take a buddy or two.** When you spend time outdoors, be sure you are with at least one other person. If something happens to you and you are with a group, one friend can stay with you and another friend can go for help.
- **Stay aware.** Learn the signs of weather emergencies. When necessary, move quickly to shelter.
- **Know your limits.** Don't take on more than you can handle. For example, if you are a beginning swimmer, don't try to swim a long distance.
- **Use good judgment.** Plan ahead. Make sure you have the equipment you need and that what you are doing is safe. If you're unsure, ask a trusted adult.
- **Warm up and cool down.** This will help prevent injuries. Stretch after your warm-up and cooldown.

Hot Weather Safety Tips

Your body can overheat when you are active outdoors in hot weather. If you feel dizzy, out of breath, or have a headache, take a break. Keep cool by drinking plenty of water. Rest in the shade when you can. Overworking your body in the heat can lead to two dangerous conditions: heat exhaustion and heatstroke. Signs of heat exhaustion can include cold, clammy skin, dizziness, or nausea. Signs of heatstroke can include an increase in body



Visit glencoe.com and complete the Interactive Study Guide for Lesson 3.



temperature, difficulty breathing, and a loss of consciousness. Heatstroke can be deadly. If someone shows signs of heatstroke, get medical help right away.

Richard Anderson

Cold Weather Safety Tips

Cold weather can be dangerous if your body or parts of your body get too cold. When you are active outside in cold weather, dress in layers. Wear a hat, warm footwear, and gloves or mittens. Anyone who starts to feel very cold or shiver should go inside and get warm.

Water Safety

Always think about safety when you are in and around water. **Figure 15.4** lists tips for staying safe in and around water.

Hiking and Camping Safety

Following the tips in **Figure 15.5** will help you stay safe while hiking and camping.

- ▲ It's important to drink enough liquid when you play or exercise outside. **What are two other ways to stay cool when you're outside?**

▼ **FIGURE 15.4**

TIPS FOR WATER SAFETY

Taking a swimming and water safety course from a trained instructor is the most important step you can take toward being safe in and around water. **List two other water safety tips.**

- Follow all posted safety rules.
- Swim only when a lifeguard or other trusted adult is present.
- Swim with a buddy.
- Monitor yourself. Don't swim if you are tired or cold, or if you have been out in the sun for too long.
- Look around your environment often. Watch for signs of storms. If you are swimming when a storm begins, get out of the water right away.
- Never swim in water with strong currents.
- Dive only in areas that are marked as safe for diving. The American Red Cross suggests that water be at least nine feet deep for diving or jumping. Never dive into unfamiliar water or into above-ground pools.
- If you are responsible for children, take extra care. Don't let them near the water unless there is a trained lifeguard on duty. Accidents can happen even in small wading pools.



**FIGURE 15.5****HIKING AND CAMPING SAFETY**

Safe hiking and camping takes planning. **Why is it important to let people know where you're going hiking and when you plan to return?**

- **Never camp or hike alone.** Make sure family members know your schedule and your route. Carry a cell phone or long-range walkie-talkie if you can.
- **Dress properly.** Be aware of the weather and dress accordingly. If you are hiking up a mountain, know that the weather may change as you change altitude. Wear sturdy footwear. Before you hike in any shoes or boots, break them in to avoid getting blisters.
- **Check your equipment.** Take along a supply of fresh water, a first-aid kit, and a flashlight with extra batteries.



- **Know where you are.** Learn how to read a compass and carry one. Carry a map of the area in which you will be hiking or camping.
- **Know the plants and animals.** Learn to recognize the dangerous plants and animals in your area so that you can avoid them. For example, learn what poison ivy and poison oak look like. To avoid insect bites and stings, tuck your pant legs into your socks and apply insect repellent.
- **Use fire responsibly.** Learn the proper way to build a campfire. Put out all campfires completely before you go to sleep or leave the campsite. To do so, soak the campfires with water or cover them completely with sand or dirt.

Lesson 3 Review



After You Read

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

What I Learned

1. **Vocabulary** What is a *pedestrian*?
2. **Identify** What are the signs of heatstroke?
3. **Describe** How can you dive safely?
4. **Give Examples** Name three items to take along when hiking.

Thinking Critically

5. **Apply** While Jordan is visiting his friend Mario, he loses track of the time. When he leaves Mario's house to walk home, it's dark. What would you advise Jordan to do?

6. **Analyze** Why should you cross in front of a school bus and not behind it?

Applying Health Skills

7. **Advocacy** Create a poster that displays the dangerous plants in your area. Show plants such as poison ivy or poison oak as well as plants that are poisonous if eaten. Post a phone number to call if someone has eaten a poisonous plant.

Lesson 4

Weather Emergencies and Natural Disasters

Guide to Reading

Building Vocabulary

As you read this lesson, write each new highlighted term and its definition on separate index cards. Practice matching the definition to the term.

- weather emergencies (p. 486)
- tornado (p. 487)
- hurricane (p. 488)
- blizzard (p. 488)
- hypothermia (p. 489)
- earthquake (p. 490)
- aftershocks (p. 490)

Focusing on the Main Ideas

In this lesson, you will be able to

- **describe** the different types of weather emergencies and natural disasters.
- **list** safety measures to take during a weather emergency or natural disaster.
- **practice** healthful behaviors by preparing an emergency supplies kit.

Reading Strategy

Predicting Skim the headings, figures, photos, and captions in this lesson. Then jot down two questions that you think might be answered in the lesson.

Quick Write

What is one kind of weather emergency that is common in your area? List two things you could do to stay safe during that emergency.

What Are Weather Emergencies?

Weather events make the news on a fairly regular basis. Reports from around the world tell of disasters that destroy property and even take lives. These events often happen with little warning. People cannot prevent them. **Weather emergencies** are *dangerous situations brought on by changes in the atmosphere*. Weather emergencies are natural events. Examples include thunderstorms, tornadoes, hurricanes, and blizzards.

The National Weather Service (NWS) works to track the progress of storms. The NWS sends out bulletins to the public. The bulletins keep people informed about possible weather emergencies. This helps keep people and communities safe. Storm bulletins may involve watches or warnings. A storm watch indicates that a storm is likely to develop. A storm warning indicates that a severe storm has already developed and a weather emergency is happening. As a result, people in the area are in danger. If your area is under a storm warning, turn on the television or radio. Follow the instructions of the NWS and local officials.



Technology has helped scientists who watch the weather. Satellites gather data very quickly and feed it into powerful computers. Computers can also help predict the paths of storms. Television and the Internet can warn the public of danger very quickly. These early warnings give people more time to plan and stay safe.

Tornadoes

Tornadoes are a type of weather emergency. A **tornado** is a whirling, funnel-shaped windstorm that drops from storm clouds to the ground. Tornadoes can happen all over the United States. However, states in the Midwest and those nearest the Gulf of Mexico experience more tornadoes than other states do. In fact, this region is often called “Tornado Alley.”

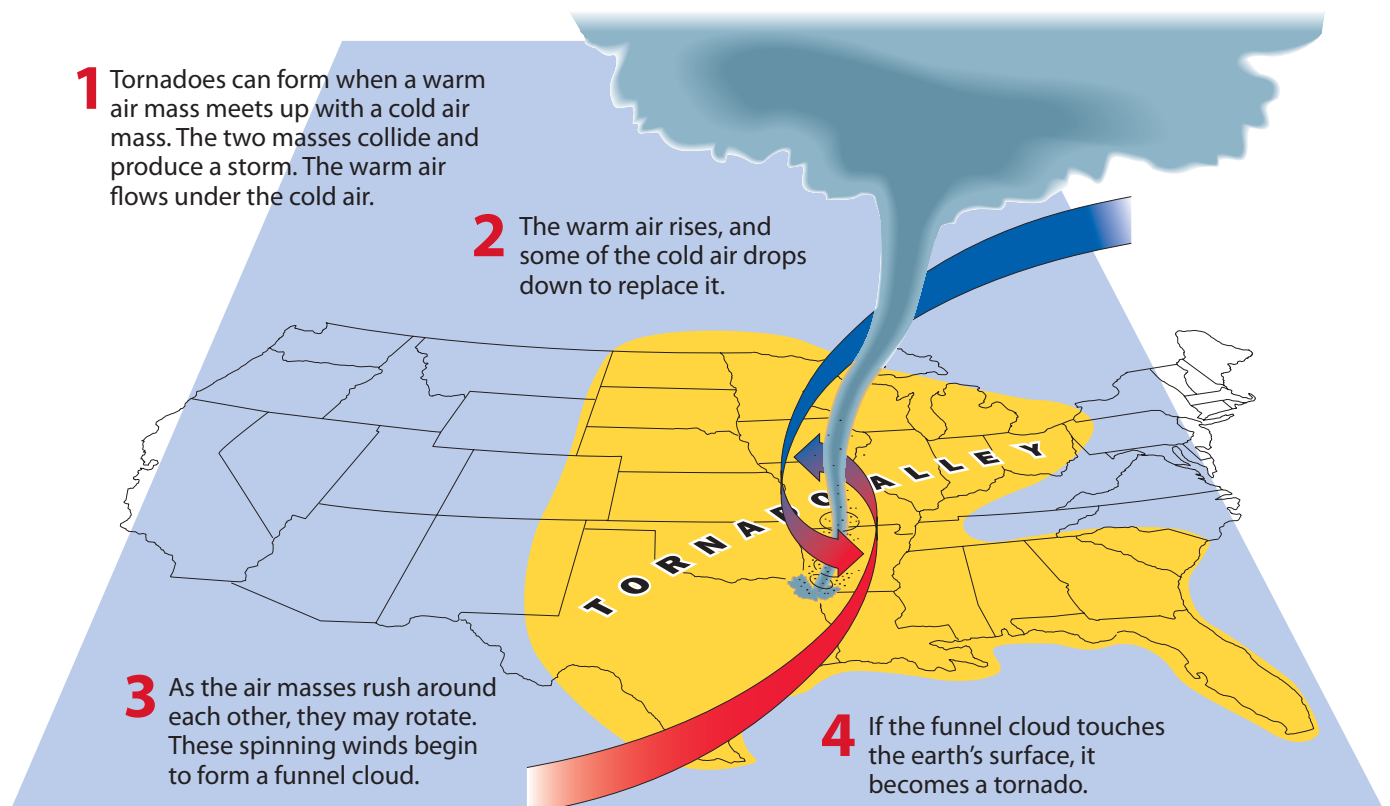
Tornadoes typically happen in the summer. They can be up to a mile wide. Most tornadoes move at about 25 to 40 miles per hour, although some speed along as fast as 60 miles per hour. **Figure 15.6** explains the conditions that lead to a tornado.

FIGURE 15.6

HOW A TORNADO FORMS

Tornadoes can occur during a storm if two air masses collide and begin to spin.

What should you do if you are inside a building during a tornado?





If a tornado watch is issued for your area, listen to the radio for updates. Decide where you will take shelter if you need to protect yourself. If a tornado warning is issued for your area, get to this shelter right away.

- **Where to go.** You are safest underground in a cellar or basement. If you cannot go underground, take shelter in a windowless room or hallway. If you are outdoors, lie in a ditch or flat on the ground. Stay away from trees, cars, and anything that could fall on you.
- **What to do.** Cover yourself with whatever protection you can find. If you are in the basement, try to get under a workbench. If you are in a room with furniture, stay under a heavy table. Lying in a bathtub under a cushion, mattress, or blanket may also offer good protection. Stay where you are. The storm will pass quickly.



Hurricanes

A **hurricane** is a strong windstorm with driving rain that forms over the sea. Each hurricane has a center, or eye, where the weather conditions are calm. A circular cloud mass swirls around the eye. This swirling mass gives the hurricane its high winds. The faster the air mass swirls, the more powerful the hurricane.

Most hurricanes happen in the late summer or early fall. Unlike tornadoes, hurricanes form and move slowly. As a result, scientists can estimate when and where a hurricane will hit land. This gives people time to plan ahead. Take these steps to stay safe in a hurricane.

- Board up windows and doors. Bring inside items such as furniture and bikes that wind could smash into houses.
- Evacuate, or leave the area, immediately if the NWS tells you to do so.
- If no evacuation is called for, stay indoors away from windows and doors.

Blizzards

A **blizzard** is a very heavy snowstorm with winds up to 45 miles per hour. Blizzards can last from an hour or two to several days. During a blizzard, always stay inside. The driving snow that a blizzard brings makes it very hard to see anything. People who leave their houses during blizzards can lose their sense of direction easily. They may get lost. In fact, a person may not be able to find his or her own home, even if it is only a few yards away.

▼ This is an image taken of a hurricane. **Give one example of how technology has affected predictions of weather emergencies.**





Bo Zauners/CORBIS

If you are outside when a blizzard begins, find shelter as soon as possible. Get inside and stay inside. One danger in a blizzard is hypothermia. **Hypothermia** is a sudden and dangerous drop in body temperature. Hypothermia can shut down your body's systems, so they stop functioning properly. It can even lead to death. To prevent hypothermia, keep your head, face, and body covered and warm. If you're in a car, pull over to the side of the road. Stay in the car, and turn on its flashers.



Thunderstorms and Lightning

Lightning is a dramatic and dangerous side effect of thunderstorms. Florida leads the United States in the number of lightning strikes that happen each year. It is also the leading state for the number of people killed by lightning. How can you protect yourself during thunderstorms? If possible, stay inside or seek shelter as soon as possible. Unplug electrical appliances and computers. Be prepared for a power loss. Also, avoid using telephones or running water during a storm with lightning. If you are caught outdoors when lightning is striking, crouch low to the ground. Keep away from electrical poles and wires, tall trees, water, and metal objects.

▲ The cold weather, high winds, and snowfall of a blizzard can be dangerous. **Why is hypothermia a danger for someone caught outside in a blizzard?**



Reading Check

Describe What should you do if you are caught outside when lightning is striking?



What Are Natural Disasters?

A natural disaster is an event caused by nature that results in widespread damage. Natural disasters include floods and earthquakes. Plan ahead so you can stay safe if a natural disaster strikes. Keep some basic supplies on hand such as fresh water, a radio, a flashlight, batteries, blankets, canned food, a can opener, and a first-aid kit.

Floods

Of natural disasters, only floods kill more people than lightning strikes. Flash floods are the most dangerous of all. Flash-flood waters rise very quickly and are surprisingly powerful. Two feet of moving water has enough force to sweep away cars. More water than that can carry away trucks and houses.



- ▶ Water in motion is a very powerful force. It can wash away cars, trucks, and even buildings. Never try to cross water in a flood. **Why should you never try to cross water that is flooding across a road?**



Royalty-free/SupperStock

If the NWS issues a flood watch for your area, follow their warning instructions. Take your emergency kit, and go to the highest place in your home. Listen to a battery-powered radio for a flood warning. If a flood warning is issued and you are told to evacuate, do so immediately. The following tips can help you survive a flood:

- Head for higher ground. The home of a relative or neighbor who lives outside the warning area on higher ground is a good choice.
- Never walk, swim, ride a bike, or drive a car through flooding water. You could be swept away, drown, or be electrocuted.
- Drink only bottled water. Floodwater is easily polluted by garbage and other waste.
- If you have evacuated the area, return home only after you are told it is safe for you to do so.
- Once you return home, throw away contaminated food. Disinfect everything that has come into contact with the floodwater.

Earthquakes

An **earthquake** is a shifting of the earth's plates, resulting in a shaking of the earth's surface. An earthquake happens when a large piece of the earth's crust actually moves. Earthquakes usually involve more than a single event. A large quake typically is followed by a series of aftershocks. **Aftershocks** are smaller earthquakes, as the earth readjusts after the main earthquake.





Health Skills Activity

Practicing Healthful Behaviors

Creating an Emergency Supplies Kit

During an emergency or disaster, an emergency supplies kit can save your life. Your kit should include enough supplies to last your family for three days. If you have to evacuate your home, take these supplies plus sturdy walking shoes, money, and any necessary prescription medicines.

- **Gallon jugs of fresh water.** Allow one gallon of fresh water per person per day.
- **Canned food.** Select food that can be eaten with little or no preparation.
- **Can opener and eating utensils.**
- **First-aid kit.** Include bandages and any needed prescription medicines, along with doses and instructions for taking the medicine.
- **Small battery-powered or crank-powered radio.**
- **Flashlight.**
- **Spare batteries for the flashlight and radio.**

On Your Own

Create your own emergency supplies kit with all the appropriate safety supplies. Prepare a personal and family emergency plan to follow in case of an emergency.

Scientists still can't predict earthquakes very accurately. However, they can measure how strong earthquakes are when they happen. Scientists use the Richter scale to measure the strength of all but the very largest earthquakes. The Richter scale rates the magnitude, or force, of ground motion during an earthquake. An earthquake that measures 1 on this scale is slight. One that measures a 2 is 10 times stronger than 1. Likewise, one that measures a 3 is 10 times stronger than 2, and so on. Many small earthquakes happen every month. The most destructive earthquakes have a magnitude of 7 or more on the Richter scale. They are much less common. Scientists have never recorded an earthquake that measures more than about 9 on the Richter scale. **Figure 15.7** describes how you can protect yourself during an earthquake.



Reading Check

Apply How many times stronger is an earthquake that measures 2 on the Richter scale than an earthquake that measures 1?



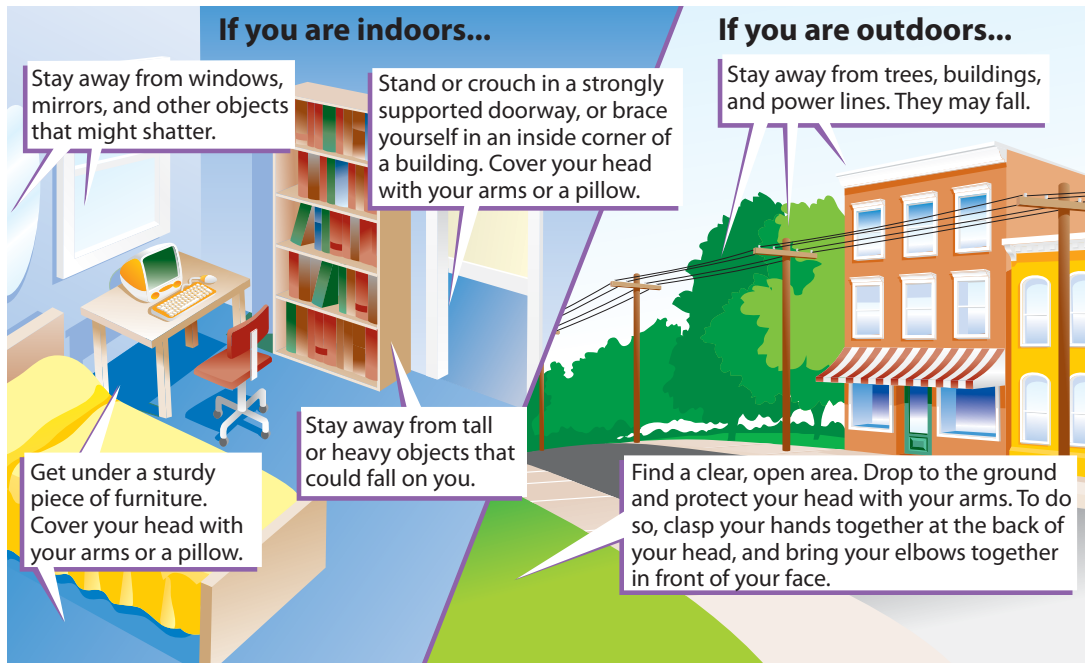
Visit glencoe.com and complete the Interactive Study Guide for Lesson 4.



FIGURE 15.7

PROTECTING YOURSELF DURING AN EARTHQUAKE

During an earthquake, stay clear of falling objects. **Why do you think standing in a doorway could help keep you safe during an earthquake?**



Lesson 4 Review

After You Read

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

What I Learned

- Vocabulary** What is an *earthquake*?
- Describe** What are two risks of being outside in a blizzard?
- Identify** What time of year do most hurricanes happen?
- Give Examples** Name four items that should be part of an emergency supplies kit.
- Explain** What regions of the United States are likely to experience tornadoes?

Thinking Critically

- Infer** Why do you think aftershocks are sometimes more deadly than the initial earthquake?
- Apply** You are playing soccer in a field, and you see a flash of lightning from an approaching thunderstorm. What should you do?

Applying Health Skills

- Practicing Healthful Behaviors** Peter's family lives in Tornado Alley. What can Peter do to be safety conscious about tornadoes?

Lesson 5

Giving First Aid

Guide to Reading

Building Vocabulary

Fold a piece of paper in half lengthwise. As you read this lesson, write each new highlighted term on one side of the fold, and write the definition on the other. Then fold the paper to quiz yourself on the definitions.

- first aid (p. 493)
- cardiopulmonary resuscitation (CPR) (p. 494)
- rescue breathing (p. 494)
- abdominal thrusts (p. 496)
- chest thrusts (p. 497)
- first-degree burn (p. 498)
- second-degree burn (p. 498)
- third-degree burn (p. 498)
- fracture (p. 498)
- dislocation (p. 498)

Focusing on the Main Ideas

In this lesson, you will be able to

- **list** steps to take in an emergency.
- **describe** how to perform CPR.
- **describe** ways to help a person who is choking.
- **explain** how to stop severe bleeding.
- **describe** how to treat burns.
- **describe** treatments for fractures, sprains, and bruises.
- **practice** healthful behaviors to avoid burns.

Reading Strategy

Predicting Read the main headings, and look at the figures in this lesson. Then write down three pieces of information that you think might be covered in the lesson. After you have completed the lesson, look back to see whether your predictions were correct.

Emergency Situations

In emergency situations, time is often critical. Acting quickly and correctly can save someone's life. When an emergency happens, call 911 or the emergency number in your area. Give your name, location, and reason for calling. Explain the condition of the injured person. Describe what help he or she has already received. If you cannot call, have someone else call right away.

Knowing basic first aid may help you deal with some emergencies while you wait for help to arrive. **First aid** is the immediate care given to someone who becomes injured or ill until regular medical care can be provided. Anyone who has received first aid should be taken to a medical provider as soon as possible.

Quick Write

Write a couple of sentences describing how you would treat a minor burn.

Reading Check

Explain What information should you give when calling 911 or another emergency number?



Taking Universal Precautions

To protect yourself and the victim when giving first aid, follow *universal precautions*. These are steps you can take to minimize contact with blood and other body fluids, which can contain viruses. Whenever possible, wear gloves when giving first aid to a victim. Avoid touching any object that was in contact with the victim's blood. Wear a face mask or use a mouthpiece, if one is available, when giving a victim rescue breaths. Always wash your hands immediately after giving first aid.

Restoring Breathing and Heartbeat

All organs, including the brain, need oxygen-rich blood to work properly. If the heart stops beating, the flow of blood to the brain stops, too. When the brain stops functioning, breathing also stops. In this situation, check to see if the victim can respond before taking action. Tap the victim and shout, "Are you OK?" If there is no response, call 911. A trained person should then begin **cardio-pulmonary resuscitation** (or CPR), a first-aid procedure to restore breathing and circulation. The first steps of CPR involve checking the victim's airway and rescue breathing. **Rescue breathing** is a first-aid procedure where someone forces air into the lungs of a person who cannot breathe on his or her own. The steps needed to perform rescue breathing are shown below in **Figure 15.8**.

▼ **FIGURE 15.8**

RESCUE BREATHING

CPR begins with checking the airway and rescue breathing. **Why do you need to make sure that the airway is cleared before performing rescue breaths?**



Before performing rescue breathing, check to see if the victim is breathing. Tilt the victim's head back and lift the chin. Look, listen, and feel for normal breathing for 5 to 10 seconds. Signs of normal breathing include

- seeing the person's chest rise and fall.
- hearing breathing sounds, including wheezing or gurgling.
- feeling air moving out of the person's mouth or nose.

If you cannot detect signs of breathing, begin rescue breathing. Follow these steps:

1. Pinch the victim's nose shut with your thumb and forefinger. With your other hand, tilt the victim's chin upward to open the airway.
2. If you have a sterile breathing mask available, place it securely over the victim's mouth and nose. Then take a breath and place your mouth over the opening in the

mask. If you do not have a mask, take a breath and place your mouth over the victim's mouth, forming a tight seal.

3. Exhale for one second and watch to see if the victim's chest rises.
4. Remove your mouth from the person's mouth and take another breath. Allow the victim's chest to fall, and feel the air escape. Then give the victim a second breath.



▼ **FIGURE 15.9**

PERFORMING THE CPR CYCLES

Performing CPR correctly involves switching between rescue breaths and chest compressions. **When performing CPR on an adult, how many chest compressions should you perform before giving two rescue breaths?**



1 To perform chest compressions, kneel next to the victim's chest. Find a spot on the center of the chest. Place the heel of one hand on that point. Place your other hand on top of the one you just put into position. Interlock your fingers with the fingers of the other hand. Raise your fingers so they do not touch the person's chest.



2 Kneel over the victim so that your shoulders are directly over your hands. Be sure your elbows are locked. Press straight down quickly and firmly at a rate of about 100 compressions per minute. Allow the victim's chest to spring back between compressions. After every 30 compressions, give the victim two rescue breaths.



3 After performing 30 compressions, give two more rescue breaths. Repeat the cycle of 30 compressions and two breaths until the victim breathes, coughs, or moves, or until professional rescuers arrive to take over.

The basic cycle of CPR involves switching between rescue breaths and chest compressions. For adults and children over the age of 12, alternate two rescue breaths with 30 chest compressions. This cycle is illustrated above in **Figure 15.9**. If you are planning to babysit, contact the American Red Cross for training in CPR for young children and infants.

Automated External Defibrillators (AEDs)

When a person's heart stops beating, an automated external defibrillator (AED) can help restore the heartbeat. This electronic device sends a quick jolt of electricity to the heart through the chest to make the heart start beating again. More and more public places keep AEDs on hand. Anyone can receive training on how to use them. In this way, more lives can be saved.



Reading Check

Explain What does an AED do?



How to Help Someone Who Is Choking

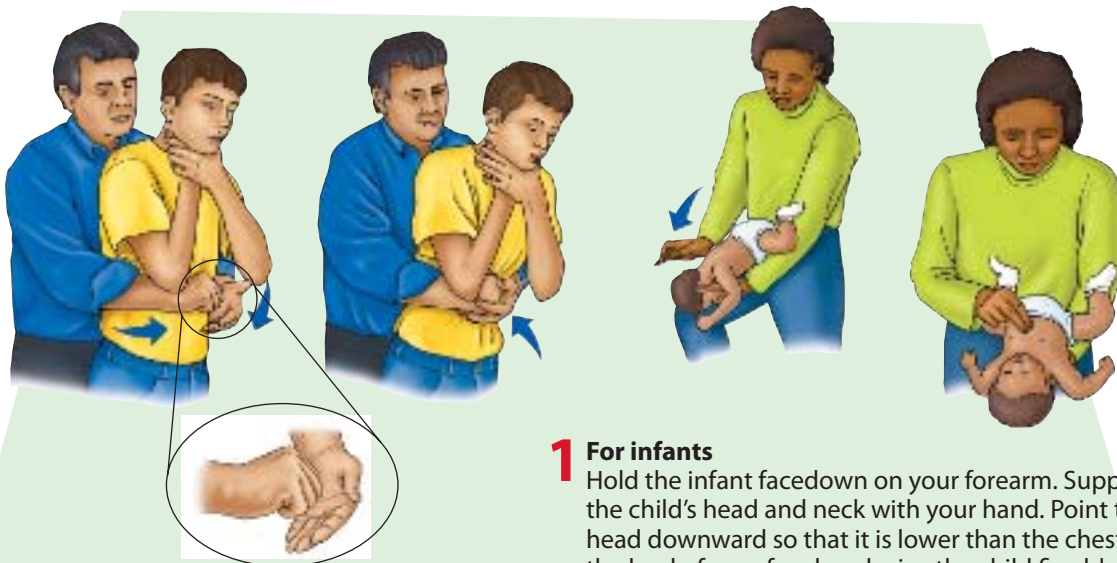
Choking results when a person's airway becomes blocked. Signs of choking include grabbing at the throat and neck, coughing, gagging, wheezing, or turning blue in the face. If someone appears to be choking but can cry, speak, or cough forcefully, do not try to give first aid. Air is still able to pass to the lungs. However, if the choking person makes no sound and cannot speak or cough, give first aid immediately. A person can die from choking within minutes.

For an adult or child who is choking, give the person five back blows. To perform back blows, stand slightly behind the person. Place one arm diagonally across the chest and lean the person forward. Strike the person between the shoulder blades five times. If the back blows do not dislodge the object, give five abdominal thrusts. **Abdominal thrusts** are *quick inward and upward pulls into the diaphragm to force an obstruction out of the airway*. **Figure 15.10** shows how to perform abdominal thrusts.

▼ **FIGURE 15.10**

FIRST AID FOR CHOKING

Follow these steps to help a person who is choking. **Why do you think chest thrusts are used to help a choking infant?**



1 For adults and children Place the thumb side of your fist against the person's abdomen, just above the navel. Grasp your fist with your other hand.

2 Give quick, inward and upward thrusts. Give five abdominal thrusts and then five back blows until the person coughs up the object. If the person becomes unconscious, call 911 or the local emergency number. Begin CPR.

1 For infants Hold the infant facedown on your forearm. Support the child's head and neck with your hand. Point the head downward so that it is lower than the chest. With the heel of your free hand, give the child five blows between the shoulder blades. If the child doesn't cough up the object, move on to chest thrusts (step 2).

2 Turn the infant over onto his or her back. Support the head with one hand. With two or three fingers, press into the middle of the child's breastbone—directly between and just below the nipples—five times. Repeat chest thrusts until the object comes out or the infant begins to breathe, cry, or cough. Make sure a health care professional checks the infant. If the infant becomes unconscious, call 911.

If an infant is choking, hold the infant face down along your forearm. You can use your thigh for support. Hit the area on the infant's back between the shoulder blades five times with the heel of your other hand. Then turn the infant over and perform chest thrusts. **Chest thrusts** are quick presses into the middle of the breastbone to force an obstruction out of the airway. Figure 15.10 shows how to help an infant who is choking.

If you start to choke and there's no one around, use your fist and hand to perform abdominal thrusts on yourself. If this does not work right away, do abdominal thrusts on a low railing or the back of a chair, as shown in the photo on this page.



Reading Check

Identify When does a person need first aid for choking?

▲ If abdominal thrusts with your hands fail, try using a low railing or a chair. **Why is it important to remove objects blocking the airway as soon as possible?**

How to Stop Severe Bleeding

Severe bleeding can be a life-threatening emergency. Blood loss prevents oxygen from getting to the body's organs. If possible, put on sterile gloves before helping someone who is bleeding. Avoid touching anyone else's blood. The blood may contain viruses or other pathogens that can make you sick. If the victim has a wound that is bleeding severely or needs other medical help, call 911 before taking action. Wash the wound with mild soap and water to remove dirt and debris. Then follow these steps to control the bleeding:

- If possible, raise the wounded body part above the level of the heart.
- Cover the wound with sterile gauze or a clean cloth.
- Press the palm of your hand firmly against the gauze. Apply steady pressure to the wound for five minutes, or until help arrives. Do not stop to check the wound; you may interrupt the clotting of the blood.
- If blood soaks through the gauze, do not remove it. Instead, add another gauze pad on top of the first and continue to apply pressure.
- Once the bleeding slows or stops, secure the pad firmly in place with a bandage or strips of gauze or other material. The pad should be snug, but not so tight that you cannot feel the victim's pulse.
- Stay with the victim until help arrives.



Reading Check

Explain What should you do if the cloth you have used to cover a wound is soaked with blood?



Go Online

Topic: First-Aid Skills

Visit glencoe.com for Student Web Activities where you can find out more about first-aid techniques, and how and where to learn them.

Activity: Using the information provided at the link above, make an emergency checklist card that list steps to take in a medical emergency, has space to write local emergency numbers and gives the name of organizations to contact about taking first-aid classes.



Emergency Physician



Emergency physicians help people with medical emergencies, such as illnesses and injuries. They must quickly recognize and treat many different kinds of problems. Emergency physicians typically work in a hospital emergency room. To prepare for a career as an emergency physician, take classes in math, biology, and chemistry.

Other than a hospital, where might an emergency physician work? Go to *Career Corner* at glencoe.com to find out.

Burns

Being safety conscious can help you avoid burns. For example, never play with matches or fire. Handle hot foods carefully. Avoid making the water too hot in the shower. Sunburns can be serious, too. Protect yourself by wearing sunscreen, staying covered, and limiting time in the sun.

If you do get burned, make sure the burn gets treated. The following is a list of the different types of burns and ways to treat them.

A first-degree burn, or superficial burn, is *a burn in which only the outer layer of skin has burned and turned red*. To treat this type of burn, flush the burned area with cold water for at least 20 minutes. Do not use ice. Then loosely wrap the burn in a clean, dry dressing. Most sunburns are first-degree burns.

A second-degree burn, or partial-thickness burn, is *a moderately serious burn in which the burned area blisters*. To treat this type of burn, flush the burned area with cold water (not ice) for at least 20 minutes. Elevate the burned area. Loosely wrap the cooled burn in a clean, dry dressing. Do not pop blisters or peel loose skin.

A third-degree burn, or full-thickness burn, is *a very serious burn in which all the layers of skin are damaged*. These burns usually result from fire, electricity, or chemicals. Third-degree burns require immediate medical attention. Call 911 or another emergency number immediately. Do not try to remove burned clothing. Reduce the heat on the affected area and then cover with a clean cloth. Only a medical professional should treat full-thickness burns.



Reading Check

Describe How should you first treat all first- and second-degree burns?



Treating Other Emergencies

Other common injuries include broken bones, dislocations, sprains, bruises, and animal and insect bites.

Broken bones and dislocations. A *break in a bone* is called a **fracture**. Fractures usually happen along the length of a bone. However, problems can also develop where bones meet at a joint. A **dislocation** is *a major injury that happens when a bone is forced from its normal position within a joint*. For example, a dislocation happens if your upper arm bone is pulled out of your shoulder socket. Moving a broken bone or dislocated joint could cause further injury. For both fractures and dislocations, call for help at once. While you wait for help, keep the victim still. Once a trained medical professional arrives, he or she can then immobilize the fracture or dislocation.

Go Online

Visit glencoe.com and complete the Interactive Study Guide for Lesson 5.

Sprains and bruises. To treat these types of injuries, keep the victim still. Then use the P.R.I.C.E. formula that you learned about in Chapter 3: **P**rotect the injured part, **R**est the injured part, **I**ce the injured part using an ice pack with a towel between the skin and the ice (be sure to remove it every 15–20 minutes so that it does not become too cold), **C**ompress the part with a bandage, and **E**levate the part above the level of the heart. Remember to report any injury to a coach or teacher, as well as a parent or guardian.

Insect and Animal Bites. Insect bites and stings can be painful but are not usually dangerous unless the person is allergic to the venom of the insect. If an allergic person has been stung, get medical help immediately. For all other bites and stings follow these steps:

- Remove the stinger by scraping it off with a firm, straight-edged object. Do not use tweezers.
- Wash the site thoroughly with mild soap and water.
- Apply ice (wrapped in a cloth) to the site for ten minutes to reduce pain and swelling. Alternate ten minutes on and off.

To treat animal bites, wash the bite with soap and water. Apply pressure to stop any bleeding. Apply antibiotic ointment and a sterile dressing. For any bite that has broken the skin, contact your doctor.



▲ Ice helps slow swelling after a sprain. **How can you reduce the risk of sprains during physical activity?**

Lesson 5 Review

After You Read

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

What I Learned

1. **Vocabulary** What is the difference between a *fracture* and a *dislocation*?
2. **Describe** What are the steps of CPR?
3. **Give Examples** What kinds of accidents can cause third-degree burns?
4. **Explain** What can you do if you are choking and there is no one around to help?

Thinking Critically

5. **Apply** Why should medical professionals always wear gloves when they help someone who is bleeding?
6. **Infer** Why can you infer that a person who cannot speak or cry is choking?

Applying Health Skills

7. **Advocacy** Create a brochure that explains the steps of CPR. Also explain why it's important to know CPR.

Building Health Skills

Accessing Information

Practicing Healthful Behaviors

Stress Management

Analyzing Influences

Communication Skills

Refusal Skills

Conflict Resolution

Decision Making

Goal Setting

Advocacy

Why is it Important to Practice Healthful Behaviors?

When you practice healthful behaviors you take specific actions to stay healthy and avoid risky behaviors. This will help you prevent injury, illness, disease, and other health problems. The following behaviors will help you make a safer place.

- Make home safety checks.
- Plan for safety emergencies.
- Share safety plans with family members.

Safety at Home

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

1 Model

Read how Matt practices healthful behaviors by conducting a safety check of his home to identify potential hazards.

Matt's grandmother was coming for a visit. Matt's father wanted to be sure she would stay safe during her visit. He asked Matt to help develop a safety plan. Matt did a safety check of the rooms and stairways. He made a list of possible hazards and solutions. Look at the safety plan Matt made.

Safety Plan

Room	Hazard	Solution
Kitchen	Slippery floor mat in front of sink	Remove the floor mat.
Bathroom	Slippery bathtub	Buy and place a mat in the tub.
Stairway	Loose handrail (missing screws)	Replace screws.

Matt and his dad worked together to make the repairs. Thanks to Matt's help, his grandmother enjoyed a safe visit.

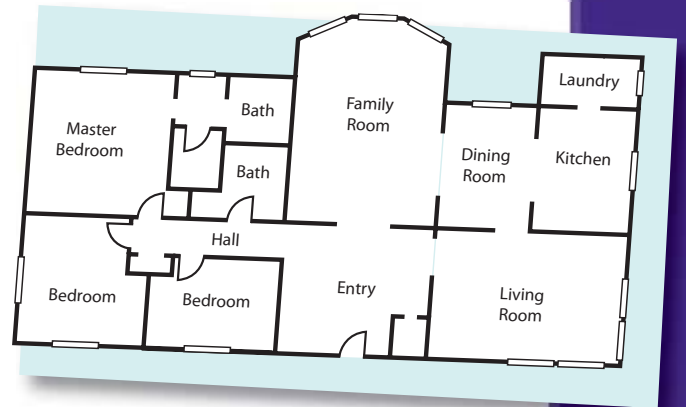


2 Practice

Andrew works with his parents to create a fire escape plan for their home. Read the passage below and then practice healthful behaviors by answering the questions that follow.

In health class, Andrew learned about how to safely escape fires. He suggested to his parents that they come up with a fire safety plan for their home. Andrew's parents asked him to develop the plan for their family. Look at the floor plan of Andrew's house and answer the following questions.

1. What are the escape options they should consider?
2. What action should they take if an escape route is blocked?
3. How can they ensure that all family members are familiar with the plan?



3 Apply

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

Create a fire escape plan for your home. First, draw a floor plan of your house or apartment. Then show the escape routes from each room and a meeting point outside. Present your plan to a classmate and explain common causes of fires in homes. Take your plan home and practice it with your family.

Self-Check

- Did I draw a floor plan and show escape routes?
- Did I have a meeting point outside?
- Did I explain causes of fires in homes?

The Internet is like any tool. You've got to use it right to stay safe.

10 Tips for CYBER SAFETY



There's no way around it. Whether for schoolwork or fun, it's almost impossible to avoid using the Internet. However, you *can* avoid the dangers that might be lurking online. Just follow these 10 easy tips—and you'll be surfing more safely.

1. No sharing!

Don't give out personal information online, especially in chat rooms. Remember, you can't actually see the people in chat rooms. Some may not be telling the truth about themselves.

2. Get permission.

Make sure to get the okay from a trusted adult before heading online—and especially before filling out any forms on the Internet.

3. NEVER meet in person.

Never agree to meet in person someone you've "met" online. This is extremely dangerous.

4. Don't send photos to strangers online.

In addition, be sure to get permission from a trusted adult before sending photos to friends.

5. Look before you link.

Some sites are not intended for you. To avoid them, don't click on links that are sent in e-mails from strangers.

6. Be careful of what you download.

Unless a site has a solid reputation, don't use it to download applications. The applications could come with viruses and spyware attached.

7. Keep your passwords private.

Your passwords are types of protection. Never reveal them to people online.

8. Watch out for viruses.

If you open an attachment from a stranger, you might be inviting a virus into your computer. Be sure to run a virus scan before opening any attachments—even if you know the sender. He or she could be passing along a virus without even knowing it.

9. Turn on your filter.

Search engines and browsers have a filter function that can block information that's not meant for you. Check out the "preferences" tab to set it up.

10. Talk to a trusted adult.

Feeling uncomfortable or scared about something that happened online? Tell a trusted adult about it immediately.





Visit glencoe.com to download quizzes and eFlashcards for Chapter 15.

FOLDABLES® Study Organizer

Foldables® and Other Study Aids Take out the Foldable® that you created for Lesson 1 and any graphic organizers that you created for Lessons 1–5. Find a partner and quiz each other using these study aids.

Lesson 1 Preventing Injury

Main Idea Being safety conscious means being aware that safety is important and acting safely.

- Eliminating hazards in your environment will help you prevent accidental injuries.
- Breaking the accident chain involves changing the situation, the unsafe habit, or the unsafe action.

Lesson 2 Staying Safe at Home

Main Idea Staying safe while at home involves taking action to prevent fires, injuries, and gun-related accidents.

- Smoke alarms and fire extinguishers help keep homes safe.
- Falls in the kitchen, bathroom, and stairway are common injuries in the home.
- Always treat a gun as if it were loaded. Never play with a gun or point it at someone.

Lesson 3 Staying Safe Outdoors

Main Idea Wearing appropriate clothing and safety gear can help you stay safe when participating in outdoor activities.

- Safety on foot requires being an alert pedestrian.
- Safety in vehicles includes wearing a safety belt and not distracting the driver.

Lesson 4 Weather Emergencies and Natural Disasters

Main Idea Weather emergencies include tornadoes, hurricanes, blizzards, and thunderstorms. Natural disasters include floods and earthquakes.

- Weather emergencies are dangerous situations brought on by changes in the atmosphere.
- Natural disasters are dramatic events caused by earth's processes.
- You can protect yourself in weather emergencies and natural disasters by following any instructions issued by authorities and by being prepared.

Lesson 5 Giving First Aid

Main Idea First aid is the immediate care given to someone who becomes injured or ill until regular medical care can be provided.

- CPR is the first aid for someone whose heart has stopped beating.
- Abdominal thrusts can help save someone who is choking.
- To control bleeding, apply a cloth and direct pressure to the wound and elevate the wound, if possible.
- Flush all burns with cold water for at least 20 minutes. Major burns require medical attention as soon as possible.
- Use the P.R.I.C.E. formula to help victims of sprains and bruises. P.R.I.C.E. stands for **Protect, Rest, Ice, Compress, and Elevate**.

After You Read

Health eSpotlight

VIDEO

Now that you have read the chapter, look back at your answer to the Health eSpotlight question on the chapter opener. Have your ideas changed? What would your answer be now?

Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–6. After each number, write the term from the list that best completes each statement.

- safety conscious
- accidental injuries
- hazard
- flammable
- smoke alarm
- fire extinguisher

Lesson 1 Preventing Injury

1. _____ are injuries caused by unexpected events.
2. Anything that is a potential source of danger is a _____.
3. If you are _____, you are aware that safety is important.

Lesson 2 Staying Safe at Home

4. A _____ can be used to put out a grease fire.
5. Materials that are _____ are able to catch fire easily.
6. A _____ can warn you that there is a fire in the house.

On a sheet of paper, write the numbers 7–12. Write **True** or **False** for each statement below. If the statement is false, change the underlined word or phrase to make it true.

Lesson 3 Staying Safe Outdoors

7. People who travel by car are pedestrians.
8. When you ride your bike, ride with the flow of traffic.
9. To stay safe in cold weather, dress in layers.

Lesson 4 Weather Emergencies and Natural Disasters

10. More people die from earthquakes than from any other natural disaster or weather emergency.
11. The center of a hurricane is called the eye.
12. Tornado Alley includes the East Coast region of the United States.

Lesson 5 Giving First Aid

On a sheet of paper, write the numbers 13 and 14. After each number, write the letter of the answer that best completes each statement.

13. The most serious kind of burn is a
 - a. first-degree burn.
 - b. second-degree burn.
 - c. third-degree burn.
14. Chest thrusts
 - a. are used with infants who are choking.
 - b. are used with adults who are choking.
 - c. are used to stop severe bleeding.



Applying Technology

Thinking Critically

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

- 15. Interpret** When you are hiking, why are you safer with two friends rather than just one friend?
- 16. Analyze** You are riding your bike and it starts to rain. You are two miles from home. You see lightning and the rain is getting heavier. You are approaching a fire station, a strip mall, and a neighborhood. What would you do?

Write About It

- 17. Expository Writing** Research the kinds of weather emergencies that are most likely to strike in your area. Learn what you can do to protect yourself from each one. Record this information on a sheet of paper.

Simple Safety

Use Microsoft Word® to create a personal safety cube illustrating how to practice safe behaviors. Follow the steps below to complete your project.

- Working in pairs or groups of three, create a new Microsoft Word® document.
- With Draw Tools form a 3" box. Copy and paste to form a net with 3 across and 4 down.
- Select one safety topic from the text, such as accident prevention, fire safety, gun safety, or water safety, for each side of the cube. Write 2–3 sentences on how to plan ahead and stay safe for each topic.
- Click, drag, and drop digital images from the media files on the right side into each box.
- Make sure your information is accurate and useful for teens.
- Edit for clarity and punctuation.
- Print and cut out. Fold and form your personal safety cube with suggestions on how to plan ahead and stay safe.

Standardized Test Practice

Writing

Read the paragraph below. Write a short essay about other places that you think automatic external defibrillators should be placed to save people who are having heart attacks. Explain your choices.

CPR can save lives, but public access to automatic external defibrillators (AEDs) can save even more. AEDs are machines that detect an irregular or missing heartbeat. In response, they send an electric shock through the chest. This restarts the heart. Every hospital has AEDs. Now, some cities are beginning to place them in more public locations.

They are training people to use them. One city trained police to use AEDs, where every police car carried one of these machines. In that city, the survival rate for people having heart attacks went from 28 percent to 40 percent. Many airports and airplanes have AEDs that have already saved people's lives. The more AEDs that are available, the more lives that can be saved.

TEST-TAKING TIP

When identifying persuasive facts, first eliminate all statements that are not facts.