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CONTENTS



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# Health

COURSE

1



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# Teen **Health**

COURSE **1**

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Graw  
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**TIME** is the nation's leading news and information magazine. With over 80 years of experience, TIME provides an authoritative voice in the analysis of the issues of the day, from politics to pop culture, from history-making decisions to healthy living. TIME Learning Ventures brings the strength of TIME and TIME For Kids' editorial and photographic excellence to educational resources for school and home.



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Printed in the United States of America.

Send all inquiries to:  
Glencoe/McGraw-Hill  
21600 Oxnard Street, Suite 500  
Woodland Hills, California 91367

ISBN-13: 978-0-07-869760-9 (Course 1 Student Edition)  
ISBN-10: 0-07-869760-3 (Course 1 Student Edition)  
ISBN-13: 978-0-07-869763-0 (Course 1 Teacher Wraparound Edition)  
ISBN-10: 0-07-869763-8 (Course 1 Teacher Wraparound Edition)

1 2 3 4 5 6 7 8 9 071 10 09 08 07 06 05

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# Your Health And Wellness

Lesson 1 **Your Total Health** .....4

Lesson 2 **Influences on Your Health** .....8

Lesson 3 **Building Health Skills**..... 12

    Health Skills Activity: Too Good To Be True? .....14

Lesson 4 **Making Responsible Decisions**..... 16

    Health Skills Activity: A Test of Friendship .....19

Lesson 5 **Setting Health Goals** .....20

**Building Health Skills:** Evaluating Influences on Your Health  
    *(Analyzing Influences)* .....24

**HANDS ON HEALTH:** Your Personal Health .....26

**Chapter 1 Reading Review** .....27

**Chapter 1 Assessment**.....28

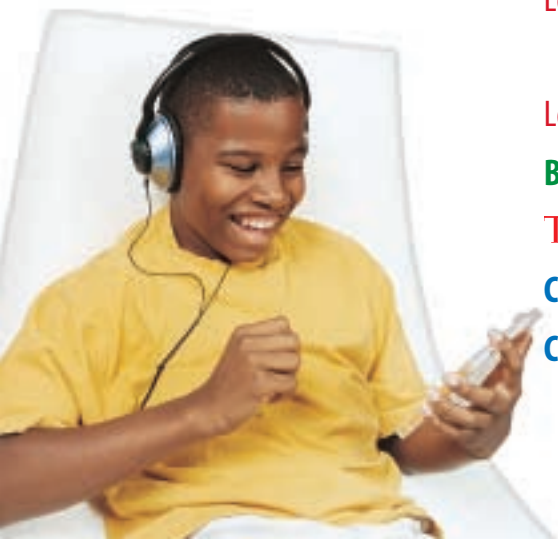


## Mental And Emotional Wellness

Lesson 1	<b>A Healthy Self-Concept</b> .....	32
	Health Skills Activity: How Do the Media Influence Your Self-Concept?.....	34
Lesson 2	<b>Your Character Counts</b> .....	36
Lesson 3	<b>Expressing Emotions</b> .....	41
Lesson 4	<b>Coping with Stress</b> .....	45
	Health Skills Activity: Relaxation Exercises .....	48
Lesson 5	<b>Emotional Problems</b> .....	50
	Health Skills Activity: Helping a Troubled Friend.....	53
	<b>Building Health Skills:</b> Dealing With Feelings (Practicing Healthful Behaviors) .....	54
	<b>HANDS-ON HEALTH:</b> Developing Good Character .....	56
	<b>Chapter 2 Reading Review</b> .....	57
	<b>Chapter 2 Assessment</b> .....	58

## Healthy Relationships

Lesson 1	<b>Communication Skills</b> .....	62
	Health Skills Activity: Safety Online .....	64
Lesson 2	<b>Your Family</b> .....	67
	Health Skills Activity: Family Meetings .....	70
Lesson 3	<b>Your Friends and Peers</b> .....	73
Lesson 4	<b>Refusal Skills</b> .....	78
	Health Skills Activity: Saying No .....	79
Lesson 5	<b>Resolving Conflicts</b> .....	81
	<b>Building Health Skills:</b> Working Things Out ( <i>Conflict Resolution</i> ) .....	86
	<b>TIME Health News:</b> School Torment .....	88
	<b>Chapter 3 Reading Review</b> .....	89
	<b>Chapter 3 Assessment</b> .....	90





CHAPTER

4

## Nutrition

Lesson 1	<b>Your Body's Nutrient Needs</b> .....	94
Lesson 2	<b>Following a Healthful Eating Plan</b> .....	98
Lesson 3	<b>Making Healthful Food Choices</b> .....	102
	Health Skills Activity: Mastering Nutrition Facts.....	104
Lesson 4	<b>Managing Your Weight</b> .....	108
	Health Skills Activity: Help for a Friend with an Eating Disorder.....	111
	<b>Building Health Skills:</b> Choosing Health-Promoting Foods (Decision Making).....	112
	<b>Hands-On Health:</b> Keeping a Food Diary.....	114
	<b>Chapter 4 Reading Review</b> .....	115
	<b>Chapter 4 Assessment</b> .....	116

CHAPTER

5

## Physical Activity

Lesson 1	<b>Physical Activity and Your Health</b> .....	120
	Health Skills Activity: Fun for the Family.....	122
Lesson 2	<b>Creating a Personal Fitness Plan</b> .....	126
	Health Skills Activity: Exercise with "Eye Appeal".....	130
Lesson 3	<b>Safety in Sports and Physical Activities</b> .....	132
	<b>Building Health Skills:</b> Developing a Personal Fitness Plan (Goal Setting)....	136
	<b>TIME Health News:</b> How to Stay Fit for Life.....	138
	<b>Chapter 5 Reading Review</b> .....	139
	<b>Chapter 5 Assessment</b> .....	140



## Personal Health

Lesson 1	<b>Your Teeth, Skin, and Hair</b> .....	144
Lesson 2	<b>Protecting Your Eyes and Ears</b> .....	151
Lesson 3	<b>Choosing Health Products</b> .....	155
	Health Skills Activity: Persuasive Advertising .....	157
Lesson 4	<b>Using Medicines Responsibly</b> .....	159
Lesson 5	<b>Health Care in Your Community</b> .....	163
	Health Skills Activity: Doing Your Part for Community Health .....	166
	<b>Building Health Skills:</b> Buyer Beware! ( <i>Accessing Information</i> ) .....	168
	<b>HANDS-ON HEALTH:</b> Observing the Eye .....	170
	<b>Chapter 6 Reading Review</b> .....	171
	<b>Chapter 6 Assessment</b> .....	172





CHAPTER  
**7**

## Your Body Systems

Lesson 1	<b>From Cells to Body Systems</b> .....	176
Lesson 2	<b>Bones and Muscles</b> .....	181
	Health Skills Activity: Building Strong Bones .....	183
Lesson 3	<b>Digestion and Excretion</b> .....	185
Lesson 4	<b>Heart, Blood, Lungs, and Nerves</b> .....	188
	<b>Building Health Skills:</b> Maintaining Healthy Body Systems (Practicing Healthful Behaviors) .....	194
	<b>TIME Health News:</b> The Mystery of Sleep .....	196
	<b>Chapter 7 Reading Review</b> .....	197
	<b>Chapter 7 Assessment</b> .....	198

CHAPTER  
**8**

## Growth And Development

Lesson 1	<b>Adolescence: A Time of Change</b> .....	202
Lesson 2	<b>Human Reproduction</b> .....	206
	Health Skills Activity: Care of the Reproductive System .....	209
Lesson 3	<b>Heredity and the Life Cycle</b> .....	210
	<b>Building Health Skills:</b> Coping With Changes During Puberty (Accessing Information) .....	214
	<b>HANDS-ON HEALTH:</b> Looking Ahead .....	216
	<b>Chapter 8 Reading Review</b> .....	217
	<b>Chapter 8 Assessment</b> .....	218



CHAPTER  
**9**

## Tobacco

Lesson 1 <b>Tobacco: A Harmful Drug</b> .....	222
Lesson 2 <b>Teens and Tobacco</b> .....	227
Lesson 3 <b>Staying Tobacco Free</b> .....	230
Health Skills Activity: Spreading the Word About Tobacco .....	233
<b>Building Health Skills:</b> Taking A Stand Against Tobacco ( <i>Refusal Skills</i> ) .....	234
<b>TIME Health News:</b> Kick Butts .....	236
<b>Chapter 9 Reading Review</b> .....	237
<b>Chapter 9 Assessment</b> .....	238

CHAPTER  
**10**

## Alcohol And Other Drugs

Lesson 1 <b>The Dangers of Alcohol Use</b> .....	242
Lesson 2 <b>Alcoholism and Addiction</b> .....	246
Lesson 3 <b>What Are Illegal Drugs?</b> .....	249
Lesson 4 <b>Drug Abuse</b> .....	253
Lesson 5 <b>Staying Alcohol-and Drug-Free</b> .....	256
Health Skills Activity: Getting SADD About Substance Abuse .....	257
<b>Building Health Skills:</b> Avoiding Drug Abuse ( <i>Decision Making</i> ) .....	260
<b>HANDS-ON HEALTH:</b> "Say No to Drugs" Skit .....	262
<b>Chapter 10 Reading Review</b> .....	263
<b>Chapter 10 Assessment</b> .....	264

CHAPTER

11

# Preventing Diseases

Lesson 1 **What Causes Disease?** .....268

Lesson 2 **Communicable Diseases** .....272

Health Skills Activity: Handwashing for Health .....276

Lesson 3 **Understanding STDs** .....277

Health Skills Activity: Accurate Information on HIV and AIDS .....281

Lesson 4 **Noncommunicable and Hereditary Diseases** .....282

**Building Health Skills:** Protecting Your Health (*Goal Setting*) .....288

**TIME Health News:** Don't Panic! .....290

**Chapter 11 Reading Review** .....291

**Chapter 11 Assessment** .....292

CHAPTER

12

# Safety And The Environment

Lesson 1 **Personal Safety Habits** .....296

Health Skills Activity: Building Safe Habits ..... 299

Lesson 2 **Safety at Home and Away** .....300

Health Skills Activity: Fire Escape Plan .....302

Lesson 3 **Safety Outdoors** .....305

Lesson 4 **Safety In Severe Weather** .....308

Lesson 5 **First Aid for Emergencies** .....312

Lesson 6 **Protecting Your Environment** .....318

**Building Health Skills:** Reduce Waste (*Advocacy*) .....322

**HANDS-ON HEALTH:** Are You Earth Friendly? .....324

**Chapter 12 Reading Review** .....325

**Chapter 12 Assessment** .....326



# Getting the most out of **Teen Health**

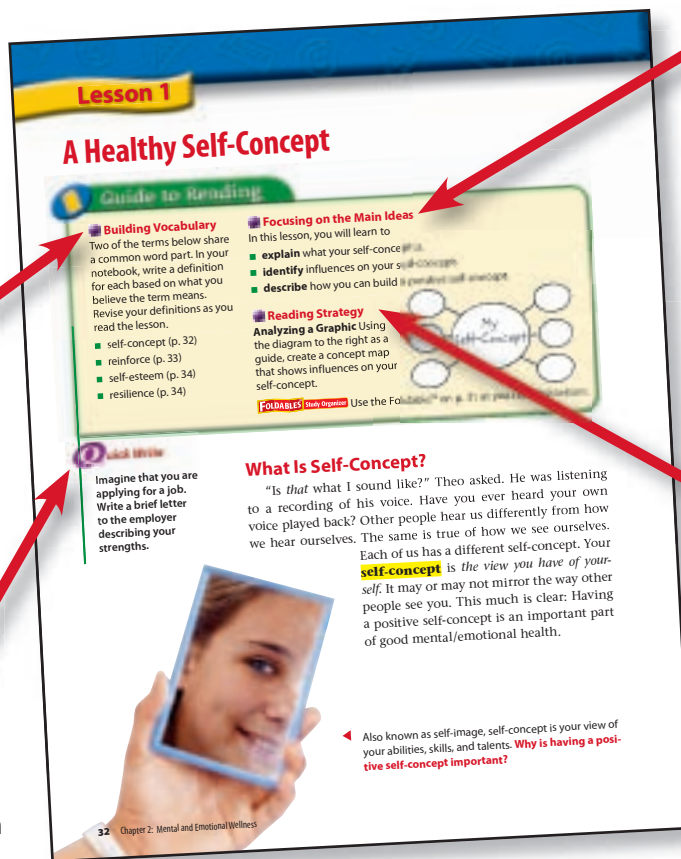
Making healthy and responsible choices is easy with *Teen Health*. Follow the guidelines below to make the most out of each lesson.

## Review Key Terms

Complete the Building Vocabulary activity to become familiar with the key terms before you read the lesson. Vocabulary terms are highlighted in yellow to make them easy to find.

## Do the Quick Write

This feature will help you start thinking about the information in the lesson.



## Preview the Lesson

Get a preview of what's coming by reading the lesson objectives in Focusing on the Main Ideas. You can also use this feature to prepare for quizzes and tests.

## Strengthen Your Reading Skills

Complete the Reading Strategy activity to help you understand the information in the lesson.

## Health Online

Use Glencoe's **Online Learning Center** to Boost Your Health Smarts!

- Rate your health by taking the Health Inventories for each chapter. Jump-start your goals by filling out a Personal Wellness Contract.
- Check out Student Web Activities for fun and interactive learning.
- Learn about different health-related careers at Career Corner.
- Get ready for tests by using the different Online Study Tools to review vocabulary terms and chapter content. E-flashcards, crossword puzzles, review questions, and online quizzes make studying fun!
- Building Health Skills features give you another chance to master important skills for good health.

## Look at the Reading Checks

When you see a Reading Check, stop and answer the question to make sure that you understand what you have just read.

Negative stress gets in your way and holds you back. Sources of negative stress are often out of your control. They may include problems at home or school. Too much negative stress can be unhealthy.

**Reading Check** **Analyze** Compare and contrast positive and negative stress. Give an example of each.

### The Stress Response

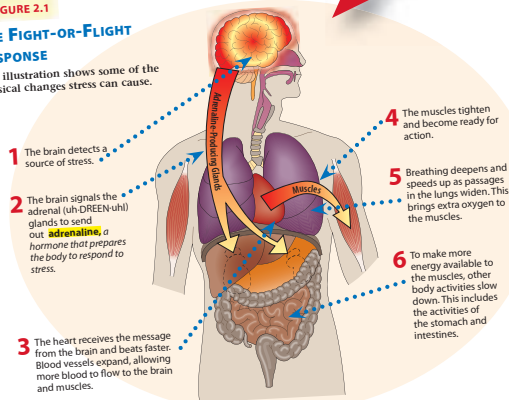
The stress response is how nature prepares the body to deal with threats of harm. This is also known as the *fight-or-flight response*. Your body is preparing to *fight* the threat or take *flight* from it. During the stress response, your body undergoes a series of physical changes, which are summarized in **Figure 2.1**.

**Reading Check** **Recall** Name two physical changes that occur during the fight-or-flight response.

FIGURE 2.1

### THE FIGHT-OR-FLIGHT RESPONSE

This illustration shows some of the physical changes stress can cause.



Lesson 4: Coping with Stress 47

## Study the Infographics

First, think about the overall message that the infographic is presenting. Then read each callout carefully and determine what part of the image it is referring to.

## Try the Health Skills Activities

Develop valuable health skills by completing the Health Skills Activities that appear in each chapter.

### Health Skills Activity

#### Decision Making

##### Helping a Troubled Friend

Caitlin's best friend Torry has been acting moody lately. When Caitlin asked her about it, Torry shrugged. "There's nothing to talk about," she said. Caitlin is worried that her friend may have a serious emotional problem. She wishes she could get Torry to open up. She knows from experience, however, that Torry doesn't like to be pressured. What should Caitlin do?

##### What Would You Do?

Put yourself in Caitlin's position. Use the decision-making process to decide what you would do.

1. State the situation.
2. List the options.
3. Weigh the possible outcomes.
4. Consider values.
5. Make a decision and act on it.
6. Evaluate the decision.



### Lesson 5 Review

#### Review

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

##### What I Learned

1. **Vocabulary** Define the term *depression*.
2. **Give Examples** What is an example of a phobia?
3. **List** Name three warning signs of suicide.

##### Thinking Critically

4. **Analyze** Imagine overhearing someone saying he or she planned to commit suicide. What would you do?

5. **Synthesize** A friend says, "I've been depressed lately." What positive health behaviors could you take to help your friend?

##### Applying Health Skills

6. **Advocacy** Write an article for the school paper about emotional problems. Identify what students should do if they are feeling very stressed or unhappy. Tell how they can help a friend with those feelings.

**Health Challenge** For more review questions for Lesson 5, go to [health.glencoe.com](http://health.glencoe.com).

Lesson 5: Emotional Problems 53

## Complete the Lesson Reviews

Completing the lesson reviews can help you see how well you know the material you just read. It also gives you a chance to apply what you've learned to different situations, as well as practice a health skill.

# Your Health and Wellness

## Chapter Preview

Lesson 1 Your Total Health .....	4	Building Health Skills .....	24
Lesson 2 Influences on Your Health...	8	Hands-on Health .....	26
Lesson 3 Building Health Skills.....	12	Chapter Reading Review.....	27
Lesson 4 Making Responsible Decisions .....	16	Chapter Assessment .....	28
Lesson 5 Setting Health Goals .....	20		

### ▲ Working With the Photo

Good health includes physical fitness, but there is more to being healthy than that. **What signs of good emotional health do these teens exhibit? What signs of good social health do they exhibit?**

# Start-Up Activities

## Before You Read

What do you do to take care of your health?

Find out by taking the short health inventory on this page. Keep a record of your answers.

## HEALTH INVENTORY

1. I try to stay physically active.  
(a) always      (b) sometimes      (c) never
2. I am aware of what influences my health.  
(a) always      (b) sometimes      (c) never
3. I think about my health before making decisions.  
(a) always      (b) sometimes      (c) never
4. I set realistic goals for myself.  
(a) always      (b) sometimes      (c) never

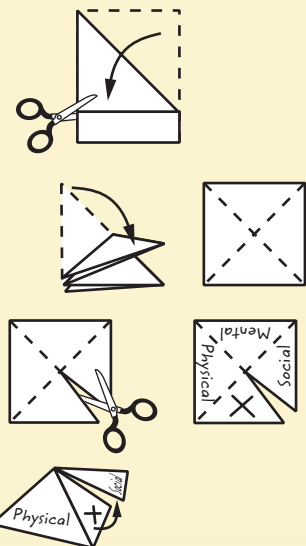
## FOLDABLES™ Study Organizer

### As You Read

Make this Foldable™ to help you organize the main ideas on health and wellness in Lesson 1. Begin with a plain sheet of  $8\frac{1}{2}'' \times 11''$  paper.

- 1 Line up one of the short edges of a sheet of paper with one of the long edges to form a triangle. Fold and cut off the leftover rectangle.
- 2 Fold the triangle in half, then unfold. The folds will form an X dividing the paper into four equal sections.
- 3 Cut along one fold line, and stop at the middle. This forms two triangular flaps. Draw an X on one tab, and label the other three as shown.
- 4 Fold the X flap under the other flap, and glue together to make a three-sided pyramid.

Write the main ideas about the three parts of health on the back of the appropriate side of the pyramid.



**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and use the e-flashcards to preview vocabulary terms for Chapter 1.



## Your Total Health

### Guide to Reading

#### Building Vocabulary

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

- health (p. 4)
- wellness (p. 7)
- habit (p. 7)

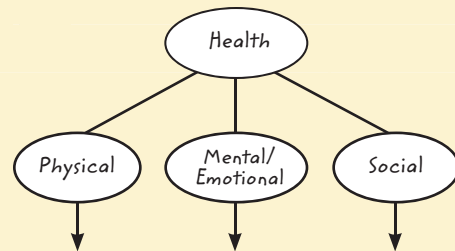
#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** the three parts of the health triangle.
- **describe** the relationship between health and wellness.
- **explain** how to balance your physical, mental/emotional, and social health.

#### Reading Strategy

**Classifying** Using the diagram to the right as a guide, create a concept map that gives examples of each of the three types of health.



**FOLDABLES** Study Organizer Use the Foldable™ on p. 3 as you read this lesson.

### Quick Write

Write an explanation of what the word *health* means to you.

### What Is Health?

What sports and other activities do you participate in? What kinds of foods do you eat? What kind of people do you spend time with? Your answers to these and similar questions reflect your total health. **Health** is a combination of physical, mental/emotional, and social well-being. These parts of your health work together to build good overall health.

Often, good health is pictured as a triangle with equal sides. As shown in **Figure 1.1**, one side of the triangle is your physical health. Another side is your mental/emotional health, and the third side is your social health. Like the sides of a triangle, the three “sides” of health meet. They are connected. If you ignore any one side, your total health suffers. By the same token, if you make improvements to one side, the others benefit. For example, when you participate in physical activities, you improve your physical health. This helps you feel good about yourself, benefiting your mental health. Activities can also improve your social health when you share them with family and friends.

◀ **FIGURE 1.1**

## **THE HEALTH TRIANGLE**

Maintaining a balanced health triangle is the key to good total health. **What are some ways you keep your health triangle in balance?**



### **Physical Health**

Do you stay active? Do you get plenty of rest each night? Do you eat healthy snacks? Your answers to these questions will tell you something about your physical health. Physical health is the condition of your body.

Physical health is measured by what you *do* as well as what you *don't* do. Teens who want to be healthy avoid harmful substances such as tobacco, alcohol, and other drugs. They balance the amount of time they spend watching TV or playing computer games with physical activity. Physical activity includes things such as playing sports, hiking, aerobics, swimming, dancing, and taking a walk. By avoiding harmful substances and being physically active, you can stay physically healthy. In other words, being physically healthy means taking care of your body.

### **Health Online**

#### **Topic: Creating Healthy Habits**

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities on creating healthy habits.

**Activity:** Using the information provided at the link above, make a checklist of five activities you can do every day to maintain your health.



## Mental/Emotional Health

Do you feel good about who you are? Do you know how to handle stressful situations? Do you have a positive attitude about life? Your answers to these questions will tell you something about your mental/emotional health. Mental/emotional health is measured by the way you think and express your feelings.

You can develop good mental/emotional health by learning to think positively and to express your feelings in healthy ways. Positive thinking is a good strategy to use when you are feeling sad or down. Try focusing your attention on all of the good things in your life, such as your friends, family, and activities you enjoy. Then the cause of your sadness might not seem so bad. Likewise, recognizing and building your

strengths will help you feel good about yourself. When negative thoughts and feelings come up, look to express them in ways that won't hurt you or others. If problems feel overwhelming, don't be afraid to talk to adults you trust. Knowing when to ask for help is a sign of good mental/emotional health.

## Social Health

How well do you get along with others? Can you work through problems with others peacefully? Are you a good listener? Your answers to these questions will help you measure your social health. Good social health means communicating well with and having respect for family, friends, and acquaintances. It also means building relationships with people you can trust and who can trust you in return. You might build a relationship with a counselor or coach, someone you trust and can go to when you have a problem. A close friend at school may need you to listen to them if they have a problem or need advice. Think about the people in your life. With whom do you feel the most comfortable and why? Can you imagine reaching out to them to offer or ask for support?

▲ Physical activity is a good choice for improving your health. **What other parts of the health triangle are these teens working on?**

**Health Online**

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

**Reading Check**

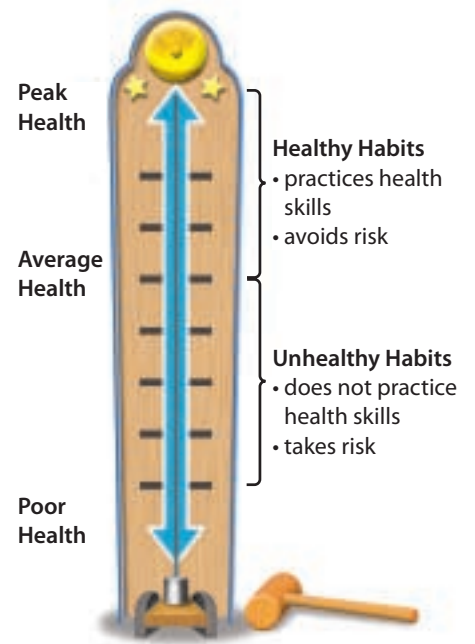
**Identify** What are the three sides of total health? Name a trait or characteristic found on each of the three sides.

## Healthy Habits and Wellness

When you are taking care of your health triangle and all three sides are balanced, wellness is achieved. **Wellness** is a *state of well-being, or total health*. You can improve your wellness by developing good health habits. A **habit** is a *pattern of behavior that you follow almost without thinking*. Good health habits include:

- choosing healthy foods.
- participating in regular physical activity.
- learning how to handle stress.
- getting along with others.

By taking a look at all the parts of your health triangle, you can get a snapshot of how healthy you are right now. (See **Figure 1.2**.) This will let you know if any areas need work. The pages ahead will help you develop positive health behaviors that will aid in the prevention of injury, illness, disease, and other health problems.



**▲ FIGURE 1.2**

### THE WELLNESS SCALE

Your health habits affect your wellness. **Where do you fit in on the wellness scale?**

#### Reading Check

**Define** What is *wellness*?

## Lesson 1 Review

#### After You Read

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

#### What I Learned

1. **Vocabulary** What is *health*?
2. **List** What are two measures of good social health?
3. **Recall** Identify three positive health habits.

#### Thinking Critically

4. **Hypothesize** Jordan spends most of his time getting together with friends. They play video games and skateboard. Jordan is not doing very well in school. What do you think his health triangle would look like?

5. **Evaluate** Alexandra is feeling upset because she didn't do well in her piano recital. Does this mean that she does not have good total health? What can she do to keep her mental/emotional health in balance?

#### Applying Health Skills

6. **Analyzing Influences** Name a positive health habit that you recently started practicing. Who or what influenced you to begin this health habit?

## Lesson 2

# Influences on Your Health

## Guide to Reading

### Building Vocabulary

Read the terms below. Define each in your notebook as best you can. As you read the lesson, make changes where needed.

- heredity (p. 8)
- environment (p. 9)
- culture (p. 9)
- peers (p. 9)
- media (p. 10)
- technology (p. 10)
- behavior (p. 11)
- attitude (p. 11)

### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** factors that influence your health.
- **explain** the role that your behavior and choices play in your health.
- **describe** how your attitudes affect your health.

### Reading Strategy

**Skimming** Look over the major and minor headings in this lesson. Write a brief paragraph explaining what you think the lesson is about.

## Quick Write

Make a list of your likes and dislikes. Explain which of these are shared by your family and which are shared by your friends.

## Factors that Affect Your Health

What foods do you like to eat? What are your hobbies and favorite activities? Your answers to these questions reflect your personal tastes, your likes and dislikes. Your health is influenced by your personal tastes. It is also influenced by outside factors. These include heredity, environment, family, culture, the media, and technology.

### Heredity

**Heredity** is the process by which biological parents pass traits to their children. These include physical traits, such as eye, hair, and skin color, and body type and size. You may also inherit a musical or athletic ability. The risk of developing certain diseases such as diabetes or allergies can also be passed along through heredity.

- ◀ The ability to run fast is sometimes passed along through heredity. **What health choice might you make based on inheriting this ability?**



## Environment

Think about where you live and go to school. These are part of your environment. **Environment** (en-VY·ruhn·muht) is *the sum total of your surroundings*. It includes the air you breathe and the water you drink. It also includes the neighborhood you live in and the people around you.

Your environment can both positively and negatively affect your personal health. If you live in a warm climate, you may have more opportunities to participate in outdoor activities. You will also have to be extra careful in the sun. How does the environment where you live affect your health?



## Family and Culture

Two related influences on your health are your family and your culture. **Culture** is *the collected beliefs, customs, and behaviors of a group*. Family and culture can influence many aspects of your health including eating habits, physical activity, and the use of health services. Some cultures, for example, eat special foods on special occasions. Some eat no food at all during religious celebrations. Bessem's family observes the holiday of *Ramadan*. During this holiday, members of the family fast until sundown. Your family might also celebrate certain holidays and observe special cultural traditions. These traditions might include dances, foods, ceremonies, songs, and games.

## Peers

Peers are an especially important influence during your teen years. **Peers** are your *friends and other people in your age group*. Peer pressure can influence healthful choices. For example, Dena's friend Shawn began volunteering at the animal shelter. Shawn invited Dena to go with him one day, and now they volunteer at the animal shelter together.

Peers can also have a negative influence on your health. If your friends take part in risky behaviors, such as smoking or drinking, you might feel pressure to join in.

- ▲ Your tastes in food may be a reflection of your family's preferences and your culture. **What other factors might influence your food choices?**

## DEVELOPING Good Character

### Setting a Good Example

Your friends can have a positive or a negative influence on your actions and your health. You also can influence the people in your life based on the examples you set. If you set a good example for others, you will encourage them to follow your lead. **Think about ways you can be a positive role model. What responsible actions can you take that might influence others?**



▲ The media influence the health choices we make. **Have you bought a health product based on an advertisement? Were you satisfied with your purchase?**

## Media

Troy realized how much the media could influence him when he saw a TV ad. As soon as he saw it, he knew he wanted the video game it advertised for his birthday. Have you had an experience similar to Troy's? The **media** is *the various methods of communicating information, including newspapers, magazines, radio, television, and the Internet*. It is often used by companies to encourage us to buy their products, such as the video game Troy saw on TV.

Messages from media and other sources influence health behavior. Through the media, it's possible to

quickly find information on almost any health topic. The media also provides us with advertisements for health products and services. However, not all media sources are equally reliable. Later in this chapter, you will learn how to judge whether a source is reliable.

## Technology

**Technology** is *the use of scientific ideas to improve the quality of life*. The use of computer technology in planes has made it easier and safer to fly. A variety of technologies for health information are now available. E-mail and the Internet are only two examples. These resources influence your health because they can provide you with fast and easy access to valid health information. The control of diseases is another area that technology has impacted.

One area in which technology has had a huge impact is in detecting illnesses. For example, MRI machines give a view of the inside of any area of the body. Finding early evidence of diseases can help doctors treat them successfully. Can you give another example of technology that has made your health and life better?



**List** Name four factors that affect your health. Give an example of each.

## Your Health Choices and Behaviors

Some of the factors that influence your health, such as heredity, are out of your control. You do, however, have control over your behavior and the choices you make. Your **behavior** is the way you act in the many different situations and events in your life. Many of the choices you make affect your health. For example, choosing to eat healthy foods will affect your physical health. Knowing the consequences of your choices and behaviors can help you take responsibility for your health.

### Personal Attitudes

An **attitude** is what you believe or feel about someone or something. Individual, family, community, and cultural attitudes play a role in your health. For example, if you have a positive feeling about wearing safety belts, you'll probably wear one when riding in a car. Teens who have positive attitudes toward healthy habits usually encourage others to do the same.

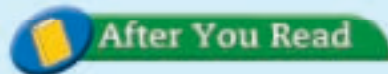


**Recall** Give one example of a choice that can affect your health.

Health Online

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

## Lesson 2 Review



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

### What I Learned

1. **Vocabulary** Define *culture* and *media*. Explain how each influences health.
2. **Describe** How has medical technology improved life?
3. **Explain** How does your attitude affect your health?

### Thinking Critically

4. **Synthesize** Which side of the health triangle do you think is most affected by outside influences?

5. **Apply** Think of a positive health habit or behavior you learned from your family. Think of another you learned from a peer.

### Applying Health Skills

6. **Analyzing Influences** Our country has people from many different cultures living within its borders. Identify cultures in your own community. With a group, discuss ways in which these cultures influence the lifestyle of community members. Think about celebrations, food, music, and the like.



## Building Health Skills

### Guide to Reading

#### Building Vocabulary

Write each term in your notebook. As you read the lesson, add each term's definition.

- prevention (p. 12)
- health skills (p. 12)
- communication (p. 15)
- advocate (p. 15)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** skills that can help you stay healthy.
- **explain** why health skills are skills for life.
- **demonstrate** how to analyze media influences.

#### Reading Strategy

**Compare** Identify similarities and differences between two of the skills mentioned.

### Quick Write

Preview the lesson. Choose one health skill. Write about ways you could—or already do—use it in your life.

### Skills for a Healthy Life

One of the keys to good health is the prevention of illness and injury. **Prevention** means *practicing health and safety habits to remain free of disease and injury*. You can prevent illness and injury in many ways. Wearing protective gear during certain activities, such as bike riding or playing baseball, can help you prevent injury to your body. You can help prevent common illnesses such as colds by washing your hands often.

These examples demonstrate health skills. **Health skills** are *skills that help you become and stay healthy* (see **Figure 1.3**). Health skills can help you improve your physical, mental/emotional, and social health. Like reading, math, and sports skills, health skills can have a positive effect throughout your life.



- ◀ Wearing goggles when swimming in a pool is one way of maintaining physical health. **What are some other examples of protective gear you should wear during sports or activities?**

▼ **FIGURE 1.3**

## THE HEALTH SKILLS

These 10 skills affect your physical, mental/emotional, and social health.  
**Why are these skills important throughout your entire life?**

Health Skill	What It Means to You
Accessing Information	You know how to find valid and reliable health information and health-promoting products and services, including medical resources on the Internet.
Practicing Healthful Behaviors	You take action to reduce risks and protect yourself against illness and injury.
Stress Management	You find healthy ways to reduce and manage stress in your life.
Analyzing Influences	You recognize the many factors that influence your health, including culture, media, and technology.
Communication Skills	You express your ideas and feelings and listen when others express theirs.
Refusal Skills	You can say no to risky behaviors.
Conflict Resolution	You work out problems with others in healthful ways.
Decision Making	You think through problems and find healthy solutions.
Goal Setting	You plan for the future and work to see your plans through.
Advocacy	You take a stand to work for the common good and make a difference in your home, school, and community.

### Staying Informed

Knowing how to *access*, or get, reliable health information is an important skill. A main source of information is adults you can trust. Parents and guardians, teachers, and your school nurse are reliable sources. They can help you find accurate books, articles, and Web sites on a variety of health topics. Community resources provide other ways to get reliable information. These resources include government health agencies and organizations such as the American Red Cross.

### Taking Care of Yourself

Practicing healthy behaviors and managing stress are two skills that all teens should learn. When you eat healthy foods and get enough sleep, you are taking actions that promote good health. Stress management is learning to cope with challenges that put a strain on you mentally or emotionally. Strategies for managing stress can help you deal with stress in a healthy way.

### Connect To... Language Arts

#### An Ounce of Prevention

Benjamin Franklin is known for his collected sayings. Here is one of them: "An ounce of prevention is worth a pound of cure."

**Form a small group to discuss the meaning of this saying. As a class, gather your own collection of health sayings. Print out and share your collection.**



# Health Skills Activity

## Analyzing Influences

### Too Good to Be True?

Trevor was excited when he first saw an infomercial for a new acne medicine. It promised to make pimples vanish overnight. This health claim sounded too good to be true. He knew the importance of considering

- **the source.** Infomercials are TV ads made to look like programs. There are few rules that control the kinds of claims advertisers can make. Trevor knew infomercials were not reliable health sources.
- **the motive.** When you hear a suspicious health claim, ask yourself, "What am I being encouraged to do?" If the answer is "buy something," beware.



### As a Group

Analyze an ad from a magazine, newspaper, or TV. Determine the source and motive behind the ad. Notice the kinds of words the ad uses to try to influence you. Talk about whether the ad is a reliable health source. Share your findings with other groups.

## Analyzing Influences

Learning how to analyze health information, products, and services will help you act in ways that protect your health.

The first step in analyzing an influence is to identify its *source*. A TV commercial may tell you a certain food has health benefits. In this case, the source is an advertiser who is trying to get you to buy the food.

Next, you should think about the *motive*, or reason, for the influence. Does the advertiser really take your well-being into consideration, or is the main goal to sell a product?

**Health Online**

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**Identify** What two steps should you take when analyzing an influence on your health?

## Communicating with Others

Three of the ten health skills involve the way you communicate with other people. **Communication** is the clear exchange of ideas and information. Good communication skills include telling others how you feel. They also include listening to others and understanding how *others* feel. You will learn more about communication skills in Chapter 3.

Sometimes you have to say no to others. An example is when you are pressured to do something you believe is wrong. *Refusal skills* help you say no in an effective way. When you have conflicts, or disagreements with others, *conflict-resolution skills* can help you find a solution that is fair to everyone involved.

## Advocacy

To advocate something means to support it or speak out in favor of it. When you **advocate** for health, you *encourage other people to live healthy lives*. You influence others to make positive choices. Advocacy also includes keeping others informed. By sharing health information, you enable others to make healthful choices.



▲ Talking through disagreements is a healthful way of dealing with them. **Can you think of another healthful way to handle a disagreement.**

## Lesson 3 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define *prevention*. Use the word in an original sentence.
2. **Recall** What are two steps you can use to analyze influences?
3. **Explain** Why are health skills important for good health?

### Thinking Critically

4. **Apply** Imagine that you overhear two teens talking about a great new CD that everyone “has to have.” Analyze the possible sources of this influence.

5. **Hypothesize** Danielle has noticed that many traffic accidents appear at one intersection in her community. How can she use the health skill of advocacy to help correct this problem?

### Applying Health Skills

6. **Communication Skills** Practice having a conversation with a classmate. Think about ways of showing you are listening. Why is it important to let the other person know you are listening?

## Making Responsible Decisions

### Guide to Reading

#### Building Vocabulary

Find the highlighted terms in the lesson. Write the definition of each in your notebook.

- decisions (p. 16)
- consequences (p. 16)
- risk (p. 16)
- cumulative risk (p. 17)
- values (p. 18)

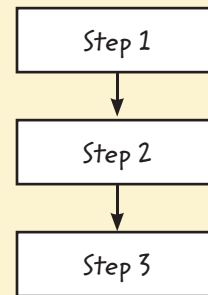
#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** how to make responsible decisions.
- **explain** why values are important when making decisions.
- **practice** the decision-making process.

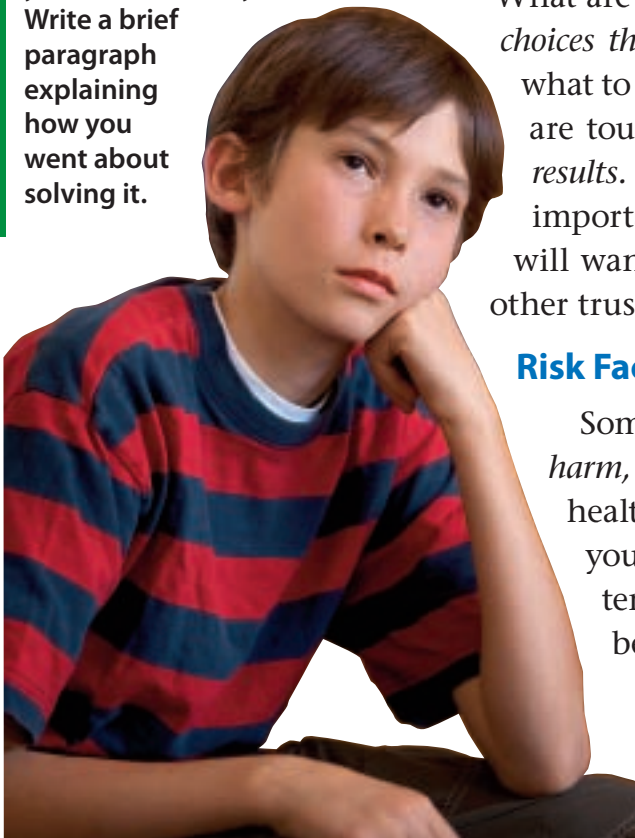
#### Reading Strategy

**Sequencing** Create a concept map showing the order of the steps in decision-making. Use the diagram to the right as a guide.



### Quick Write

Identify a problem that you faced recently. Write a brief paragraph explaining how you went about solving it.



### Your Decisions Count

What are some decisions you made today? **Decisions** are *choices that you make*. Some decisions are small, such as what to eat for breakfast or what to wear. Other decisions are tougher. They can have serious **consequences** or *results*. During your teen years, you will have many important decisions to make. For some decisions, you will want to seek help from your parents, guardians, or other trusted adults.

#### Risk Factors

Some decisions involve risks. **Risk** is *the chance of harm, or loss*. Any decision that involves a risk to your health is an important one. When making decisions, you should understand the short-term and long-term consequences of safe, risky, and harmful behaviors.

- ◀ Decisions can sometimes be difficult to make.  
**What are some decisions that affect your health?**

## The Decision-Making Process

Big decisions are a little like math problems. They should be broken down into smaller parts before they can be solved. Using the following six-step process can help you make healthy and responsible decisions.

Whenever possible, it's a good idea to write down your answers as you work through each step. That way, you won't leave out important details. You can also go back and review the steps.

### Step 1: State the Situation

Before you can make a decision, you should understand the situation. Ask yourself the following: What are the facts? Who else is involved?

### Step 2: List the Options

Once you have analyzed the situation, think of your options. Try to cover all the possibilities. You may want to ask other people for suggestions. An adult that you trust is a good person to ask for advice when making an important decision.

### Step 3: Weigh the Possible Outcomes

Consider your options carefully. Remember the word *HELP* when working through this step:

- **H (Healthful)** What health risks, if any, will this option present?
- **E (Ethical)** Does this choice reflect what you and your family believe to be *ethical*, or right?
- **L (Legal)** Does this option violate any local, state, or federal laws?
- **P (Parent Approval)** Would your parents approve of this choice?

For some decisions, you should think about cumulative risks. **Cumulative** (KYOO·myuh·luh·tiv) **risk** is *the addition of one risk factor to another, increasing the chance of harm or loss*. For example, riding in a car without wearing a seat belt is one risk factor. Riding in a car that is going over the speed limit is another. When combined, the two behaviors increase your risk of harm.



### Decisions, Decisions

In some TV shows, characters face decisions. These shows can be a good way of observing decision making in action.

The next time you watch your favorite TV program, be aware of any problems that arise.

Notice how characters go about solving these problems. What do they do when solutions don't work?

**Describe a problem you saw on TV. How was it solved?**

## Step 4: Consider Values

**Values** are beliefs you feel strongly about that help guide the way you live. Values reflect what is important to you and what you have learned is right or wrong. Your values should guide any important decision you make.

## Step 5: Make a Decision and Act on It

You've weighed your options. You've mapped out the risks and consequences. Now you're ready for action. Choose the course that seems best and that supports your values. Make sure you are comfortable with your decision. If not, look at other options or ask a trusted adult for help.

## Step 6: Evaluate the Decision

After you've acted on your decision, look at the results. Were they positive or negative? Were there any unexpected outcomes? Was there anything you could have done differently? What have you learned from the experience? If the action you took wasn't as successful as you'd hoped, try again. Use the decision-making process to find another way to deal with the situation.



**List** What are the six steps in the decision-making process?

- ▶ You can apply the decision-making process to health issues and problems. **What health decisions do you make with the help of others?**

**Health Online**

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# Health Skills Activity

## Decision Making

### A Test of Friendship

Kris's family moved to a new town. Almost from the first day, Lisa became her best friend. Lisa showed Kris around the town and introduced her to other teens. At school Lisa asked Kris to help her pass an English test. "All you need to do," Lisa explained, "is move your hand so I can see your paper." Kris was taught to always help out a friend. Yet what Lisa was asking Kris to do was help her cheat. Kris was also taught that cheating is wrong. What should Kris do?



### What Would You Do?

Apply the six steps of decision making to Kris's problem. When you've finished, share the decision you would make with the class.

1. State the situation.
2. List the options.
3. Weigh the possible outcome.
4. Consider values.
5. Make a decision, and act on it.
6. Evaluate the decision.

## Lesson 4 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Use the terms *decision* and *consequences* in a sentence.
2. **Explain** What are two questions you might ask yourself when stating the situation in the decision-making process?
3. **Recall** Why are values important when making a decision?

### Thinking Critically

4. **Analyze** Choose one of the six steps in the decision-making process, and describe its importance to the process.

5. **Apply** Lena is supposed to spend the weekend with a younger cousin from out of town. A friend calls offering an extra ticket to a concert for that Saturday night. How should Lena decide what to do?

### Applying Health Skills

6. **Decision Making** With a partner, write a skit in which a teen is faced with a tough choice. Show how the teen uses the decision-making skills to arrive at a good solution.



## Setting Health Goals

### Guide to Reading

#### Building Vocabulary

Examine the terms below. Look for relationships between them. As you come across these in the lesson, write them in your notebook.

- goal (p. 20)
- short-term goal (p. 21)
- long-term goal (p. 21)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** why having goals is important.
- **describe** how to set goals.
- **develop** a strategy to reach your goals.

#### Reading Strategy

**Comparing and Contrasting** What do you think is the difference between a short-term and long-term goal? What is an example of each?

### Quick Write

Write about a goal you would like to achieve. Tell why it is important to you, and how you plan to achieve it.

### Setting Goals

What do you dream of achieving in your lifetime? What are your ambitions? Your answers to these questions reflect your goals. A **goal** is *something you hope to accomplish*. Some goals are broad, such as wanting to be happy or successful. Other goals are specific, such as getting a good grade on a test. Goal setting is an important skill that will help you achieve and maintain good health.



- ▶ Achieving your goals requires planning.  
**What dreams do you hope to achieve?**  
**What can you do now to start on the road to achieving them?**

## Types of Goals

Goals may be short-term or long-term. A **short-term goal** is a goal that you plan to accomplish in a short time. An example of a short-term goal is getting your homework done in time to watch a certain TV program. A **long-term goal** is a goal that you hope to achieve within a period of months or years.

Often, short-term goals lead to long-term goals. Inez's long-term goal is to be a veterinarian, an animal doctor. Her short-term goals include doing well in science and earning money for college. To achieve her short-term goal, Inez walks neighbors' dogs. This also gives her experience running a business and being around animals. Notice that goals such as these form a chain (see **Figure 1.4**). How would you fill in the fourth link of Inez's chain?

By setting clear goals for herself, Inez has taken charge of her life. Have you taken charge of yours?

### Reading Check

**Identify** What are the two types of goals? How are they related?

### **FIGURE 1.4**

## **THE GOAL CHAIN**

The goal chain illustrates how short-term goals can help you achieve a long-term goal. **How will Inez's short-term goals help her become a veterinarian?**



### Setting Goals in a Group

Setting goals can be challenging, especially when a whole group is involved. Sara's soccer team needed to raise money for new equipment. One team member insisted that a yard sale was the answer. Another argued that they should hold a raffle. A third student suggested doing both, and everyone agreed. By working together, the team reached its goal.

**Describe a group goal-setting experience you have been involved in. How did you choose your goal? How did you go about reaching it?**

## Choosing Goals

The goals that are right for you depend on your interests, skills, and abilities. Priorities, changing abilities, and responsibilities also influence setting goals. What do you do well? What would you like to improve? Answering questions such as these will help you choose goals you will want to work toward. Being aware of your skills and interests will help you choose goals you can achieve. Here are a few other *do's* and *don'ts* when setting a goal:

- *Do a reality check.* Ask yourself whether your goal is realistic. Is it something you can really achieve?
- *Don't sell yourself short.* Select goals that are challenging for you. Don't be afraid to aim high. Believe in yourself, and use all your abilities.



### Reading Check

**Recognize** Identify three tips for choosing a goal.

## Reaching Your Goals

All goals, big and small, have one thing in common. To achieve them, you should have a plan. How do you get from where you are now to where you want to be? Here are some tips:

- ▶ Following a logical plan can help you achieve many goals. **What realistic goal can you achieve?**



- **Make your goals specific.** Don't just say, "I want to be a better piano player." Say, "I want to be able to play a certain piece without making any mistakes at my next recital."
- **List the steps to reach your goal.** Break big goals down into smaller tasks. For example, to play piano in the recital, you will need to practice. Set a practice schedule, maybe half an hour each day.
- **Get help from others.** Identify people who can help you achieve your goals. Seek the input of parents, teachers, and other trusted adults. Also, identify sources of information, such as books and magazine articles.
- **Evaluate your progress.** Check periodically to see how well you're progressing toward your goal. In the case of the piano piece, you might record and play back your performances. Your teacher can also give you any necessary feedback. Should you be doing anything differently? Is one part giving you more trouble than others? If necessary, adjust your plan, or seek help.
- **Reward yourself.** Treat yourself in a special way, and celebrate your accomplishments.

 Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 5.

## Lesson 5 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *short-term goal* and *long-term goal*. Use each term in an original sentence.
2. **Describe** Why is it important to set a realistic goal?
3. **Recall** Describe each step in the goal-setting process.

#### Thinking Critically

4. **Apply** Seth's long-term goal is to be a professional baseball player.

What short-term goals could Seth set for himself to help him reach this goal?

5. **Hypothesize** Sometimes goals need to be changed. What are some reasons a goal might need to be changed?

#### Applying Health Skills

6. **Goal Setting** Choose a personal health goal. Discuss strategies and skills needed to attain a personal health goal.

# Building Health Skills

## ANALYZING INFLUENCES

### Evaluating Influences On Your Health

#### DIRECTIONS

Analyzing influences involves recognizing the ways in which internal and external factors affect your health choices. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.



#### 1 Model

As you know, many factors influence your health. Take the case of Darrol. Darrol went to the mall to buy new sneakers. He planned to buy the same kind of shoes he already owned because they were very comfortable. In the store, the saleswoman showed him a different style. "These just came in, and they're going to be very popular," the saleswoman said. She pointed to a large colorful display. It showed a teen about Darrol's age wearing the new sneakers. Suddenly, Darrol couldn't decide what he wanted.

Darrol told the saleswoman he needed to think about his choice. At home, Darrol thought about the two pairs of shoes. He made a list of what influences were affecting his decision and why. He numbered each influence in the order of its importance to him. Then he went back to the store and bought the shoes he had planned to buy.

#### Decision: Which shoes should I buy?

Influencing Factors	What I value most right now and why
Likes/dislikes	1—I like the shoes I've owned.
Health	2—I need shoes that are comfortable.
Peers	3—The new sneakers might be popular at school.
Media	4—The poster in the store looked really cool.

## 2 Practice

Darrol has made a new friend, Brock. Brock's friends are different from those Darrol usually hangs out with. Darrol has eaten lunch with Brock several times and has enjoyed getting to know some of the kids in his group. Today, Brock invited Darrol to hang out at his house with a few of the friends from his group. Darrol really wants to go but he has already promised to go to his friend Chris's house.

List the factors that would influence Darrol's decision. Assign a number value to each factor, with number one being the most important influence.

### Skill Summary

#### ANALYZING INFLUENCES

Both internal and external influences affect your choices. These influences may include:

##### Internal

- knowledge
- interests
- likes/dislikes
- fears
- curiosity

##### External

- family
- friends
- media
- culture

## 3 Apply

Imagine you are choosing which after-school club to join. Think about the different factors that would influence your decision. Make a list like the one Darrol made. Decide which factors are most important to you. Remember to assign a number value to each factor.

### Self-Check

- What influences did I name?
- Which influence do I value most? Why?



## Your Personal Health

Do you have a clear picture of your own health triangle? Take this personal health inventory to identify factors that affect your physical, mental/emotional, and social health.

### What You Will Need

- Pencil or pen
- Paper

### What You Will Do

On your paper, write the numbers 1 to 6 for each health area. Think about each of the following statements and respond with yes or no.

#### Physical Health

1. I eat at least three well-balanced meals each day and snack on healthful foods such as fruits and vegetables.
2. I get at least 60 minutes of physical activity daily.
3. I sleep at least eight hours a night.
4. I avoid the use of tobacco, alcohol, and other drugs.
5. I have good personal hygiene habits.
6. I follow safety rules.

#### Mental/Emotional Health

1. I feel good about myself.
2. I can name several things I do well.
3. I generally keep a positive attitude.
4. I ask for help when I need it.
5. I am able to handle stress.
6. I try to improve myself.

#### Social Health

1. I get along well with my family.
2. I try to work out any differences I have with others.
3. I express my feelings in positive ways.
4. I treat others with respect.
5. I have at least one friend I can talk to.
6. I listen when someone is speaking to me.

#### Wrapping It Up

Give yourself 1 point for each yes. A score of 5–6 in any area reflects good health. A score of 3–4 indicates you're doing well but can still improve. If you score 0–2 in any area, try to improve that part of your health triangle.

# Reading Review

## 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 Your Total Health

#### Key Ideas

- The three parts of the health triangle are physical health, mental/emotional health, and social health.
- Wellness means that all three of the sides of the triangle are healthy and in balance.
- You can balance your physical, mental/emotional, and social health by developing good health habits.

#### Vocabulary

- health (p. 4)
- habit (p. 7)
- wellness (p. 7)

### Lesson 2 Influences on Your Health

#### Key Ideas

- Your health is influenced by heredity, environment, family, culture, the media, and technology.
- Maintaining positive attitudes will help you choose health-promoting behaviors.

#### Vocabulary

- heredity (p. 8)
- environment (p. 9)
- culture (p. 9)
- peers (p. 9)
- media (p. 10)
- technology (p. 10)
- behavior (p. 11)
- attitude (p. 11)

### Lesson 3 Building Health Skills

#### Key Ideas

- Skills that can help keep you healthy are accessing information, practicing healthful behaviors, stress management, analyzing influences, effective communication, refusal skills, conflict resolution, decision making, goal setting, and advocacy.
- Health skills are skills you will use throughout your life. They can help you prevent or limit illness and injury.

#### Vocabulary

- prevention (p. 12)
- health skills (p. 12)
- communication (p. 15)
- advocate (p. 15)

### Lesson 4 Making Responsible Decisions

#### Key Ideas

- You can make good, responsible decisions by learning and practicing the six-step decision-making process.
- You can apply the decision-making process to health issues and problems.

#### Vocabulary

- decisions (p. 16)
- consequences (p. 16)
- risk (p. 16)
- cumulative risk (p. 17)
- values (p. 18)

### Lesson 5 Setting Health Goals

#### Key Ideas

- Creating goals for yourself teaches you to plan, challenge yourself, and work to achieve those goals.
- You can set goals by following a well-defined series of steps.

#### Vocabulary

- goal (p. 20)
- short-term goal (p. 21)
- long-term goal (p. 21)



# Assessment

## After You Read

### HEALTH INVENTORY

Now that you have read the chapter, look back at your answers to the Health Inventory on the chapter opener. Is there anything that you should do differently?

## 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 sentence.

- attitudes
- consequences
- culture
- decisions
- habit
- health
- health skills
- media
- prevention
- wellness

### Lesson 1 Your Total Health

1. \_\_\_\_\_ is a state of well-being, or total health.
2. \_\_\_\_\_ is a combination of physical, mental/emotional, and social well-being.
3. A(n) \_\_\_\_\_ is a pattern of behavior that you follow almost without thinking.

### Lesson 2 Influences on Your Health

4. The sum total of daily habits found within a society is its \_\_\_\_\_.
5. TV and the Internet are two methods of communicating information grouped together as the \_\_\_\_\_.

6. Feelings and beliefs, or \_\_\_\_\_, can play a role in how well you take care of yourself.

On a sheet of paper, write the numbers 7–14. 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 Building Health Skills

7. Wellness is keeping something bad from happening to your health.
8. Two parts to the skill of analyzing influences are identifying the source and the motive.
9. Parts of the skill of advocacy are being a good listener and telling others honestly how you feel.

### Lesson 4 Making Responsible Decisions

10. Every decision you make has risks, or results.
11. Stating the situation is the first step in the decision-making process.
12. When considering options, remember the word *HELP*, whose letters stand for healthful, ethical, legal, and permission.

### Lesson 5 Setting Health Goals

13. It is important to ask yourself whether a goal is realistic, something you can achieve.
14. Breaking down big goals into smaller tasks is a step in goal setting.



### Thinking Critically

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

- 15. Synthesize** Write a plan that breaks down the long-term goal of achieving physical fitness into several short-term goals that can be reached one at a time.
- 16. Describe** Identify a cumulative risk. How can this affect your health?

### Write About It

- 17. Analyzing Influences** Write a short story in which a teen becomes a positive role model for a younger child. Show how the teen influences the child by making healthy choices and displaying healthful behaviors.
- 18. Goal Setting** Write a journal entry describing a goal you have set for yourself. Describe your journey in reaching the goal, including the steps you have taken so far.

**Health Teacher** Do you like learning about health? Do you think you have a gift for helping others learn? A career as a health teacher might be for you. This career requires excellent communication skills and the ability to motivate others. You'll also need a four-year teaching degree with courses in health education. For more information, visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

Information on good health habits has been around for a long time. In the 1100s, a physician named Moses Maimonides published a book titled *Rules for Physical Health*.

*Rules for Physical Health* suggests that people need eight hours of sleep a night to maintain their health. It also encourages its readers to exercise or play sports regularly. It even contains specific suggestions about the kinds of food a person should eat.

The book is not just about what individuals could do to improve their health. It also stresses the importance of breathing clean air. In other words, it recognizes that a healthy environment is an important part of staying healthy.

### TEST-TAKING TIP

Read the passage carefully once to find out what information it contains. After you read each question, look back at the passage to find the answer.

- As described in the passage, *Rules for Physical Health* gives suggestions on all of the following EXCEPT?
  - healthful eating habits
  - ways of improving social health
  - making physical activity a regular habit
  - getting enough bed rest at night
- What suggestion in the book relates the environment to personal health?
  - the importance of sealing garbage bags
  - the importance of drinking clean water
  - the importance of recycling
  - the importance of breathing clean air

# Mental and Emotional Wellness



## Chapter Preview

Lesson 1 A Healthy Self-Concept .....32	Building Health Skills..... 54
Lesson 2 Your Character Counts..... 36	Hands-On Health ..... 56
Lesson 3 Expressing Emotions .....41	Chapter Reading Review..... 57
Lesson 4 Coping with Stress.....45	Chapter Assessment ..... 58
Lesson 5 Emotional Problems..... 50	

### ▲ Working With the Photo

Good health includes physical fitness, but there is more to being healthy than that. **What signs of good emotional health do these teens exhibit?**

# Start-Up Activities



## Before You Read

Look at the Instant Message below. What would you tell Julie? Keep a record of your answer.



## IM Express

**KatieZ:** Hey Jule, how's it going?  
Miss you! 😊

**Julie33:** It's OK—Stressed about the new school

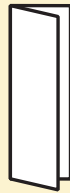
## FOLDABLES™ Study Organizer



## As You Read

Make this Foldable™ to record what you learn about positive self-concept in Lesson 1. Begin with a plain sheet of 8½" x 11" paper.

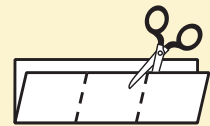
- 1** Fold the sheet of paper in half along the long axis.



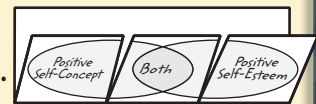
- 2** Turn the paper and fold it into thirds.



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



- 4** Draw two overlapping ovals, and label as shown.



Under the appropriate tab, take notes on what you learn about positive self-concept and high self-esteem. Under the middle tab, write down what the two have in common.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Health Inventory for Chapter 2.

## A Healthy Self-Concept

### Guide to Reading

#### Building Vocabulary

Two of the terms below share a common word part. In your notebook, write a definition for each based on what you believe the term means. Revise your definitions as you read the lesson.

- self-concept (p. 32)
- reinforce (p. 33)
- self-esteem (p. 34)
- resilience (p. 34)

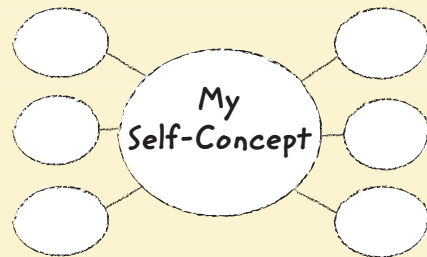
#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** what your self-concept is.
- **identify** influences on your self-concept.
- **describe** how you can build a positive self-concept.

#### Reading Strategy

**Analyzing a Graphic** Using the diagram to the right as a guide, create a concept map that shows influences on your self-concept.



**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 31 as you read this lesson.

### Quick Write

Imagine that you are applying for a job. Write a brief letter to the employer describing your strengths.

### What Is Self-Concept?

“Is *that* what I sound like?” Theo asked. He was listening to a recording of his voice. Have you ever heard your own voice played back? Other people hear us differently from how we hear ourselves. The same is true of how we see ourselves.

Each of us has a different self-concept. Your **self-concept** is *the view you have of yourself*. It may or may not mirror the way other people see you. This much is clear: Having a positive self-concept is an important part of good mental/emotional health.

- ◀ Also known as self-image, self-concept is your view of your abilities, skills, and talents. **Why is having a positive self-concept important?**



## How Does Self-Concept Develop?

Your self-concept starts forming when you are very young. Parents or guardians are the first and greatest influence. How they speak to you and treat you have a lasting effect. Grandparents, sisters, brothers, and relatives have an effect too.

Your skills and abilities also shape your self-concept. You may see yourself as a good basketball player or a good singer. You may feel you are good at writing stories but average in math. How you view your talents and abilities influences your overall self-concept. Focus on your strengths rather than your weaknesses. When you focus on your weaknesses, you may begin to feel that you are not good at anything. Instead, identify what you do well and what you enjoy doing. This will help you develop a positive self-concept. Seeing yourself in a positive way will help you feel good about yourself.

Family members, friends, and teachers **reinforce**, or *support*, your self-concept through messages. Some of the messages from people around you are spoken or written. Others take the form of looks or gestures. “Way to go!” is an example of a positive word message. Can you think of a look or gesture that carries the same idea?

Positive messages help you develop a positive self-concept. You may think you did well on a school project. Having your parent or teacher tell you that you did a good job reinforces your belief. Keep in mind that sending positive messages is a two-way street. When you support others, they are likely to support you, too.

- ▶ Messages from others influence your self-concept. These messages may be spoken, written, or communicated through looks or gestures.

**What is the message being sent by the gesture pictured here?**



DEVELOPING

Good Character

### A Positive Home Environment

A healthy home environment will positively affect your self-concept. You can help create a healthy home environment by being patient with family members and helping them when they need it. **How can you help create a healthy family setting?**



# Health Skills Activity

## Analyzing Influences

### How Do the Media Influence Your Self-Concept?

One factor that affects your self-concept is the media. Think about the images you see on television or in movies. They often show attractive people having fun. Some teens try to look and act like the people they see on-screen. They may feel this will improve their self-concept. It's important to recognize the ways in which media messages influence the way you feel about yourself.

### With a Group

Collect pictures, video clips, or descriptions of images from the media. Analyze the message each sends.



## Self-Concept and Self-Esteem

Do you like and respect yourself? Do you have confidence to try new things? If you do, you have high self-esteem. Your **self-esteem** is a measure of how much you like and respect yourself. Your self-esteem is closely related to your self-concept. Having a positive self-concept will help you build a high level of self-esteem. When you have high self-esteem, you feel good about yourself. You have confidence in what you do and have a positive outlook. You come to new challenges with a “can-do” attitude. When things go wrong, you are resilient. **Resilience** is the ability to work through and recover from disappointment. Being resilient helps you cope with failure in a positive way. For example, imagine that you try out for one of the lead parts in the school play. You are disappointed when you find out you didn't get the part. If you are resilient, you won't let this disappointment stop you. Try out for a smaller part or even volunteer to help backstage.

- ◀ Resiliency is your ability to bounce back from difficulties. **Why is this an important ability? How can a person become more resilient?**

## Developing a Positive Self-Concept

Developing a positive self-concept is an important part of emotional health. To develop a positive view of yourself, list your strengths and weaknesses. Focus on what you do well. This gives you the confidence you need to try new things. Here are some other suggestions:

- Have confidence in yourself and your abilities.
- Accept encouragement; use it to recognize your strengths.
- Set a goal and work to reach it. This will give you a sense of accomplishment.
- Develop realistic expectations. Remember that no one is perfect.
- Find friends that support and encourage you.
- Avoid worrying about hurtful remarks or looks. Put them behind you and move on.

### Reading Check

**Explain** Give three suggestions for improving your self-concept.

**Health Online**

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

## Lesson 1 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define the terms *self-concept* and *self-esteem*. Write a sentence that includes both terms.
2. **Identify** What is resilience?
3. **Give Examples** Name three ways to improve your self-concept.

### Thinking Critically

4. **Analyze** How might having a high level of self-esteem help you set goals for the future?

5. **Apply** Yolanda didn't make the soccer team. She was disappointed, but decided to try out again next season. Does Yolanda have a positive self-concept? Why or why not?

### Applying Health Skills

6. **Goal Setting** List three things you do well. Set a goal to improve one of these strengths during the next week. Follow your plan carefully. Then write a paragraph describing the results.



## Your Character Counts

### Guide to Reading

#### Building Vocabulary

List each term below in your notebook. As you come across it in your reading, write the definition.

- character (p. 36)
- advocacy (p. 38)
- role model (p. 39)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** the traits of good character.
- **explain** how character develops.
- **list** ways of showing good character.

#### Reading Strategy

**Predicting** Look over the headings in this lesson. Write a question that you think the lesson will answer. After reading, check to see if your question was answered.

### Quick Write

Make a list of the good deeds you did this month. Then describe two of them in a paragraph.

### What Is Character?

Do you help out with chores at home? Are you honest? Do you help others when you can?

If you truthfully answered yes to these questions, you probably have good character. **Character** is *the way you think, feel, and act*. Your character is reflected in your attitudes, views, and words. Do you recall reading about values in Chapter 1? Your character is an outward expression of your inner values. It's an important part of your relationships and the choices you make.

- ◀ Keeping an open mind helps you grow as a person. It gives you a chance to see the world through someone else's eyes. **How can being open-minded positively affect your health?**



People with good character are loyal to their friends. They respect others and their property. They try to keep an open mind to ideas and views different from their own. People with good character do not cheat or lie. They do not take credit for someone else's work.

Your character affects your physical, mental/emotional, and social health. Taking care of your body shows that you have respect for your physical health. When you act responsibly and follow safety rules, you are protecting your physical health. When you are kind to others you feel good about yourself. This strengthens your mental/emotional health. Good character also improves your social health. Being fair and honest helps you get along well with others. You can build strong relationships by treating others with respect and understanding.



▲ Caring for younger brothers or sisters is a sign of good character. **What are some other ways to demonstrate good character?**



Reading Check

**Explain** What is character?

## Traits of Good Character

There are six main character traits. They are *trustworthiness*, *respect*, *responsibility*, *fairness*, *caring*, and *citizenship*. Developing these character traits will help you communicate care, consideration, and acceptance of self and others.

### Trustworthiness

People who are trustworthy are reliable—they keep the promises they make. For example, if a teen promises his parents to be home on time, he keeps his word. People who are trustworthy are also honest.

### Respect

Demonstrating respect means showing regard for other people, for property, and for authority. This involves treating others the way you'd like them to treat you.



## Responsibility

Accepting responsibility means being willing to take on duties or tasks. It also means being willing to accept blame for mistakes you have made. A responsible person accepts the consequences of his or her actions and decisions.

## Fairness

When you were young, you were taught to take turns and share your toys. You were taught fairness. Being fair means treating everyone equally and honestly. A fair person judges a contest on the basis of talent. She or he doesn't just award first prize to a friend in the contest.

Fairness also includes being a good sport. It means knowing how to accept defeat when you lose and not showing off when you win.

## Caring

Caring means treating others with understanding. Caring people are kind and consider the feelings of others. They try to help others when they can. Show that you care about others. Make an effort to welcome new students to your school. Listen to a friend when he or she needs you.

- ▲ Helping to keep your community clean is an example of good citizenship. **What are some other examples of good citizenship?**

## Citizenship

Being a good citizen means following rules and obeying laws. Good citizens also take action to make their community better. This is called advocacy. **Advocacy** is *taking a stand to make a difference*.



**Recall** Name and define three traits of good character.

## How Does Character Develop?

Your character is shaped by your family and others around you. It is also influenced by your experiences in life and your values.

Family members are often the first teachers of character. Through their words and actions, they help you develop your

own values. For example, your family may volunteer to help others in need. This teaches you to be a good citizen. You also learn responsibility at home. Doing chores or helping younger siblings with homework teaches responsibility. Being kind and helpful are ways that family members show they care about each other.

As you grow older, you learn from experience. Sports and games teach the importance of fairness and of following rules. At school you learn responsibility. You are responsible for getting your work done and in on time. School also teaches respect for authority.



**Explain** Who are the first teachers of character?

## Role Models

One of the most important ways in which you learn character and values is by watching and listening to others. You learn by their examples. Some of these people may become positive role models for you. A **role model** is a person whose success or behavior serves as a good example for others. Parents or guardians are among the most important role models for their children.



## Connect To... Language Arts

### The Idea of Character

The word character comes from a Greek word meaning "mark or engrave." Look up the word character in a dictionary.

**What other meanings do you find? How are they related?**

▼ Team players demonstrate character through good sportsmanship.

**What are some ways that team sports help build character?**

## MediaWatch

### TV Character

Many TV programs feature teens who show positive character traits. These teens can be considered good role models.

**Name three examples of positive teen role models from your favorite TV shows.**

## Health Online

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

## Character in Action

Good character is not something you feel or show once in a while. It is part of who you are. It is a way of living. By having good character, you promote your own health and the health of others. You feel good about yourself and are able to make responsible decisions. At the same time, you set a good example for others to follow.

At home, you can demonstrate good character by showing respect for your parents and other family members. Be honest with them. Listen when they talk to you. Show responsibility by getting up on time for school and by doing your chores. Let your family members know that you care about them. Work out your differences calmly and peacefully.

At school or during other activities, you can show you have good character by being a good citizen. Work together with others to advocate for healthy individuals, families, and communities. Follow school or other rules. Help to keep your school and community clean. Show respect for teachers, other adults, and students. Be honest—don't cheat on your schoolwork. In sports, play fair and responsibly.

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define *character*. What are the six character traits?
2. **Recall** What is advocacy?
3. **Explain** Tell how role models can shape a person's character.

### Thinking Critically

4. **Evaluate** Give an example of how good character might influence your health.

5. **Analyze** How is making responsible decisions related to good character?
6. **Synthesize** Give two examples of how life experiences might have a positive influence on character.

### Applying Health Skills

7. **Communication Skills** Write a short story about a teen faced with a difficult choice. Tell how he or she demonstrates good character in making a decision.

## Expressing Emotions

### Guide to Reading

#### Building Vocabulary

Read each of the words. If the word is familiar, write down what you think its meaning is. If it's not, guess at its meaning using word clues. These include word parts, such as *ab-*, meaning "from."

- emotions (p. 41)
- hormones (p. 41)
- abstinence (p. 44)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** what causes the emotions we experience.
- **express** strong feelings healthfully.
- **discuss** why abstinence is important for teens.

#### Reading Strategy

**Identifying Cause and Effect** As you read, think about examples of each emotion described. Identify a possible cause of this emotion in your daily life.

### Your Emotions

What are you feeling right now? Maybe you are feeling happy about some good news that you got today. Maybe you are feeling down. You may even be having several different emotions at once. **Emotions** are *feelings such as joy, love, or fear*. Your emotions affect all sides of your health triangle.

### What Causes Emotions?

Emotions are often triggered by daily events. You are passed over for a part in the class play and feel sad. Your friend returns a borrowed jacket with a rip and you feel angry.

During your teen years, another emotional trigger is at work. It is deep inside you and beyond your control. Have you had days lately where you feel "up" one minute, "down" the next? These mood shifts are related to your body's release of hormones (HOR·mohnz). **Hormones** are *powerful chemicals, produced by glands, which regulate many body functions*. These hormones are preparing your body for adulthood. The emotional swings hormones cause can be confusing or even scary. If you've had these feelings, relax. Mood swings are part of growing up.

### Quick Write

List five ways you show you're happy. Now list five ways you show you're angry. Which feeling do you find easier to express? What does this tell you?

### Reading Check

**Explain** What are hormones? How do they affect emotions during the teen years?

- ▶ Mood swings can feel as if you are riding an emotional roller coaster. **What is the cause of mood swings during the teen years?**



## Types of Emotions

Some emotions, such as happiness, are pleasant to experience. Other feelings, while less enjoyable, are still normal. Every person feels angry or afraid at one time or another. These emotions aren't good or bad—they just *are*. An important part of good mental/emotional health is learning how to handle your emotions in healthy ways.

## Understanding Your Emotions

The first step in responding healthfully to a strong or difficult emotion is understanding what you're feeling. Sometimes, you know exactly what you are feeling and why. Other times, it's easy to confuse one emotion with another. This is especially true of anger. Strong words like "I hate you!" often mean "I'm angry with you." When you feel a strong emotion, take a moment to stop and think about what you are feeling and why. Try to focus on what is bothering you or making you angry. Ask yourself: What am I really reacting to? Am I angry because I feel hurt or disappointed? Once you understand your feelings, you can learn to manage them in healthy ways.

## Expressing Your Emotions

Expressing your emotions healthfully is an important strategy for dealing with strong feelings. It is also important to effectively express feelings and opinions on health issues. Holding emotions inside can harm all sides of your health triangle. It can lead to stomachaches and headaches. It can make it hard to focus on what you are doing. Keeping your feelings inside can also have a negative effect on your relationships. It is better to let emotions out, especially strong ones. For instance, suppose you are angry or upset with someone. Pause for a moment and take a deep breath. Think of words that will express your true feelings without being hurtful. Then calmly tell the other person how you feel. For example, Cara was angry when her friend Jen called to cancel their plans. Cara took a moment to breathe slowly and deeply. She realized that she felt hurt because she and Jen hadn't been spending much time together lately. She called Jen back and they talked calmly about the situation. Cara felt much better afterward.

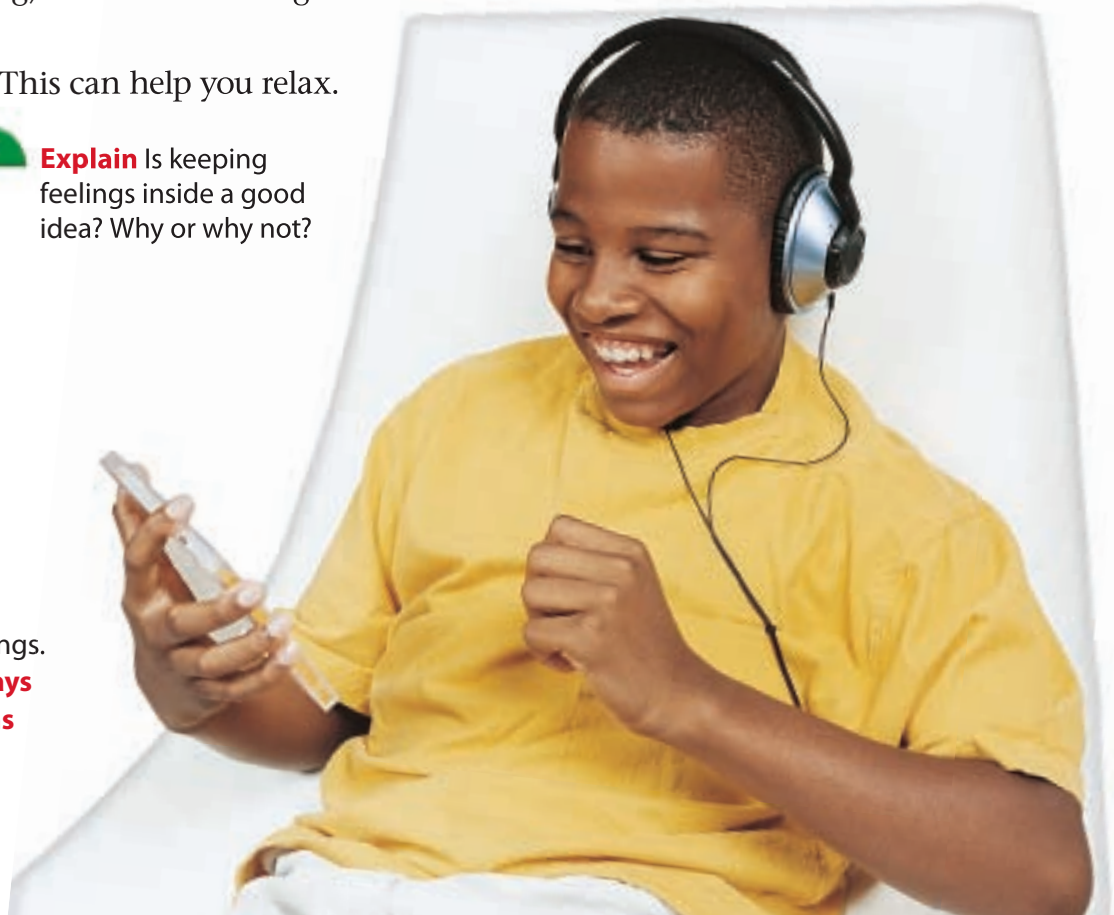
There are many other healthful strategies for dealing with strong or difficult feelings. These include the following:

- Engage in physical activity. This can help relieve tension.
- Talk with family members or friends. They can provide help and support.
- Create something, such as a drawing or poem.
- Listen to music. This can help you relax.



**Explain** Is keeping feelings inside a good idea? Why or why not?

- ▶ Listening to music is one good way to manage strong feelings. **Name two other ways to express emotions healthfully.**



**Health Online**

### Topic: Managing Strong Emotions

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities on identifying and expressing your emotions.

**Activity:** Using the information provided at the link above, write down four healthful ways you can manage strong emotions.



## Practicing Abstinence

Everyone has basic emotional needs. These include the need to be loved and accepted. Some teens try to fill their emotional needs by participating in risky behavior. They may join gangs. Some may use tobacco, alcohol, or illegal drugs. Others become sexually active. These behaviors do not really meet emotional needs. Dealing with emotions in healthy ways includes saying no to high-risk behaviors like these.

**Abstinence** (AB-stuh-nuhns) is *not participating in high-risk behaviors*. Abstinence is a strategy for avoiding harmful situations. It protects your health and the health of others. Being abstinent tells others you refuse to take part in unsafe behaviors. It also shows you have self-control. You will learn more about the value of abstinence in Chapter 3 and Chapter 8.

Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.



Reading Check

**Discuss** How is abstinence related to making good decisions?

## Lesson 3 Review

After You Read

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

### What I Learned

1. **Vocabulary** Define the word *emotion*, and use it in a sentence.
2. **Explain** Why are mood swings common during the teen years?
3. **Identify** What are two strategies for expressing emotions healthfully?

### Thinking Critically

4. **Analyze** How might expressing emotions affect your social health?

5. **Apply** You are angry because your brother or sister has borrowed your headphones without asking. Explain how you will deal with your emotions.
6. **Summarize** What might you say to someone who tried to fill his or her emotional needs by participating in high-risk behaviors?

### Applying Health Skills

7. **Practicing Healthful Behaviors** Describe how abstinence can help you avoid harmful situations.

## Lesson 4

# Coping with Stress

### Guide to Reading

#### Building Vocabulary

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

- stress (p. 45)
- anxiety (p. 46)
- adrenaline (p. 47)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** what stress is.
- **describe** how your body responds to stress.
- **list** ways to manage stress.

#### Reading Strategy

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

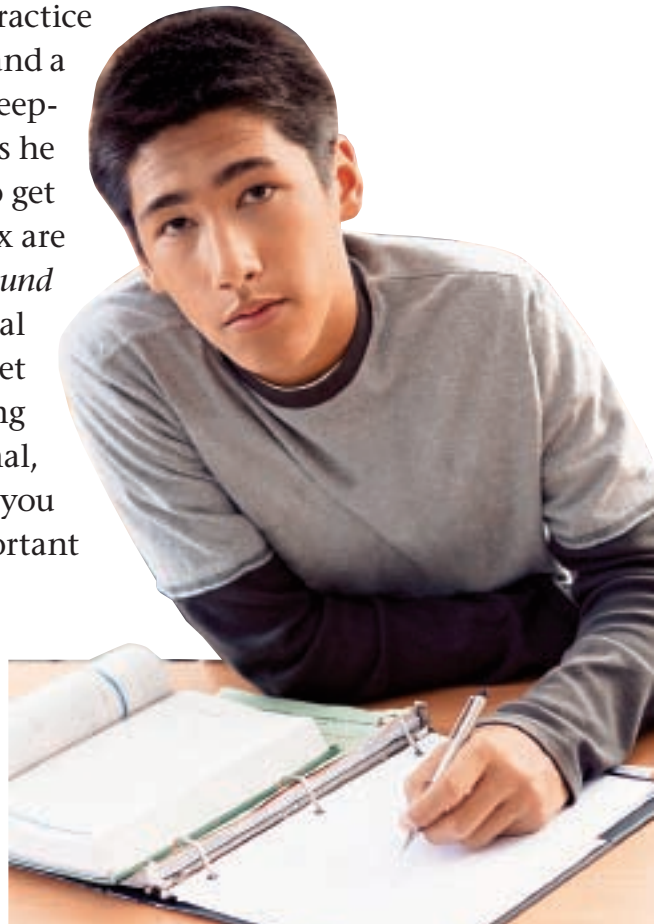
## What Is Stress?

Sonya has to give an oral report in class. Her mouth feels dry, and her palms are sweaty. Her stomach feels like butterflies are fluttering around inside it. Alex is on the soccer team. The championship game is coming up, so he's been at practice every night this week. He also has a big test to study for and a major project due. Lately Alex has been having trouble sleeping. He's been lying awake thinking about all the things he has to do. Whenever he worries about how he's going to get everything done, his heart starts to race. Sonya and Alex are feeling stress. **Stress** is *your body's response to changes around you*. Everyone feels stress from time to time—it's a normal part of life. Stress can give you energy and help you get things done. However, stress that continues over a long period of time can harm your physical, mental/emotional, and social health. While you can't always avoid stress, you can learn strategies for managing stress. This is an important part of staying healthy.

### Quick Write

Write about a stressful situation you have been in and how you dealt with the stress.

- ▶ Stress is a part of life. **What are some examples of stressful events?**



- ▶ Positive stress gives athletes the motivation they need to perform. **How can you use positive stress to your own benefit?**



## Sources of Stress

Many different things can cause stress. It can result from small events, like forgetting your locker combination. Stress can also come from major events. These include life-changing situations—for example, moving to a new city or starting a new school. People sometimes respond to stressful events with anxiety. **Anxiety** is *feelings of uncertainty or worry over what may happen*.

People may view different events as stressful. You may feel stress when trying out for a part in the school play. Your friend may find this situation exciting rather than stressful. What has happened to you in the past may affect your views on what is stressful. For example, maybe you forgot some of your lines when performing in the school play. This might make you more anxious in similar situations. Your beliefs, attitudes, and values also influence what you think of as stressful.

## Types of Stress

Stress can be positive or negative. For example, Jay was really excited about the race. When the signal to start sounded, he felt a burst of energy and took the lead. Jay was experiencing what is known as *positive stress*. Positive stress has many benefits. It can help you reach goals and accomplish tasks. It also provides needed energy to help you escape danger.

Negative stress gets in your way and holds you back. Sources of negative stress are often out of your control. They may include problems at home or school. Too much negative stress can be unhealthy.

### Reading Check

**Analyze** Compare and contrast positive and negative stress. Give an example of each.

## The Stress Response

The stress response is how nature prepares the body to deal with threats of harm. This is also known as the *fight-or-flight response*. Your body is preparing to *fight* the threat or take *flight* from it. During the stress response, your body undergoes a series of physical changes, which are summarized in **Figure 2.1**.

### Reading Check

**Recall** Name two physical changes that occur during the fight-or-flight response.

**FIGURE 2.1**

### THE FIGHT-OR-FLIGHT RESPONSE

This illustration shows some of the physical changes stress can cause.

**1** The brain detects a source of stress.

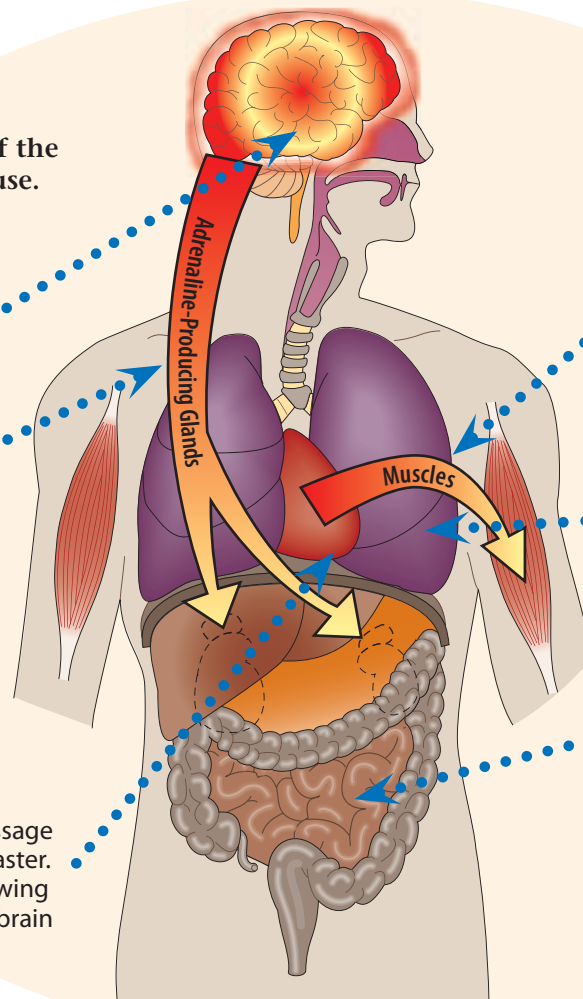
**2** The brain signals the adrenal (uh-DREEN-uhl) glands to send out **adrenaline**, a hormone that prepares the body to respond to stress.

**3** The heart receives the message from the brain and beats faster. Blood vessels expand, allowing more blood to flow to the brain and muscles.

**4** The muscles tighten and become ready for action.

**5** Breathing deepens and speeds up as passages in the lungs widen. This brings extra oxygen to the muscles.

**6** To make more energy available to the muscles, other body activities slow down. This includes the activities of the stomach and intestines.





# Health Skills Activity

## Stress Management

### Relaxation Exercises

When you're feeling stress, your whole body is affected. You may feel stiffness in your shoulders or neck. Your mind may be cluttered with troubling thoughts. One strategy for dealing with stress is to use relaxation exercises.

There are three main types of relaxation exercises:

#### DEEP BREATHING

1. Close your eyes and inhale deeply.
2. Hold the breath for a moment, then slowly exhale.
3. Repeat these steps several times.

#### MUSCULAR RELAXATION

1. Picture the muscles in your body.
2. Working one at a time, tighten a muscle group.
3. Hold the position for a moment, then relax.
4. Repeat these steps for each muscle group in the body.

#### DIRECTING YOUR THOUGHTS

1. Try to clear your mind.
2. After a moment or two, picture someplace pleasant, such as a sunny beach or park.
3. Keep picturing this relaxing scene until the stress is gone.

### On Your Own

Practice each of the relaxation techniques described. Which one works best for you?

## Strategies for Managing Stress

When stress levels are high or constant, your health can suffer. Fortunately, there are strategies for managing stress.

- **Identify the source.** Determine what is causing you to feel stressed. Having a clear understanding will help you manage the stress better.
- **Set your priorities.** Make a list of things you want to accomplish. Rank each task in order of importance. Decide which task to focus on. Don't try to include too many activities in your life.

- **Budget your time.** Set aside regular times for homework and chores. That way you won't have to rush to get them done at the last minute.
- **Redirect your energy.** Stress increases your energy. Use that energy for something positive. Learn a hobby. Offer to help a family member with a project.
- **Talk to someone.** Talking about stress can reduce it. A parent, friend, or school counselor may give you some useful advice.
- **Put things in perspective.** Remember that you are not alone. Everyone has stress and other problems. Don't make your problems bigger than they are.
- **Increase physical activity.** Becoming more active releases built-up energy from stress. Vigorous physical activity naturally relaxes the body.

### Reading Check

**Identify** What are two strategies for managing stress?

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 4.

## Lesson 4 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define the term *stress*.
2. **Describe** What does adrenaline do during the stress response?
3. **Give Examples** Name a major event and minor event that might cause stress.
4. **Identify** List two strategies for managing stress.
6. **Synthesize** Identify two stresses family members might experience.
7. **Apply** How can setting priorities help a teen manage stress?

#### Applying Health Skills

8. **Stress Management** Jamal is anxious about starting a new school. What are some ways that Jamal could manage his stress?

#### Thinking Critically

5. **Hypothesize** Do you think it's possible to have too much positive stress? Explain why or why not.

## Emotional Problems

### Guide to Reading

#### Building Vocabulary

Two of the terms below contain the word *disorder*. Look up this word in a dictionary. See if you can guess the meaning of the two terms.

- anxiety disorder (p. 51)
- mood disorder (p. 51)
- depression (p. 51)
- suicide (p. 51)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **describe** types of emotional problems.
- **recognize** the warning signs of suicide.
- **identify** sources of help for emotional problems.

#### Reading Strategy

**Analyzing a Graphic** Using the diagram below as a guide, create a chart that lists and describes different types of emotional disorders.

Mental Health Problems	
Name of Problem	Symptoms

### Quick Write

Imagine a friend writes you to say she or he has been feeling sad for weeks. Write a paragraph describing what positive action you could take.

### What Are Emotional Problems?

Cindy's friend Jon seemed sad, but she figured he would soon bounce back from whatever was bothering him. Then a month went by and Jon still rarely smiled or spoke to anyone. Cindy began to worry that something was really wrong.

- ▶ When sadness or other emotions last for weeks or months, action is needed. **How might you show your concern for someone who is dealing with an emotional problem?**

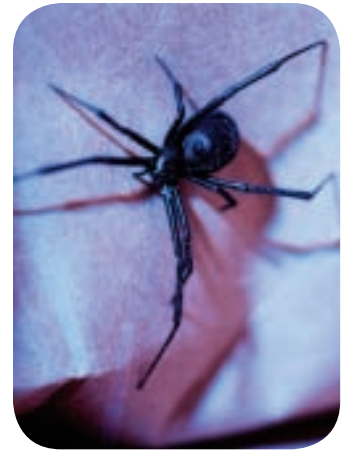


It's normal to feel sad or afraid from time to time. However, when such feelings last for weeks, it can be a sign of an emotional problem. Help is needed to reduce risks related to emotional problems of adolescents. Some common emotional problems are described below.

## Anxiety Disorders

An **anxiety disorder** is a serious emotional problem that keeps a person from functioning normally. An anxiety disorder is not the same thing as anxiety, or worry, mentioned in Lesson 4. Anxiety disorders prevent people from leading normal lives.

One type of anxiety disorder is *phobia* (FOH-bee-uh). Phobias are unreasonable fears of objects or ideas. Some people, for example, have a phobia about being in high places. Others have an unreasonable fear of spiders. Another anxiety disorder is *obsessive-compulsive disorder* (OCD). People with OCD can't keep certain thoughts or images out of their minds. They may repeat behaviors, such as washing their hands, over and over. In the person's mind, this helps relieve anxiety.



- ▲ Some people have an intense fear of spiders. **What type of anxiety disorder would such a person have?**



**Recall** Name and describe two anxiety disorders.

## Mood Disorders

Another type of emotional problem is mood disorders. A **mood disorder** is a serious emotional problem where a person's mood goes from one extreme to another. These changes are far more extreme than the mood swings typical in teens. A person may "cycle" between feelings of deep sadness and extreme happiness. In some people, both moods happen at once. In others, the happiness is replaced by rage.

## Depression

Sometimes when they're feeling down, people will say they "feel depressed." **Depression** is an emotional problem marked by long periods of hopelessness and despair. It is different from ordinary sadness. Depression can make it hard for a person to function.

## Suicide

Sometimes, the effects of emotional problems are so severe the person considers suicide. **Suicide** is the deliberate act of taking one's own life. Suicide is the third leading cause of death in people ages 10 to 14. Most of the time, these young people don't want to die. They just want their problems to go away.





▲ Caring adults can provide comfort when the going is rough. **How would you comfort a close friend with a problem?**

Suicide is not the answer. If someone you know is talking about suicide, go for help immediately. Urge the person to talk to a concerned adult. Tell an adult about the situation yourself. Never promise to keep the person's plan a secret. Suicide is one secret no friend should keep.

### Warning Signs of Suicide

Sometimes, a person planning suicide doesn't use the word suicide, but there are other signs that a person may be thinking about it. If you notice any of the following behaviors, remember to tell a trusted adult right away.

- Avoiding activities that involve family or friends
- Taking greater risks than usual
- Losing interest in hobbies, sports, or school
- Giving away prized possessions



**Explain** What should you do if someone you know talks about suicide?

## Help for Emotional Problems

Emotional problems have many causes. Some come from chemical changes in a person's brain. Others may be passed on through heredity.

It's important to know that emotional problems can be treated. Some are treated with medication, others with counseling, still others with both. Having an emotional problem is no different from having any other illness. Being able to ask for help shows you are taking responsibility for your health.


### Sources of Help

There are many sources of help and support for emotional problems. Some are in your home or at school. You might talk to a parent or other family member. A teacher or a school counselor is another good person to turn to. Some people find it helpful to talk to a religious leader.

Often, people with emotional problems see a mental health professional. These are people specially trained to deal with emotional problems. They can give the person the specialized care he or she needs.



**Recall** Name two sources of help for people with emotional problems.

  
Visit [health.glencoe.com](http://health.glencoe.com)  
and complete the Interactive  
Study Guide for Lesson 5.



# Health Skills Activity

## Decision Making

### Helping a Troubled Friend

Caitlin's best friend Torry has been acting moody lately. When Caitlin asked her about it, Torry shrugged. "There's nothing to talk about," she said. Caitlin is worried that her friend may have a serious emotional problem. She wishes she could get Torry to open up. She knows from experience, however, that Torry doesn't like to be pressured. What should Caitlin do?

### What Would You Do?

Put yourself in Caitlin's position. Use the decision-making process to decide what you would do.

1. State the situation.
2. List the options.
3. Weigh the possible outcomes.
4. Consider values.
5. Make a decision and act on it.
6. Evaluate the decision.



## Lesson 5 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define the term *depression*.
2. **Give Examples** What is an example of a phobia?
3. **List** Name three warning signs of suicide.

### Thinking Critically

4. **Analyze** Imagine overhearing someone saying he or she planned to commit suicide. What would you do?

5. **Synthesize** A friend says, "I've been depressed lately." What positive health behaviors could you take to help your friend?

### Applying Health Skills

6. **Advocacy** Write an article for the school paper about emotional problems. Identify what students should do if they are feeling very stressed or unhappy. Tell how they can help a friend with those feelings.

# Building Health Skills

## PRACTICING HEALTHFUL BEHAVIORS

### Dealing with Feelings

#### DIRECTIONS

Practicing Healthful Behaviors involves taking specific actions to stay healthy and avoid risky behaviors. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

Part of growing up is learning to cope with feelings healthfully. Aiden wanted to lash out when his cousin Rob called him a baby. Instead, he followed the steps for handling strong emotions:

1. First, he determined what he was feeling (*angry and hurt*).
2. Then he evaluated the cause (*my cousin made fun of me*).
3. He asked his older brother for help in coping with his feelings.
4. Aiden decided to respond to Rob by calmly explaining why the comment upset him.



## 2 Practice

Aiden had a difficult day. First, he forgot his math homework. Then, he found out he did poorly on a test. To top it off, his bike had a flat tire, and he had to walk it all the way home from school.

1. What emotion is Aiden experiencing?
2. What caused his emotion?
3. Where could Aiden get help for dealing with his emotion?
4. What would be a healthy response to this emotion?

### Skill Summary

#### PRACTICING HEALTHFUL BEHAVIORS

You can deal with strong emotions by following these steps:

- Determine the emotion.
- Evaluate the cause.
- Ask for help if needed.
- Learn to respond in a way that does not hurt anyone.

## 3 Apply

Think of a situation that created a strong emotion in you. Then draw the steps for handling emotions.

Divide a piece of poster board into four sections.

1. In the first section, draw a picture of how you felt.
2. In the second section, list the causes.
3. In the third section, list people who could help you handle your emotions.
4. Draw a healthy response to the emotion in the last section.

Explain your drawing to the class, and tell why your response is healthy.

### Self-Check

- Did I illustrate an emotion?
- Did I include examples of sources of help?
- Did I show a healthy response?
- Can I explain why my response is healthy?

# HANDS-ON HEALTH



## Developing Good Character

Character is formed every day by your thoughts and actions. Developing good character is important to your health. It will help you develop positive relationships and behaviors. A person of good character is trustworthy, treats people with respect, is responsible, fair, caring, and a good citizen. In this activity you will create a poster with examples of how to develop one of the six traits of character.

### What You Will Need

- Poster board
- Markers or crayons

### What You Will Do

- 1** Your teacher will divide the class into six small groups and assign each group one of the six traits of character: trustworthiness, respect, responsibility, fairness, caring, or citizenship.
- 2** In your group, brainstorm and list examples of how teens can develop the assigned character trait. For example, if your group was assigned trustworthiness, you might list telling the truth and keeping promises.

- 3** Now, create a colorful poster featuring the examples you listed in Step 2. Use your group's character trait as the title for your poster. As a group, explain to the class how your examples can help a teen develop good character.

### Wrapping It Up

After all the groups have presented their posters, discuss these questions as a class: How can teens help other teens develop good character? How can good character affect your physical, mental/emotional, and social health?

Display your posters where your classmates can see them. This will help other students learn about the six traits of good character.

# Reading Review

## 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 A Healthy Self-Concept

#### Key Ideas

- Your self-concept is the view you have of yourself.
- Your self-concept is influenced by parents, guardians, and those around you.
- You can build a positive self-concept by thinking positive thoughts, accepting encouragement, and finding friends that support you.

#### Vocabulary

- self-concept (p. 32)
- self-esteem (p. 34)
- reinforce (p. 33)
- resilience (p. 34)

### Lesson 2 Your Character Counts

#### Key Ideas

- Traits of good character are trustworthiness, respect, responsibility, fairness, caring, and citizenship.
- You develop character by learning from parents, guardians, other role models, your environment, and your understanding of right and wrong.
- You can show good character by making responsible decisions and setting an example for others.

#### Vocabulary

- character (p. 36)
- role model (p. 39)
- advocacy (p. 38)

### Lesson 3 Expressing Emotions

#### Key Ideas

- Emotions and mood swings are caused by events around you and by hormones in your body.
- You can learn to express your feelings in healthful ways.
- Choosing abstinence from high-risk behaviors protects your health and the health of others.

#### Vocabulary

- emotions (p. 41)
- abstinence (p. 44)
- hormones (p. 41)

### Lesson 4 Coping with Stress

#### Key Ideas

- Your body responds to stress through a series of physical changes known as the fight-or-flight response.
- You can manage stress by setting priorities, budgeting your time, redirecting your energy, keeping perspective, and increasing physical activity.

#### Vocabulary

- stress (p. 45)
- adrenaline (p. 47)
- anxiety (p. 46)

### Lesson 5 Emotional Problems

#### Key Ideas

- Emotional problems include anxiety disorders, mood disorders, and depression.
- Warning signs of suicide are avoiding activities, taking risks, losing interest in hobbies or school, and giving away prized possessions.

#### Vocabulary

- anxiety disorder (p. 51)
- suicide (p. 51)
- depression (p. 51)
- mood disorder (p. 51)

## After You Read

## IM Express

Now that you have read the chapter, review your answer to the I.M. Express 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 1–8. After each number, write the term from the list that best completes each statement.

- abstinence
- encouragement
- advocacy
- hormones
- character
- role model
- confidence
- self-concept
- emotions

### Lesson 1 A Healthy Self-Concept

1. The view you have of yourself is known as your \_\_\_\_\_.
2. When you have high self-esteem, you have \_\_\_\_\_ in what you do.
3. Accepting \_\_\_\_\_ is one way to develop a positive self-concept.

### Lesson 2 Your Character Counts

4. The way you think, feel, and act is known as your \_\_\_\_\_.
5. Taking a stand to make a difference is known as \_\_\_\_\_.
6. A person whose success or behavior serves as an example for others is a \_\_\_\_\_.

### Lesson 3 Expressing Emotions

7. \_\_\_\_\_ are powerful chemicals that regulate many body functions.
8. Refusing to participate in high-risk behaviors is called \_\_\_\_\_.

### Lesson 4 Coping with Stress

On a sheet of paper, write the numbers 10–12. Write **True** or **False** for each statement below. If the statement is false, change the underlined word or phrase to make it true.

9. Your body's response to changes around you is known as stress.
10. Anxiety refers to feelings of happiness over what may happen.
11. Adrenaline is a hormone that stops the body from responding to stress.

### Lesson 5 Emotional Problems

On a sheet of paper, write the numbers 12 and 13. After each number, write the letter of the answer that best completes each statement.

12. A disorder in which a person has an unreasonable fear of an object or idea is known as
  - a. depression.
  - b. phobia.
  - c. obsessive-compulsive disorder.
13. Signs that a person might be thinking about suicide include
  - a. avoiding activities with friends.
  - b. taking greater risks than usual.
  - c. both of the above.



### Thinking Critically

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

- 14. **Interpret** How do messages from those around you affect your self-concept?
- 15. **Analyze** Identify three events that have caused stress in your life.

### Write About It

- 16. **Analyzing Influences** Imagine you are writing an article on self-esteem for the school newspaper. In your article, explain what factors might affect a teen’s self-esteem.
- 17. **Stress Management** Write a short story about a teen who is having a stressful day.

**School Counselor** You may enjoy helping young people discover their talents and plan for their future. If so, consider a career as a school counselor. These professionals work in a school setting to help students solve problems and set career goals. School counselors need a four-year college degree and two years of graduate training. Read more about this and other health careers by visiting *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

Identify what is causing the teen stress. Show how the teen handles the stress in a healthy way.

## Standardized Test Practice

### Math

Use the table to answer the questions.

Percentage of Schools Teaching Suicide Prevention, by Topic		
Topic	Middle School	High School
How to handle stress in healthy ways	90.0	96.5
Recognizing types of stress and signs of depression that might be associated with suicide	64.8	86.5
What to do if someone is thinking about suicide	60.3	82.1

#### TEST-TAKING TIP

When questions use tables, read the title of the table. This will help you figure out its subject. Read each column heading and the label of each row.

1. What percentage of middle school students learn what to do if someone is thinking about suicide?
  - A. 60.3
  - B. 64.8
  - C. 90.0
  - D. 96.5
2. Which statement is *true*?
  - A. More middle school students learn healthful ways of handling stress than high school students.
  - B. Over 90 percent of high school students learn what to do if someone is thinking about suicide.
  - C. Nearly 65 percent of middle school students learn to recognize the types of stress associated with suicide.
  - D. Less than 60 percent of middle school students learn what to do if someone is thinking about suicide.



# Healthy Relationships



## Chapter Preview

Lesson 1 Communication Skills ..... 62	Building Health Skills ..... 86
Lesson 2 Your Family ..... 67	TIME Health News ..... 88
Lesson 3 Your Friends and Peers ..... 73	Chapter Reading Review ..... 89
Lesson 4 Refusal Skills ..... 78	Chapter Assessment ..... 90
Lesson 5 Resolving Conflicts ..... 81	

### ▲ Working With the Photo

Think about the people that are part of your life. **How many different people can you identify? List a few of them.**

# Start-Up Activities



## Before You Read

What do you know about healthy relationships?

Take the short quiz below. Keep a record of your answers.

**HEALTH QUIZ** Answer *true* or *false* to each of the following questions.

1. Communication is important in healthy relationships.
2. Every family has two parents and one or more children.
3. Good friends are honest with each other.
4. Saying no to friends isn't always easy.

ANSWERS: 1. True; 2. True; 3. True; 4. True.

## FOLDABLES™

### Study Organizer



## As You Read

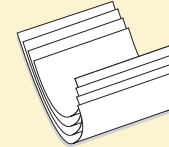
Make this Foldable™ to help you organize what you

learn about good communication skills. Begin with four plain sheets of  $8\frac{1}{2}'' \times 11''$  paper.

- 1 Collect four sheets of paper and place them  $\frac{1}{2}''$  apart.



- 2 Roll up the bottom edges, stopping them  $\frac{1}{2}''$  from the top edges. This makes all tabs the same size.



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



- 4 Label the tabs as shown. Use your Foldable™ to describe several rules for effective communication listed in Figure 3.1.



**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Chapter 3 crossword puzzle.

## Communication Skills

### Guide to Reading

#### Building Vocabulary

Copy the terms below into your notebook. Guess the meaning of each. As you read, see how many terms you got right.

- communication (p. 62)
- relationship (p. 62)
- body language (p. 63)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** different ways people communicate.
- **describe** how you can be a better speaker and listener.
- **identify** the three styles of communication.
- **develop** skills to communicate safely online.

#### Reading Strategy

**Organizing Information** Copy the major and minor headings from the lesson onto a sheet of paper. Leave space beneath each. Write a sentence beneath each heading that summarizes the ideas under that heading.

**FOLDABLES** Study Organizer Use the Foldable™ on p. 61 as you read this lesson.

### Quick Write

Think of someone you like talking with. In a short paragraph, explain why you enjoy talking with this person.

### What Is Communication?

Each day you communicate with people. **Communication** is *the clear exchange of ideas and information*. When you communicate, you send or receive a message. Successful communication is at the root of healthy relationships. A **relationship** is *a connection you have with another person or group*. Good communication helps people understand each other and get along.



- ◀ Talking is the main way people communicate. **What are some other forms of communication?**



◀ Body language can be a powerful communication device. **What message is being sent by the teen leaning in?**

Good communication requires special skills. Both the sender of the message and the receiver should have them. In this chapter, you will learn about these skills and how to use them.



Reading Check

**Define** What is *communication*?

## Different Ways to Communicate

The main way people communicate is through language. On one end of the communication, there is a speaker or writer. On the other end, there is a listener or reader.

Communication, however, runs much deeper than just words. One way to demonstrate attentive communication is through body language. **Body language** refers to *facial expressions, eye contact, gestures, and posture*. Shrugging your shoulders at a question you can't answer is an example of body language. So is leaning in toward someone who's speaking about something you find interesting. People are often unaware of their body language. Sometimes, without knowing it, they send *mixed messages*. Their words don't match what their body is saying. For example, a friend might say, "That is a good idea," but roll her eyes. Mixed messages are confusing for listeners.

You can communicate with others in several different ways. You can speak face-to-face or by telephone. You can send written messages using e-mail, text messaging, or mail services. You can also give someone a written note or letter in person. For people with hearing loss, sign language is an effective way to communicate face-to-face.



### Commercial Count

How many commercials do you think you see each day? According to one industry source, over 1,500 commercials can be seen on TV daily. Many commercials are repeated again and again. At first, you may not be aware of the messages they're communicating. Eventually though, they will sink in.

**Make a list of health products or services advertised on TV within one hour. Notice if any of the ads are repeated and what messages they contain.**



# Health Skills Activity

## Practicing Healthful Behaviors

### Safety Online

*Instant messaging (IM)* is a great example of how technology improves communication in our lives. So is e-mail. When using these technologies, it is important to play it safe. Here are some tips:

- Make sure that a parent or guardian gives you permission to communicate with others online.
- Never give out any information about yourself or your family. That includes your address, phone number, age, passwords, or the names of your family members.
- Stay out of unsupervised chat rooms.
- Never agree to meet anyone in person you have met online, without asking a parent or guardian.
- If an online conversation makes you feel uncomfortable, exit and tell a parent or other adult right away.

### On Your Own

These are good rules for all members of the family. Make a copy and post it near your home computer.

There are advantages and disadvantages to different kinds of communication. Talking on the phone, for example, allows you to communicate your feelings, exchange ideas and information, and get an immediate response. However, when you speak on the telephone, visual clues such as facial expressions are absent. Communicating by e-mail gives you a chance to think and make corrections before you hit the send button. E-mail also gives you the ability to communicate information that needs to be remembered. You might e-mail directions to a birthday party or a list of supplies you should bring to school. Sometimes it is easier to express feelings or difficult emotions in writing than face-to-face or on the phone. In written messages, your reader can't see your facial expressions or hear the tone of your voice. All forms of communication allow you to communicate successfully.



**Give Examples** Give two examples of body language.

## Using Good Communication Skills



**Figure 3.1** summarizes effective verbal and nonverbal communication skills for both sending and receiving messages. Whether you are speaking or listening, it is important to use good communication skills.

### Communication Styles

In addition to the variety of ways we can communicate, there are also different *communication styles*. Tom is aggressive in his communication. When he wants something, he will say, “Give me that!” in a threatening tone. His sister Abby is the opposite. If she wants something, she’ll ask for it in a low, timid voice. Her meek and shy style of communication is *passive*.

### ▼ FIGURE 3.1 COMMUNICATION SKILLS

Giving and getting messages each have their own “skill set.” **How do these skills relate to each other? What rules could you add for communication that is not face-to-face?**

Outbound (“Sending”) 	Inbound (“Receiving”) 
<ul style="list-style-type: none"><li>■ <b>Think, then speak.</b> Don’t just blurt out the first words that come into your mind. Plan what you’re going to say. Think it through.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Listen actively.</b> Recognize the difference between hearing and listening. Hearing is just being aware of sound. Listening is paying attention to it. Use your mind as well as your ears.</li></ul>
<ul style="list-style-type: none"><li>■ <b>Use “I” messages.</b> Express your concerns in terms of yourself. You’ll be less likely to make others angry or feel defensive.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Ask questions.</b> This is another way to show you are listening. It also helps clear up anything you don’t understand. It prevents misunderstandings, which are a roadblock to successful communication.</li></ul>
<ul style="list-style-type: none"><li>■ <b>Make clear, simple statements.</b> Be specific and accurate. Stick to the subject. Give the other person a chance to do the same.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Mirror thoughts and feelings.</b> Pay attention to what is being said. Repeat what someone says to show that you understand.</li></ul>
<ul style="list-style-type: none"><li>■ <b>Be honest with thoughts and feelings.</b> Say what you really think and feel, but be polite. Respect the feelings of your listener.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Use appropriate body language.</b> Even if you disagree, listen to what the other person has to say. Make eye contact, and don’t turn away.</li></ul>
<ul style="list-style-type: none"><li>■ <b>Use appropriate body language.</b> Make eye contact. Show that you are involved as a speaker. Avoid mixed messages. Beware of gestures, especially when speaking with people of different cultural backgrounds. Some gestures, such as pointing, are considered rude in certain cultures.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Wait your turn.</b> Don’t interrupt. Let the person finish speaking. You’ll expect the same courtesy when it’s your turn.</li></ul>

Neither Tom’s nor Abby’s approach to communication is very effective. Speaking aggressively can cause arguments or hurt feelings. People who communicate in a passive tone may not clearly express their needs to others. They risk not being heard or taken seriously. To communicate effectively, you must learn to use an *assertive* style. Assertive communication means you aren’t shy or hesitant about expressing yourself. It is making your wants or needs known in a positive, active manner. A positive approach means the tone and feeling of your words are calm and pleasant. Suppose someone sitting near you at the movies is talking. An aggressive person might say something rude. A shy person might say nothing at all. But an assertive communicator would politely but firmly ask the person to stop talking.

## Health Online

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

### Reading Check

**Identify** What are three styles of communication?

## Lesson 1 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *body language*.
2. **Identify** List four speaking skills a good communicator uses.
3. **Recall** What is assertive communication?

#### Thinking Critically

4. **Evaluate** Max was wrapped up in a TV show. His mother said something to him and got no response. When she scolded him for not listening, he replied, “I heard every word you said.” What communication skills could Max have used to show his mother he was listening?

5. **Apply** “I’d love to come,” Karen said when her friend called to invite her to a party. Karen’s voice sounded uncomfortable. Did Karen’s words match her voice? What kind of message was she giving her friend?

#### Applying Health Skills

6. **Communication Skills** You and two classmates are having a conversation. Demonstrate attentive communication skills. Make eye contact and use appropriate hand and body gestures.

## Your Family

### Guide to Reading

#### Building Vocabulary

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

- family (p. 67)
- nurture (p. 69)
- abuse (p. 71)
- physical abuse (p. 71)
- sexual abuse (p. 71)
- neglect (p. 71)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **recognize** different types of family units.
- **identify** your role within your family.
- **explain** how family members care for each other.
- **develop** effective communication skills for family meetings.

#### Reading Strategy

**Organizing Information** Make two lists. One list should contain types of family units. The other should list roles people play within a family.

### Family Relationships

Think of the different relationships you have in your life. You have relationships with family, friends, classmates, teachers, and others in the community. Relationships are an important part of your social health. Good relationships make you feel loved, wanted, safe and secure.

Family relationships are some of the most important. The **family** is *the basic unit of society*. A family includes two or more people brought together by blood, marriage, adoption, or a desire for mutual support.

There are many different kinds of families. Some families have two parents, others one. Trevor lives with his father, step-mother, and half-sister. Trevor's is a *blended family*. Can you guess what an *extended* family might be? Extend means to reach out or make bigger. What kinds of people might be in an extended family? **Figure 3.2** shows several different family types. Which type is your family?

- ▶ Extended families include members from more than one generation. This family, for example, is made up of a mother, child, and grandfather. **What are some other types of family units?**

### Quick Write

List some activities you do regularly with your family. Choose one activity and explain how it brings your family closer together.





▶ **FIGURE 3.2**

## FAMILY TYPES

There are many different types of family units. **Are there examples of each type of family in your community?**

Family Type	Makeup
Couple	A husband and a wife who do not have children
Nuclear family	Two parents and one or more children
Extended family	A nuclear family plus other relatives such as grandparents
Single-parent family	One parent and one or more children
Blended family	Two people, one or both with children from previous marriages
Foster family	Adults caring for one or more children born to different parents
Adoptive family	A couple plus one or more adopted children
Joint-custody family	Two parents living apart, sharing custody of their children
Single-custody family	Two parents living apart and one or more children living with only one parent

## Roles and Responsibilities in the Family

Every family member has a role to play. Parents and other adults are responsible for making sure the basic needs of the family are met. Their jobs also include teaching and practicing good health habits. They have a responsibility to model good communication and other health skills. They also should encourage young people in the family to practice these skills.

Not all responsibilities in the family fall on parents and other adults. Children have special jobs, too. In many families, for example, children share the household chores. Helping around the house is one way to demonstrate that you are responsible. Another way to contribute to the health and happiness of your family is by showing appreciation. To appreciate means to value someone or something. Saying “thank you” to the person who cooked dinner, for example, is a good way to show appreciation. You could also help with the dishes, volunteer to carry groceries, or do other tasks. As a teen, your role may also include helping other family members. You may be asked to spend time with a grandparent who has trouble getting around, or help a brother or sister with homework. However you choose to help, it’s important to realize that your support helps make your family healthier.

### DEVELOPING Good Character

#### Teaching Character

One of the biggest responsibilities parents have is to help their children develop good character. They do this through both their words and actions. For example, Nikki’s father talks to her about the importance of honesty. He also demonstrates honesty in his own life, giving her a good example to follow. **Which character trait do you think would be hardest to teach? Try teaching it to a younger sibling or friend.**



**List** Name and describe three types of families.

## Building Strong Families

The main job of any family is to meet the needs of its members. A strong family nurtures its members. To **nurture** is to *fulfill physical, mental/emotional, and social needs*. Nurturing families meet each other's needs on all three sides of the health triangle.

Some of the physical needs your family should provide include a place to live, food, and clothing. Healthy families go beyond these basics. They look after each other during difficult times. They show concern for one another's safety and well-being.

Emotional support from the family includes love, but it's more than that. Strong families provide an atmosphere of warmth and security. Members make each other feel welcome and accepted. They celebrate one another's successes and help each other deal with disappointments and challenges.

Socially, strong families understand the importance of sharing. Members willingly pitch in with tasks or chores. Strong families spend time together. They may watch television, attend school functions, or participate in physical activities together.



**List** What are three kinds of support that strong families provide?

## Coping with Family Changes

Just as individuals go through changes, so do families. Some changes, such as a job promotion or graduation, are positive. Other changes can be difficult, for example, when a family member becomes ill or loses a job. These events can be stressful for the whole family.

Two especially difficult changes are separation and divorce. A split in the family can bring on feelings of anger, sadness, or guilt. It can make you feel uncertain about the future. Children are never the cause of divorce or separation. It is an adult problem. If your family is going through a separation or divorce, share your feelings with your parents or another trusted adult. They can help you understand how these changes will affect you and other



Health Online

### Showing Appreciation

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities that will give you more information on how to show appreciation.

**Activity:** Using the information from the link above, make plans to show three people in your life how much you appreciate them.

- ▼ Spending time together helps build strong family relationships. **What are some qualities of a strong, healthy family?**



# Health Skills Activity

## Communication Skills

### Family Meetings

The behavior of family members and peers affects interpersonal communication. One way of improving communication between family members is through *family meetings*. In family meetings, all members meet to discuss problems and find solutions. Each family member should be encouraged to share opinions and offer suggestions.

It is important during family meetings to speak respectfully to one another. Each family member should have a chance to speak. It is also important for each member to listen carefully while others are speaking.

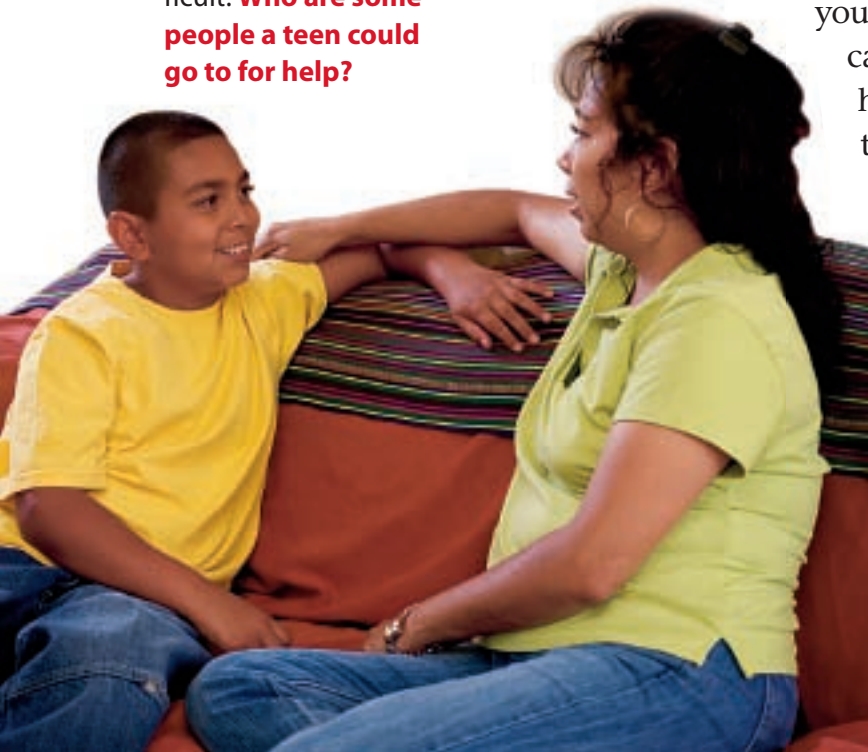
### With a Group

Discuss how you think a family meeting should be run. Make a list of rules and guidelines to follow during a family meeting. When should people speak? Should all members vote on decisions to be made?

family members. Remember that parents, whether together or apart, love and care about their children.

Among the hardest changes to cope with is the death of a family member. Strong emotions are common and include sadness, grief, fear, and even anger. Expressing these feelings is an effective communication strategy for managing grief caused by disappointment, separation, or loss. Share your thoughts and feelings with people you can trust. Comforting others may also help you deal with your own feelings. It takes a long time to manage all the feelings caused by loss. Don't hesitate to ask for help. You might want to talk to a counselor who specializes in helping people manage grief.

- ▼ Dealing with family changes can be difficult. **Who are some people a teen could go to for help?**



### Reading Check

### Give Examples

What are some changes that can affect the health of a family?

## Serious Family Problems

We all have our ups and downs, good days and bad. The same is true of families. A healthy family manages to get over the bumps. Sometimes, however, the situation is more serious. It is beyond the family's ability to handle. One such problem is abuse (uh·BYOOS). **Abuse** is a *pattern of mistreatment of another person*. An adult or a child can be the target of abuse. Abuse is a serious problem that can have long-lasting effects on all family members. A family with an abuse problem needs to get help immediately.

Abuse can take several different forms. **Physical abuse** involves the use of physical force. A physically abused person often shows signs such as bruises, burns, or broken bones.

Emotional abuse is harder to spot. It often involves yelling and putting a family member down. Although there may be no physical harm, emotional abuse is just as serious. An emotionally abused person often feels worthless and angry.

**Sexual abuse** is any mistreatment of a child or adult involving sexual activity. Sexual abuse includes any type of unwanted or forced sexual activity. This can include touching one's private body parts or being forced to touch someone else. Displaying sexual material to a child is another act of sexual abuse. It is often difficult to see that a person is being sexually abused.

Parents are responsible for taking care of their children. When parents fail to do so, they are neglecting their children. **Neglect** is the failure of parents to provide their children with basic physical and emotional care and protection. Physical neglect involves not providing enough food, clothing, shelter, or medical care. Emotional neglect involves not giving love, respect, and other forms of emotional support.

Another serious problem for a family is when a family member is addicted to alcohol or drugs. You will learn strategies for coping with addiction in Chapter 10.



- ▲ Some victims of abuse are afraid to talk to someone. Talking to a trusted adult, however, is the first step in getting help. **What are some sources of help for families with problems of abuse or neglect?**

## Help for Troubled Families

If you ever feel you are in danger from a family member, you must be brave enough to get help right away. Families where there is abuse need help. Start by speaking with an adult you feel you can trust. This might be a teacher or school counselor. The abuser needs help, too. He or she must understand the reasons behind the behavior and why it must change. If the danger is immediate, the police should be called. Abusing others is never acceptable.

Situations involving abuse or neglect often require professional health services. Social workers are professionals trained to help families with problems. Religious leaders and crisis centers can also offer help. You can call hotlines listed under “crisis intervention” in your telephone book. Still other resources to turn to are school counselors and doctors. They can suggest support and self-help groups. Some support groups are for those who are abused. Others are for the abusers. Both types try to help all the people involved.

### Health Online

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

### Reading Check

**List** Name and describe two forms of abuse.

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Give Examples** Name two roles a person can have in a family.
2. **Vocabulary** Define *nurture*, and use it in a sentence.
3. **List** What are two forms of neglect?

### Thinking Critically

4. **Apply** Al lives in an extended family that includes a grandparent and a younger cousin. What are some ways in which Al could show he cares about the members of his family?

5. **Synthesize** Kelly just found out her parents are getting divorced. How would you suggest that Kelly get help dealing with her concerns and fears?

### Applying Health Skills

6. **Accessing Information** Use the phone book to access the names of community agencies that advocate healthy individuals, families, and communities. Make a list of these agencies.

## Your Friends and Peers

### Guide to Reading

#### Building Vocabulary

How are the terms below related? Are there words that have similar or related meanings? Define each term as best you can.

- friendship (p. 73)
- reliable (p. 74)
- loyal (p. 74)
- empathy (p. 74)
- cooperation (p. 75)
- peers (p. 76)
- peer pressure (p. 76)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** the qualities of a good friend.
- **recognize** character traits found in friends.
- **understand** the two kinds of peer pressure.

#### Reading Strategy

**Organizing Information** As you read the lesson, make two lists. One should contain a list of the positive character traits of good friends. The second should list the ways peers can be negative influences.

### Who Are Your Friends?

A friendship is an important relationship. A **friendship** is a special type of relationship between people who enjoy being together. There are many reasons people become friends. When you are young, location is a factor. Most of your current friends are probably from the same neighborhood or school. Another reason for choosing friends is shared interests, such as hobbies or activities. Personality traits, such as a sense of humor, may also lead people to each other so they that become friends.

Sometimes making new friends can be tough, especially when you move to a new school or city. Here are some tips to help you build friendships.

- ▶ Participating in activities helps you make friends with similar interests. **What are some activities and hobbies you enjoy?**

### Quick Write

Write a poem or short story about an imaginary friend you want to meet. Include the qualities you would look for.



- *Get to know yourself.* Make a list of your own interests and talents. What are your positive qualities? What would make you a good friend to others?
- *Break the ice.* Start a conversation with a classmate you think you'd like to know better. Ask a question, or give a compliment. Talk about sports, movies, or whatever else interests you. If the other person shares the same interests, a friendship may develop.
- *Join a club, sports team, or community group that interests you.* You will be able to meet people with shared interests.
- *Offer a helping hand.* Help a classmate or neighbor with homework or other projects. When you reach out, you let others know you're a good friend to have.

### Character Traits of Good Friends

It is important to choose friends who have positive values and attitudes. Good friends often have the same views of what is right and wrong. They may share common character traits such as trustworthiness and caring.

Do you have friends you can share your thoughts and feelings with? People who fit this description are trustworthy. Good friends should also be **reliable**, or *dependable*. They keep their promises. If they say they'll meet you at 4:00 o'clock, they show up at 4:00. They don't arrive thirty minutes late. Good friends are also **loyal**, or *faithful*. A loyal friend will not allow others to say untrue or mean things about you.

Good friends care about each other and support each other, through good and difficult times. They display **empathy**, *the ability to identify and share another person's feelings*. When you're feeling sad or disappointed, a good friend shares your pain. He or she will listen carefully when you talk about your problems.

- ▶ Friendships are relationships that you actively seek out. **What are qualities you and your friends share in common?**





- ◀ Friends often help each other improve their skills.  
**How does this benefit both of you?**

Does being friends with someone mean the two of you will always agree? Of course not. It is only natural for the two of you to have occasional disagreements. Accepting views and opinions that are different from your own is a sign of respect. It is also a measure of maturity, a sign that you're growing up.



**Give Examples** Give one example each of reliability and empathy.

## Building Strong Friendships

Building and maintaining positive friendships is important. You can build stronger friendships through cooperation. **Cooperation** means *working together for the common good*. Eduardo and Ben help each other prepare when one of them has a test. Ben will ask Eduardo questions, and vice versa. As members of the same little league team, the two also practice fielding together. As friends, Eduardo and Ben help each other reach goals.

Another way of making friendships stronger is through mutual respect and support. This means that friends listen and respect each other's opinions. Talking together about problems or concerns is a form of support. Supporting each other will help you and your friend make more healthful decisions. This includes saying no to negative peer pressure.



- ▶ When your peers see you doing good work, they may feel motivated themselves.  
**What are some other examples of positive peer pressure?**



## Peer Pressure

**Peers**, as noted in Chapter 1, are *friends and other people in your age group*. During the teen years, your expanding abilities, independence, and responsibilities can influence personal behavior. Peers can give you support and confidence during this *transition*, or move, toward adulthood.

During this time, peer pressure can influence healthful choices. **Peer pressure** is *the influence that people your age may have on you*. Peer pressure can be something you feel indirectly. You see classmates wearing a certain type of clothing. Without a word from anyone else, you go out and buy the same item or something similar. At other times, peer pressure is direct. A peer may tell you what you should do to blend in or be accepted. Sometimes, this may come in the form of a demand or threat. Because it influences your decisions, peer pressure can affect your health in many ways.

### Positive Peer Pressure

Peer pressure can be either positive or negative. Positive peer pressure can inspire you to improve yourself or do something worthwhile. For example, you may be encouraged to study for a test by studying together with friends or other peers. They are having a positive influence on you.

Inspiring you to improve your health and appearance, or to perform well on a team, are other ways to be positive influences. Maggie joined the yearbook staff partly because of encouragement from her friends. In what ways do your friends positively influence your behavior?

## Negative Peer Pressure

“I dare you!” When Shauna heard these words, she knew it was time to walk away. Daring someone to behave in dangerous or illegal ways is an example of negative peer pressure. The same is true of challenges that go against your beliefs and values. Here are some examples:

- Urging a peer to use tobacco, alcohol, or other drugs
- Talking a peer into being unkind to someone who is different
- Persuading a peer to do something illegal such as shoplifting
- Encouraging a peer to be disrespectful to parents or other adults
- Urging a peer to fight or get involved in gangs

Standing up to negative peer pressure can be difficult. It is, nevertheless, an important skill to learn. In the next lesson, you’ll learn ways to say no to negative peer pressure.



### Reading Check

**Explain** What is the difference between negative and positive peer pressure?

 Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review



### After You Read

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

### What I Learned

1. **Vocabulary** Define *friendship*.
2. **Identify** What are two characteristics of a good friend?
3. **List** Give two examples of negative peer pressure.

### Thinking Critically

4. **Apply** How do you show empathy to a friend who has just lost a pet?

5. **Analyze** Ted has been told that “all the cool kids are smoking.” What kind of peer pressure is Ted experiencing?

### Applying Health Skills

6. **Decision Making** Write a story in which a teen chooses to volunteer time because of positive peer pressure. In your story, show how the teen uses the six decision-making steps.

## Refusal Skills

### Guide to Reading

#### Building Vocabulary

Write the terms below in your notebook. Define each term as you read about it in the lesson.

- refusal skills (p. 78)
- abstinence (p. 80)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** how to use refusal skills to resist peer pressure.
- **demonstrate** refusal skills to resist negative peer pressure.
- **explain** the importance of abstinence during the teen years.

#### Reading Strategy

**Identifying Problems and Solutions** After reading this lesson, give examples of peer pressure. Tell how you might say no in each situation.

### Quick Write

List as many ways as you can of saying no when someone pressures you to do something dangerous or unhealthy.

## What Are Refusal Skills?

Lance worked in the school store. Stan, another student, asked Lance to let him have a notebook without paying. “Come on, no one will notice,” Stan said. Lance knew he was being asked to do something wrong. He could get into trouble. Even if he didn’t get into trouble, his conscience would bother him.

When you are pressured to do something wrong, tension can build. You may worry what will happen if you don’t go along with the group. Will your friends still like you? Will you still be a part of the group? It is at these times that refusal skills can help. **Refusal skills** are *ways of saying no*. They are communication strategies for avoiding potentially harmful situations.

### Using Refusal Skills

You may find yourself in a situation in which you feel pressure to participate in unsafe behaviors. One way of refusing effectively is to use the S.T.O.P. strategy. Each of the letters stands for a different step:

- ◀ When pressure builds, something has to give. **What is a method for resisting pressure without having a situation get out of control?**





# Health Skills Activity

## Refusal Skills

### Saying No

Apply the S.T.O.P. strategy to Lance's problem in the lesson opener. Role-play the story with two classmates. One of you is to take the role of Lance. The other two are to be the classmates pressuring Lance. Prepare a script for your story. Show how Lance uses the four steps to say no to his friends.



### With a Group

Be prepared to perform your role-play for classmates. *What is another situation in which you could use the S.T.O.P. strategy to avoid negative peer pressure?*

- **Say no in a firm voice.** Sometimes, saying no is enough. Friends who respect you will take no for an answer. People are more likely to believe you if you speak firmly. Show self-confidence without being insulting to others.
- **Tell why not.** Explain your reasons for saying no. Let your peers know that you value your health and safety. It's also a chance to show your good character traits.
- **Offer other ideas.** Change the subject by coming up with something else to do instead.
- **Promptly leave.** If people continue to put pressure on you, walk away. If certain people always put pressure on you whenever you see them, avoid them.

▼ Saying no to risky behaviors can be tough. **What are some ways to say no to risky behaviors?**

Remember that you are not alone when you face a difficult situation. You can always get help from a trusted adult. A parent, older brother or sister, or counselor will listen to your problem. They can help you decide the best course of action to take. They might even suggest some options you hadn't thought about.



**Explain** How do refusal skills protect your health and safety?

## What Is Abstinence?

Some of the negative pressures you face as a teen are relatively minor. Others can be major. Among these are pressures to take part in high-risk behaviors such as using tobacco, alcohol, or illegal drugs. Becoming sexually active is another high-risk behavior. When you say no to high-risk behaviors, you are practicing abstinence (AB·stuh·nuhns). **Abstinence** is *not participating in high-risk behaviors*. Abstinence protects your health and that of others. It shows you have self-control.

### Choosing Abstinence

When you choose abstinence, you protect the three sides of your health triangle. Abstaining from tobacco, for example, protects your lungs and heart. Abstaining from alcohol and illegal drugs protects your body and mind. Abstaining from sexual activity protects you against pregnancy and sexually transmitted diseases. Teens who abstain from high-risk behaviors understand the importance of practicing positive health behaviors.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 4.

**Reading Check**

**List** Name three benefits of choosing abstinence.

## Lesson 4 Review

**After You Read**

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

### What I Learned

1. **Vocabulary** What are *refusal skills*?
2. **Identify** Describe the relationship between peer pressure and refusal skills.
3. **Recall** Why is abstinence important during the teen years?

### Thinking Critically

4. **Explain** Tell how positive peer pressure can make a friendship stronger.

5. **Analyze** Hannah told her friend that smoking harms a person's lungs and heart. Her friend continues to urge Hannah to smoke a cigarette. What must Hannah do next? Explain.

### Applying Health Skills

6. **Advocacy** Create a poster that colorfully explains the S.T.O.P. strategy. With permission from school administrators, place your poster on a hallway wall.

## Resolving Conflicts

### Guide to Reading

#### Building Vocabulary

Arrange the terms below in two columns: problems and solutions. Match each problem with a solution.

- conflicts (p. 81)
- prejudice (p. 82)
- tolerance (p. 82)
- compromise (p. 83)
- negotiation (p. 83)
- peer mediation (p. 83)
- violence (p. 84)
- gang (p. 84)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** why conflicts occur.
- **describe** ways of protecting yourself from violence.
- **identify** a strategy to resolve conflicts through negotiation.

#### Reading Strategy

**Sequencing** Create a flow chart to show the steps that lead up to violence. Then add steps that show how to prevent conflicts from turning violent.

### What Are Conflicts?

“Give that back to me! It’s mine.” The twins Jenny was babysitting were at it again. It seemed they couldn’t go more than a few minutes without arguing. Luckily, Jenny had learned about conflicts in health class. **Conflicts** are *disagreements in ideas, beliefs, or interests*. The first step in preventing conflicts is understanding what causes them.

### Quick Write

Do you think schools with violence problems should install video cameras? Why or why not? Explain in a brief paragraph.



◀ When conflict arises, it is no game. **What are some healthy ways to resolve conflicts?**

### The Myth of Positive Prejudice

Some kinds of prejudice can seem positive. For example, saying all French people are good cooks may sound like a compliment. However, it is really a form of prejudice. Prejudices assume things about people based on their race, culture, or the groups they belong to. Don't assume anything about a person until you get to know him or her. Imagine hearing a prejudiced remark at school. **What would you say to correct the prejudice without creating conflict?**

## Causes of Conflict

When you understand the possible causes of conflict, you can develop positive communication strategies for preventing conflict. Most conflicts can be traced back to an act or event. A difference of opinion, or jealousy, can create a conflict. For example, a group of students working on a school project might disagree over the jobs each person should do.

Sometimes conflicts are started *because of* prejudice (PREH·juh·dis). **Prejudice** is *an opinion or fear formed without having facts or firsthand knowledge*. Disliking a person because of their skin color or culture is an example of prejudice. Prejudice can cause both emotional and social health risks within a community.



### Reading Check

**Identify** Name some common causes of conflict.

## Preventing Conflicts

The first step in preventing conflict is using good communication skills. When you disagree with someone, state your case clearly and calmly. Use “I” statements that do not accuse or blame. An example of an “I” statement is “I feel like I am being left out of the group.” Compare this with the more aggressive “You are ignoring me!”

Another valuable tool in preventing conflicts is tolerance. **Tolerance** is *the ability to accept other people as they are*. Accepting people who are different from you can help you build and maintain positive interpersonal relationships.

## Resolving Conflicts

When a conflict occurs, conflict resolution skills can help you resolve it in a positive way. One skill is knowing when to walk away. Sometimes the right response to a possible conflict is no response. Often, the disagreement will end quickly if you walk away.

No matter what the disagreement, refuse to fight. If a conflict appears to be turning physical, just walk away. This does not make you a coward or chicken. It makes you wiser and more mature than the other person.

If a conflict is brewing between two other people, don't get in the middle or take sides. If a fight breaks out, don't get between the fighters. Instead, go get help from an adult right away.

## Reaching a Compromise

One important conflict-resolution skill is compromise. **Compromise** is a skill in which each side gives up something in order to reach an agreeable solution. Suppose that you and your friends go to the schoolyard to play soccer. Unfortunately, you arrive at the exact same time as a girl from your class and you both try to grab the only ball left. Instead of fighting over the ball however, you reach a compromise. You all join in a game together. Compromise is a great way to resolve conflicts, as long as it does not go against your values.

Reaching a compromise sometimes requires negotiation (neh·GOH·shee·AY·shuhn). **Negotiation** is the process of talking about a conflict and deciding how to reach a compromise. The T.A.L.K. strategy is an effective way of resolving conflict through negotiation. The steps are as follows:

- **Take a time-out.** Wait at least 30 minutes before you talk over the situation. This will give both of you a chance to calm down and think more clearly.
- **Allow each person to tell his or her side.** Each person should have the chance to explain his or her feelings without interruption. Choose a time and place to talk where you won't be interrupted or distracted. Always listen carefully, and show respect for the other person.
- **Let each person ask questions.** Each person should have the chance to question the other. Stay calm and respectful. Also, stay focused on one problem. Don't bring up other problems at this time.
- **Keep brainstorming.** Try to see the situation from the other person's point of view. Work to find a solution that will satisfy you both.

When all else fails, get help from a school counselor, parent, or other adult. An option in some schools is peer mediation (mee·dee·AY·shuhn). **Peer mediation** is a process in which a specially trained student listens to both sides of an argument to help the people reach a solution. Your teacher or school counselor can tell you if your school has peer mediators.



▲ A peer mediator can help students resolve conflict. **What are some other ways to resolve conflict?**



**List** Identify two steps in the T.A.L.K. strategy. Tell what happens in each.



## When Conflicts Get Out of Hand

When conflicts are not dealt with, they can get out of hand. This in turn can lead to violence. **Violence** is *the use of physical force to harm someone or something*. Violence is a growing problem in the United States. It can lead to injury and even death.

In some communities, there is gang violence. A **gang** is *a group whose members often uses violence or takes part in criminal activity*. Some teens join gangs because of peer pressure. Many teens who join gangs come from troubled families. They seek a sense of belonging that is missing in their lives. Gang membership is never an answer to life's problems. Belonging to a gang only makes problems worse. Teens in gangs have a higher school drop-out rate than nonmembers. They are arrested more often, too. Because gangs often use weapons, these teens have a higher risk of getting seriously injured or of dying.

### Avoiding Violence

There may be times when conflict or violence finds you. For example, someone may try to bully you or pull you into a fight. Fortunately, there are techniques for avoiding threatening situations.

For starters, learn and practice self-control. Do not fight or threaten others. Don't wear any clothing that could be mistaken for gang clothing. If you use a purse, carry it with the strap across your chest. Whenever you can, steer clear of harmful situations. If you know a party might include alcohol or drugs, don't go. If you know or suspect someone has a weapon, report it immediately to a parent or another trusted adult.

Avoid violence by becoming an advocate for peace. Let others know you are a nonviolent person. Serve as a positive example. Use good communication skills. Being polite and showing respect for others are also good ways to avoid violence.

### Protecting Yourself from Violence

Observing safety rules is another way of protecting yourself from violence. If you're home alone, do not open the door to anyone you don't know. Keep doors and windows locked. Never tell visitors or callers you are alone. Instead, say your parents are busy or can't come to the phone.

- ▼ This teen is wearing her handbag in a way that lessens her risk of becoming a victim of violence. **What are some other injury-prevention strategies for personal and family health?**



If you are going out, tell your family where you are going and how you will get there. Make sure they also know when you expect to return. When walking home, try to walk in pairs or with a group. Stay in familiar neighborhoods; avoid deserted streets and dangerous shortcuts.

Avoid strangers. Never get into or go near a stranger's car or hitchhike. Do not enter a building with a stranger. Don't agree to run errands or do other tasks for strangers. Finally, if someone tries to grab you, scream and run away. Go to the nearest place with people. Ask them to call 911, or your parents.



▲ Remember that there is safety in numbers. Bullies are less likely to pick on a group. **What are some other ways of protecting yourself against violence?**

### Reading Check

**Identify** What are some ways of avoiding violence?

## Lesson 5 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Use *prejudice* and *tolerance* in a sentence.
2. **List** Name two ways in which you can help prevent conflicts from occurring.
3. **Recall** When should you not be willing to compromise?

#### Thinking Critically

4. **Evaluate** When Seth walks away from a fight, he hears his opponent call him “chicken.” What should Seth do? Explain.

5. **Analyze** Darla notices it is dark when she leaves her friend's house. Suggest some things Darla should do to avoid becoming a victim of violence.

#### Applying Health Skills

6. **Communication Skills** With a partner, practice changing “you” sentences into “I” sentences. How does the use of “I” sentences help prevent conflict?

# Building Health Skills

## CONFLICT RESOLUTION

### Working Things Out

#### DIRECTIONS

Conflict resolution involves finding a positive solution to a disagreement or preventing it from becoming a larger conflict. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

Conflicts are common in relationships. A healthy way to resolve these conflicts is to discuss the problem. Read about how two teen sisters, Kari and Samantha, resolve a conflict.

**Kari:** Sam, I'd like to talk to you about something that is bothering me.

**T—Take a time-out.**

**Samantha:** Sure, what's going on, Sis?

**Kari:** I get upset when you borrow my clothes without asking. I didn't get a chance to wear that sweater yet. I wish you had asked me before putting it on.

**A—Allow each person to tell his or her side uninterrupted.**

**Samantha:** Sorry, Kari. I didn't think you would mind if I borrowed it. Do you want it back right now?

**L—Let each person ask questions.**

**Kari:** No, it's okay if you wear it, but can we make an agreement? What if from now on we ask before borrowing each other's stuff?

**K—Keep brainstorming to find a good solution.**

**Samantha:** It's a deal.



## 2 Practice

To practice what you have learned about resolving conflict, read the following conversation between Kari and Anne. Can you identify the T.A.L.K. steps the girls took to resolve their conflict? Write the conversation on your own paper, and label each step with a T., A., L., or K. Complete the conversation by writing an ending where Kari and Anne agree on a solution.

**Kari:** Anne, can you please pay for the CD you lost?

**Anne:** It was an accident so I don't think I should have to pay for it.

**Kari:** I know it was an accident, but it's my favorite CD. I would really like to buy a new one.

**Anne:** So what should we do?

### Skill Summary CONFLICT RESOLUTION

- T** Take a time-out.
- A** Allow each person to tell his or her side uninterrupted.
- L** Let each person ask questions.
- K** Keep brainstorming to find a good solution.

## 3 Apply

Conflict-resolution skills promote healthy relationships. On your paper, list several situations that lead to conflict for teens. Choose one of these situations, and write a script showing how the conflict can be resolved. Remember to use the T.A.L.K. steps for conflict resolution.

### Self-Check

- Did my script show how to use the T.A.L.K. steps for conflict resolution?
- Did my script show both sides of the conflict?
- Did my script show a positive solution?

# Schoolroom TORMENT

Do you have the wrong idea about bullies?

**M**any people think that bullies don't have any friends and are lonely. If you know a bully, you probably know that isn't always true. According to psychologist Dorothy Espelage, the typical bully is not a loner at all. Instead, bullies are popular and athletic. Bullies know how to get their way with adults while bullying their schoolmates at the same time.



Here's how Dr. Espelage answered some of our questions about bullies.

**Q** How do you define "bully"?

**A** A bully is a kid who teases and intimidates other students. Bullies spread rumors about other kids. Bullies form social groups that keep many kids out.

**Q** What's behind bullying behavior?

**A** First of all, with some teens, you can fit in and be cool if you bully others. Second, bullies don't feel that great about themselves, and bullying can block some of those feelings. Lastly, some teens don't always have the skills to tolerate differences in other kids. So when bullies see people who are different, they lash out and make fun of them.

**Q** Are bullies usually from single-parent homes?

**A** We find bullying just as often where there is a mom and a dad at home. It's all about parental supervision. If kids are unsupervised, they're more likely to become bullies.

**Q** What can young people do about bullies and bullying?

**A** Kids shouldn't be easy targets for bullies. Look the bully in the eye and walk away confidently. Bullies want to hurt your feelings. Even if they're being really mean, act as if they're not succeeding and don't get into a fight.

Also, tell a parent or a teacher. They want to know what is happening and how you feel about it. If the bullying happened at school, have a parent talk it over with your teacher. Parents shouldn't call the parents of the bully.



# Reading Review

## 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 Communication Skills

#### Key Ideas

- Good communication skills include both verbal and nonverbal forms of communication.
- The three styles of communication are assertive, passive, and aggressive.

#### Vocabulary

- communication (p. 62)
- relationship (p. 62)
- body language (p. 63)

### Lesson 2 Your Family

#### Key Ideas

- Different types of family units include nuclear, blended, extended, and single-parent families.
- A teen's role within the family includes helping other family members in need.
- Family members care for each other by providing physical, mental/emotional, and social support.

#### Vocabulary

- family (p. 67)
- nurture (p. 69)
- abuse (p. 71)
- physical abuse (p. 71)
- sexual abuse (p. 71)
- neglect (p. 71)

### Lesson 3 Your Friends and Peers

#### Key Ideas

- People may become good friends because of shared interests.
- Character traits found in friends include reliability, loyalty, and a willingness to show empathy.
- The two kinds of peer pressure are positive and negative.

#### Vocabulary

- friendship (p. 73)
- reliable (p. 74)
- loyal (p. 74)
- empathy (p. 74)
- cooperation (p. 75)
- peers (p. 76)
- peer pressure (p. 76)

### Lesson 4 Refusal Skills

#### Key Ideas

- You can resist negative peer pressure by using the S.T.O.P. strategy of refusal.
- Practicing abstinence is important in order to avoid high-risk behaviors.

#### Vocabulary

- refusal skills (p. 78)
- abstinence (p. 80)

### Lesson 5 Resolving Conflicts

#### Key Ideas

- Conflicts occur for a number of reasons, including jealousy and competition.
- Conflict-resolution skills include compromise and negotiation.
- You can protect yourself from violence by avoiding dangerous situations.

#### Vocabulary

- conflicts (p. 81)
- prejudice (p. 82)
- tolerance (p. 82)
- compromise (p. 83)
- negotiation (p. 83)
- peer mediation (p. 83)
- violence (p. 84)
- gang (p. 84)

## After You Read

## HEALTH QUIZ

Now that you have read the chapter, look back at your answers to the Health Quiz in 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 1–6. After each number, write the term from the list that best completes each statement.

- abuse
- body language
- communication
- empathy
- loyal
- neglect
- nurture
- relationship

### Lesson 1 Communication Skills

1. \_\_\_\_\_ includes facial expressions, eye contact, gestures, and posture.
2. \_\_\_\_\_ is the sharing of thoughts and feelings between two or more people.

### Lesson 2 Your Family

3. Healthy families \_\_\_\_\_ their members, or provide physical, mental/emotional, and social needs.
4. A pattern of mistreatment of another person is known as \_\_\_\_\_.
5. \_\_\_\_\_ is the failure of parents to provide their children with basic physical and emotional care and protection.

On a sheet of paper, write the number 6–11. Write **True** or **False** for each statement. If the statement is false, change the underlined word to make it true.

### Lesson 3 Your Friends and Peers

6. When you can depend on a person to keep promises, that person is reliable.
7. Cooperation is the influence to take on behaviors and/or beliefs of your peers.

### Lesson 4 Refusal Skills

8. The T.A.L.K. strategy can help you say no when you face a high-pressure situation.
9. The active choice not to participate in high-risk behaviors is abstinence.

### Lesson 5 Resolving Conflicts

10. An opinion or fear formed without having facts or firsthand knowledge is known as tolerance.
11. The process of talking about a conflict and deciding how to reach a compromise is called peer mediation.

## Thinking Critically

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

12. **Recognize** Mike and his sister Meg are having a dispute. Mike waits patiently for Meg to finish speaking before he speaks. What type of skill is Mike demonstrating?



- 13. Give Examples** Give an example of peer pressure that can positively affect your health.

### Write About It

- 14. Communication Skills** Write a letter of appreciation to someone in your family. In your letter, identify what they did, and tell how it made you feel.
- 15. Analyzing Influences** Write a paragraph describing the positive character traits of a good friend. How can a good friend influence you in positive ways? Use specific examples in your paragraph.

**Family Counselor** A family that is having problems can find help from a family counselor. These professionals teach family members how to listen to one another. They help families work together to find solutions. A family counselor needs a four-year college degree plus two years of graduate work in counseling. To learn more, click on *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

Every culture of the world uses body language. In many cultures, people are not aware of their body's "messages." In some, however, people go to great lengths to "speak" through their bodies. In one culture, for example, people at work never smile. To outsiders, they may look angry. Actually, smiling on the job means you are not serious about your work.

Sometimes misunderstandings arise over gestures and posture. Americans, for example, like to put space between themselves and those they're speaking with. In the Middle East, this posture is interpreted differently. It means you are not interested in what the speaker is saying.

Facial expressions can also have different interpretations. In the United States it is rude to stare. In Greece, people feel ignored if they are not stared at in public. Europeans usually change their facial expression to show happiness, anger, boredom, and sadness. In Asia, facial expressions change less frequently.

### TEST-TAKING TIP

Read the passage carefully once to find out what information it contains. After you read each question, look back at the passage to find the answer.

- Which best sums up the author's purpose?
  - To show that body language differs among cultures
  - To show that Americans are viewed as rude worldwide
  - To show that body language is meaningless
  - To show that facial expression is less important than posture
- If you stare at someone in Greece, he or she is likely to
  - become angry
  - feel ignored
  - feel as though you are paying attention to him or her
  - feel as though you are being rude



## Nutrition



## Chapter Preview

<b>Lesson 1</b> Your Body's Nutrient Needs .....	94	<b>Building Health Skills</b> .....	112
<b>Lesson 2</b> Following a Healthful Eating Plan .....	98	<b>Hands-on Health</b> .....	114
<b>Lesson 3</b> Making Healthful Food Choices .....	102	<b>Chapter Reading Review</b> .....	115
<b>Lesson 4</b> Managing Your Weight ...	108	<b>Chapter Assessment</b> .....	116

## ▲ Working With the Photo

Food is your body's fuel.  
**What kinds of food do you eat each day?**

# Start-Up Activities

## Before You Read

Do you make healthy food choices? To find out, take the health inventory below. Keep a record of your answers.



## HEALTH INVENTORY

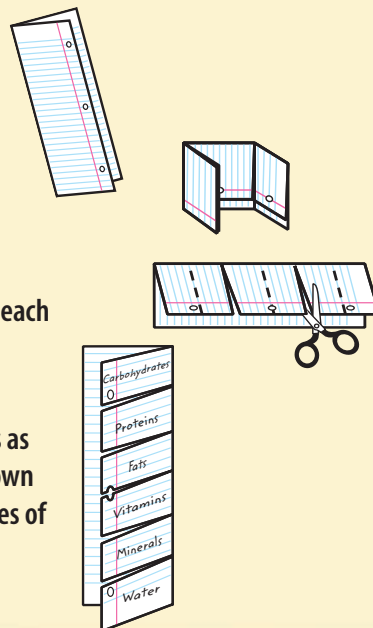
- I drink water every day.  
(a) always      (b) sometimes      (c) never
- I make sure to eat breakfast.  
(a) always      (b) sometimes      (c) never
- I try to limit the amount of fat I eat.  
(a) always      (b) sometimes      (c) never
- I try to maintain a weight that is healthy for me.  
(a) always      (b) sometimes      (c) never

## FOLDABLES™ Study Organizer

### As You Read

Make this Foldable™ to help you organize the material in Lesson 1 on nutrients. Begin with a plain sheet of  $8\frac{1}{2}'' \times 11''$  paper, or one sheet of notebook paper.

- Fold a sheet of paper along the long axis, leaving a  $\frac{1}{2}''$  tab along the side.
- Turn the paper, and fold into thirds.
- Cut the top layer along both folds. Then cut each tab in half to make six tabs.
- Turn the paper vertically, and label the tabs as shown. Under the appropriate tab, write down major concepts, definitions, and food sources of each type of nutrient.



**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and use the e-flashcards to preview Chapter 4 vocabulary terms.

## Your Body's Nutrient Needs

### Guide to Reading

#### Building Vocabulary

You may already know the meaning of some words in the list below. Write each word and what you think it means.

- nutrients (p. 94)
- nutrition (p. 94)
- carbohydrates (p. 95)
- fiber (p. 95)
- proteins (p. 95)
- fats (p. 95)
- vitamins (p. 96)
- minerals (p. 96)

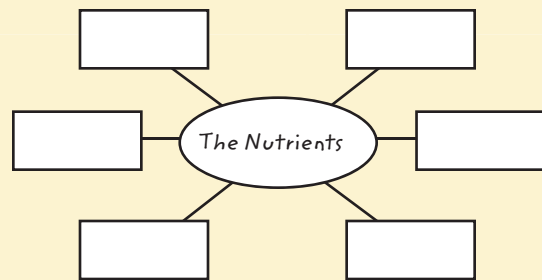
#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** the six main classes of nutrients.
- **determine** what foods you can eat to obtain the nutrients you need.
- **analyze** the key nutrients found in a recipe.

#### Reading Strategy

**Classifying** Using the diagram to the right as a guide, create a concept map that identifies the main nutrient classes.



**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 93 as you read this lesson.

### Quick Write

Make a list of the foods you eat often. What do you think influences your food choices?

## Nutrients and Nutrition

How is your body like a car? It needs fuel in order to run. The fuel your body uses comes from food, or more specifically from nutrients (NOO·tree·ents). **Nutrients** are *substances in food that your body needs to carry out its normal functions*.

Which nutrients does your body need? The answer to that question is the subject of nutrition (noo·TRIH·shun).

**Nutrition** is *the process of taking in food and using it for energy, growth, and good health*. There are more than forty kinds of



- ▶ The nutrients in the foods you choose give you energy. **What is another important role of these nutrients?**

nutrients. Some give you energy for work and play. Others provide the building blocks your body needs to grow and to repair itself. Since different foods contain different nutrients, you should eat a variety of foods each day.

All nutrients are grouped into one of six categories: *carbohydrates, fats, proteins, vitamins, minerals, and water.*

## Carbohydrates

The fuel your body gets the best mileage from is carbohydrates (kar·boh·HY·drayts). **Carbohydrates** are *sugars and starches contained in foods.* Carbohydrates are your body's primary energy source.

There are two main types of carbohydrate. *Simple carbohydrates*, or sugars, are found in fruits, milk, and table sugar. *Complex carbohydrates*, or starches, are found in bread, rice, pasta, beans, and other vegetables. Your body cannot use these nutrients directly. First, it must break them down through the process of *digestion*. You'll learn more about digestion in Chapter 7.

Another type of complex carbohydrate, fiber, cannot be digested. **Fiber** is the *tough, stringy part of raw fruits, raw vegetables, whole wheat, and other whole grains.* Fiber helps carry wastes out of your body.

## Proteins

**Proteins** (PROH·teens) are *nutrients that provide the building blocks your body needs for growth.* Proteins promote healing and aid in the repair of tissues. Protein sources include fish, chicken, beef, eggs, milk, and other dairy products. You can also get protein from beans, nuts, and most soy-based products.

## Fats

This may surprise you, but did you know your body needs some fat? **Fats** are *a nutrient found in fatty animal tissue and plant oils.* Fats carry certain vitamins in your bloodstream and help keep your skin healthy. They also help you feel full after a meal. Fats are also a source of energy for your body.

Although fats are important, you only need small amounts in your diet. Eating too many foods that are high in fat can contribute to health problems, such as heart disease and obesity. These conditions usually appear later in life. Yet, they can often be traced to unhealthy habits developed earlier in life. Salad dressings, doughnuts, and fried foods are often high in fat. You should only eat small amounts of these foods.

▼ Eating a variety of different nutrients is important to good health. **Which of these foods do you enjoy eating?**



## Vitamins

**Vitamins** (VY·tuh·muhns) are *nutrients that help regulate body functions*. Your body needs only tiny amounts of these nutrients. Vitamins help your body use other nutrients and fight disease.

Many foods are naturally rich in vitamins. This includes many fruits and vegetables, such as oranges, carrots, and broccoli. Whole-grain breads and some meats are also excellent sources of some vitamins.

Some vitamins, such as vitamin C and the B-complex vitamins, need to be replaced daily. Other vitamins—including vitamins A, D, E, and K—are stored in your body. Vitamin A is important for good vision. Vitamin D promotes strong bones and teeth.

## Minerals

**Minerals** (MIN·uh·ruhls) are *elements in foods that help your body work properly*. Like vitamins, minerals are needed only in small amounts. Calcium is a mineral that helps build strong bones and teeth. Calcium is important during the teen years but also throughout your life. So is the iron found in red meats, beans, and other foods. Iron contributes to healthy blood, which in turn helps you fight many diseases.

Some people take supplements to get extra vitamins and minerals. However, food sources are best. Eating a variety of foods will help you get the nutrients you need. Always check with a parent or guardian before taking any vitamin or mineral supplements. **Figure 4.1** provides additional information on vitamins and minerals important to teens.

### ▼ FIGURE 4.1

Most teens don't get enough of the nutrients shown. **Which foods in the chart are part of your regular eating plan?**

	Vitamins	Minerals	Food Sources
✓	Vitamin A		Dark green leafy vegetables (such as spinach), milk and other dairy products, carrots, apricots, eggs, liver
✓	Vitamin B12		Eggs, meat, poultry, fish, dairy products, some soy products
✓	Vitamin C		Oranges, grapefruits, cantaloupe, strawberries, mangoes, cabbage, broccoli
✓	Vitamin E		Fortified ready-to-eat cereals, peanut butter, almonds
✓		Calcium	Milk, fortified ready-to-eat cereals, oatmeal, canned salmon
✓		Potassium	Baked potato, peaches, bananas
✓		Magnesium	Pumpkin seeds, cashews, almonds

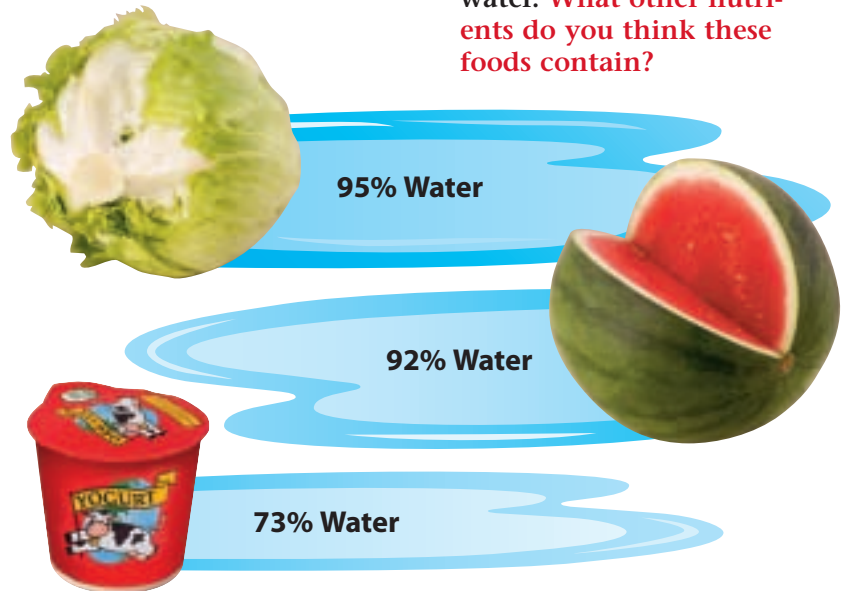
## Water

Did you know that about two-thirds of your body is water? Water is essential to life. It carries other nutrients around your body. It helps with digestion, removes waste, and cools you off. You need at least eight cups of water every day. Even more is needed in hot weather and when you exercise. Let thirst be your guide. Drink when you are thirsty and with meals to help your body get enough water. You can also get water from many foods and from beverages such as milk. See **Figure 4.2** for some examples of foods with a high water content.

▼ **FIGURE 4.2**

## WATER, WATER EVERYWHERE

Most of the weight of the foods shown is from water. **What other nutrients do you think these foods contain?**



### Reading Check Identify

What are two types of carbohydrates?

## Lesson 1 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define the term *nutrition*. Use it in an original sentence.
2. **Identify** Name the six categories of nutrients.
3. **Recall** Why is calcium important to your body?

### Thinking Critically

4. **Hypothesize** How might your knowledge of nutrients influence your snack food choices?

5. **Analyze** Record what you eat for one day. Remember to count the cups of water you drink. What nutrients have you eaten? What improvements, if any, can you make?

### Applying Health Skills

6. **Accessing Information** Analyze the key nutrients in a recipe from a magazine or newspaper. What other foods could be served at the same meal to provide an even greater variety of nutrients.

## Following a Healthful Eating Plan

### Guide to Reading

#### Building Vocabulary

As you read this lesson, write the following terms and their definitions in your notebook.

- MyPyramid food guidance system (p. 98)
- calorie (p. 100)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **discuss** how to use the MyPyramid food guidance system.
- **list** the names of the five food groups.
- **demonstrate** how to plan a nutrient-rich meal using MyPyramid.

#### Reading Strategy

**Identifying Problems and Solutions** Many teens and other people make unhealthy food choices. What solutions to this problem can you suggest?

### Quick Write

In a paragraph, explain why you think it is important to eat a variety of foods.

## The MyPyramid Food Guidance System

Have you ever been inside a mega-supermarket? These giant food warehouses have thousands of foods and food products to choose from. How do you know which foods give your body the nutrients it needs?



The United States Department of Agriculture (USDA) publishes information to help you decide what foods are best for your health. One source of information appears in **Figure 4.3** on page 99. This is the **MyPyramid food guidance system**, a system designed to help Americans make healthful food choices.

- ◀ Food supermarkets offer many choices. **How can you tell which foods will help your body meet its nutrient needs?**

The colorful graphic, named “MyPyramid,” is meant to provide healthful reminders. One is that you should eat a variety of foods. Notice that a different food group appears for each color band. Another reminder appears in the form of the figure going up the stairs. This is to remind you to make regular physical activity part of your lifestyle. Both of these topics will be explored in more depth in the next lesson.

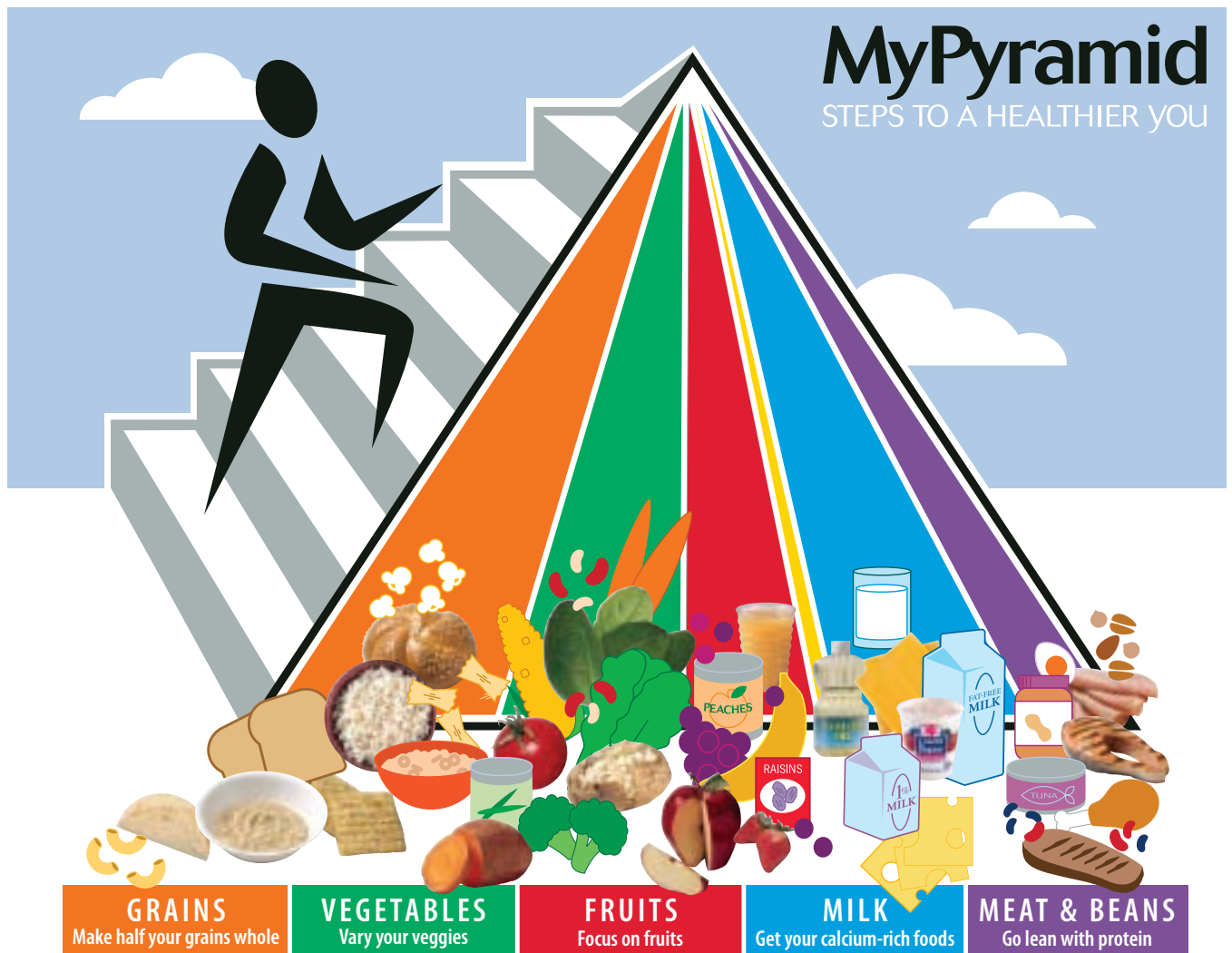


**Identify** What does the MyPyramid graphic remind people to do?

▼ FIGURE 4.3

## MyPYRAMID FOOD GUIDANCE SYSTEM

The MyPyramid food guidance system can help you make healthful food choices. **Why do you think some color bands are larger than others?**





**Topic: MyPyramid**

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities that will help you develop a personal eating plan using MyPyramid.

**Activity:** Using the information from the link above, create a personal eating plan based on your age, gender, and activity level.

## A Closer Look at MyPyramid

The idea behind MyPyramid is not to avoid certain foods. Rather, it is designed to help each person develop a personal eating plan based on how many calories he or she needs. A **calorie** is a unit of heat that measures the energy available in foods. Your body converts the calories it receives from the foods you eat into energy. The amount of calories your body needs is based on your age, gender, and how physically active you are.

If you are physically active on most days, your body needs more calories than someone who is not physically active. MyPyramid estimates that females between the ages of 9 and thirteen need 1,600 to 2,200 calories per day, based on activity level. Males in the same age group need 1,800 to 2,600 calories per day.

Your main source of calories should come from nutrient-rich foods. MyPyramid lets you know how much of which foods to eat in order to stay healthy. The diagonal color bands on the pyramid represent the different food groups that you should be eating. These foods are shown by the broad color bands: orange, green, blue, red, and purple. Figure 4.3 shows food possibilities for each color group. These represent just a few of the many ways of meeting your daily food group recommendations.

The following is an example of what a moderately active teen should eat. If you are very active most days, you may need to eat a little more. Likewise, if you are less active or not at all active, you may need to eat less.

- **Grains—the Orange Group:** Girls should have five to seven 1-ounce equivalents of grain products each day. Boys should have six to nine 1-ounce equivalents. In general, 1 slice of bread, 1 cup cold cereal, or  $\frac{1}{2}$  cup cooked rice, pasta, or cooked cereal is the equal to 1 ounce from the grains group. Half of these choices should come from whole-grain foods such as whole-wheat bread.
- **Vegetables—the Green Group:** Most boys need  $2\frac{1}{2}$  to  $3\frac{1}{2}$  cups of vegetables a day, girls 2 to 3 cups. When eating leafy greens such as lettuce, 2 cups equals 1 cup of vegetables.
- **Fruits—the Red Group:** Most girls and boys should both have  $1\frac{1}{2}$  to 2 cups from this group daily. When eating dried fruit such as raisins,  $\frac{1}{2}$  cup is equal to 1 cup from the fruit group.

- **Milk—the Blue Group:** Boys and girls should both have 3 cups of milk or other foods made from milk. In general, 1 cup of yogurt, 1½ ounces natural cheese, or 2 ounces of processed cheese is equal to 1 cup from the milk group.
- **Meats and Beans—the Purple Group:** Most girls should have 5 to 6 ounces from the meat or beans group every day. Most boys should have 5–6½ ounces. In general, 1 egg, 1 tablespoon peanut butter, ¼ cup cooked beans, or ½ ounce of nuts is equal to 1 ounce from the meat and beans group.

Notice that the narrow yellow color band in MyPyramid has not been mentioned. This group represents fats and other foods you should eat in only very small amounts. Examples include sweets and many salty snacks, such as potato chips. In the next lesson, you will learn how to include these foods in a healthy eating plan.



### Reading Check

**List** Identify the names of the five food groups in MyPyramid.

**Health Online**

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

## Lesson 2 Review



### After You Read

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

#### What I Learned

1. **Vocabulary** What is the *MyPyramid food guidance system*?
2. **Explain** Why does your level of activity affect how many calories your body needs?
3. **Recall** How many cups of fruit should a moderately active 12-year-old eat per day? How many cups of vegetables?

#### Thinking Critically

4. **Synthesize** Describe a healthful meal that includes three different food groups.

5. **Analyze** Stacy had a cup of milk at breakfast and a cup of yogurt after school. How many more cups from the milk group does she need to meet her daily recommendation?

#### Applying Health Skills

6. **Analyzing Influences** As you watch television, describe an advertisement you see about food. What does the advertisement tell you about the food? Does it make you want to try the food? Use your findings to discuss how television influences eating habits.

## Making Healthful Food Choices

### Guide to Reading

#### ● Building Vocabulary

How are the terms below related? As you read the lesson, write the definitions in your notebook.

- saturated fat (p. 106)
- cholesterol (p. 106)
- trans fats (p. 106)
- sodium (p. 106)

#### ● Focusing on the Main Ideas

In this lesson, you will be able to

- **recognize** influences on your food choices.
- **identify** guidelines to make healthy food choices.
- **analyze** key nutrients in a food product.

#### ● Reading Strategy

**Identifying Cause-and-Effect** Identify three factors that you think cause people to be overweight. As you read, notice which of these factors is or is not mentioned.

### Quick Write

Write about your current eating habits. What kind of foods do you eat most often? What kind of snacks do you usually eat?

### Your Food Choices and You

What does the statement “You are what you eat” mean to you? The foods you choose to eat affect your health. Eating too much of certain foods can lead to health problems. As a teen, you need a variety of foods that give your body nutrients to grow and be healthy. Eating a variety of foods helps you feel better and gives you energy for school and other activities.

### Your Eating Habits and Influences

As a teen, your body is growing rapidly. Your nutrient needs right now are great. To make sure you’re meeting those needs, you should look closely at your eating habits. This includes being aware of what you eat and when. When you are hungry, do you reach for a piece of fruit or a bag of potato chips? Do you snack, for example, while watching TV?

Have you ever thought about why you eat the foods you do? There are several factors that influence your food choices, including the taste, texture, and appearance of food. Your appetite also influences the foods you choose. *Appetite* is an emotional desire for certain foods or tastes.

Other influences include your friends, family, culture, and convenience. You might get a snack from a vending machine because it is handy. One big influence on many people's food choices is the media. Think about the food advertisements you see each day. How do you think advertisers persuade you to buy their foods?



**List** Name four factors that influence a person's eating habits.

## Guidelines for Healthy Teens

How can you make sure you're getting the nutrients you need? One way that you've already read about is the MyPyramid food guidance system. MyPyramid reflects the scientific advice in the *Dietary Guidelines for Americans*. These guidelines encourage people of all ages to develop a healthy lifestyle. The *Dietary Guidelines* give the following advice on choosing healthy foods and staying active.

### Eat a Variety of Foods

Imagine eating the same food at every single meal of every day. Eventually you'd get tired of it. Adding variety to your eating plan is one way to make eating more fun. It can also help you get the nutrients your body needs. Use your imagination to create some meals that include a variety of healthful foods. Ask a parent or guardian for help.

### Control the Amount You Eat

Pay attention to the portion sizes and calories that you are eating. Remember that one slice of bread is equal to one ounce. If you eat a sandwich with two slices of bread, you are eating two ounces and double the calories. Only consume as many calories as your body needs. Healthy teens will normally gain weight as they grow and develop. However, if you take in more calories than your body needs, you could gain more weight than is healthy for your body.

- ▶ Your likes and dislikes influence what you choose to eat. **What other influences affect your food choices?**





# Health Skills Activity

## Accessing Information

### Mastering Nutrition Facts

How can you tell how many calories a packaged food has? The answer is to look at the Nutrition Facts panel on the product's label. This will tell you how many calories are in a serving, which nutrients, and how much of those nutrients the product contains.

- **Serving Size** is the amount of food in one serving. How many cups are in one serving of this product?
- **Servings per Container** is the number of servings the package contains. How many servings are in this product?
- **Calories** shown on the label reflect the number of calories in one serving. If the product contains two servings and you ate the whole product, you would consume twice the number of calories.
- **Daily Values** is the amount of a nutrient a person needs in one day. The label shows a percentage of the Daily Value for each nutrient in a serving of food. What percent of the Daily Value of Vitamin A does this product contain, based on a 2000 calorie diet?

<b>Nutrition Facts</b>			
<b>Serving Size 1 cup (226 g)</b>			
<b>Servings Per Container 2</b>			
<b>Amount Per Serving</b>			
<b>Calories 250</b>	<b>Calories from Fat 110</b>		
% Daily Value*			
<b>Total Fat 12g</b>	18%		
Saturated Fat 3g	15%		
Trans Fat 3g			
<b>Cholesterol 30g</b>	10%		
<b>Sodium 470mg</b>	20%		
<b>Potassium 700mg</b>	20%		
<b>Total Carbohydrate 31mg</b>	10%		
Dietary Fiber 0g	0%		
Sugar 10g			
<b>Protein 5g</b>			
Vitamin A 4%	Vitamin C 2%		
Calcium 2%	Iron 4%		
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

### With a Group

Analyze the Nutrition Facts panel shown above. Which nutrients does this product contain? If you ate this entire food product, how many calories would you consume? How much of each nutrient would you consume, based on a 2000 calorie per-day diet?

## Be Physically Active

To maintain a healthy weight, you should balance the food you eat with physical activity. Teens should be physically active for at least one hour on most days. Physical activity helps you burn off some of the calories you consume. It also builds strength and helps you feel good about yourself. What are some ways you can add physical activity into your day?

## Keep Foods Safe to Eat

“Wait, you better use another cutting board!” Gail warned Philip. Her brother was about to cut up vegetables on a board he had just used for cutting raw meat.

Gail was right. Using the same cutting board or even the same knife, without washing them first, can spread germs. This is one rule of food safety. Here are some others:

- Wash your hands before handling food. Wash them again if you are about to handle a different kind of food.
- Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing them.
- Cook meat, chicken, turkey, and fish to safe internal temperatures. Refrigerate cooked leftovers right away after meals. Both these actions will help stop the spread of germs. See **Figure 4.4** for safe food temperatures.

## Choose Foods Wisely

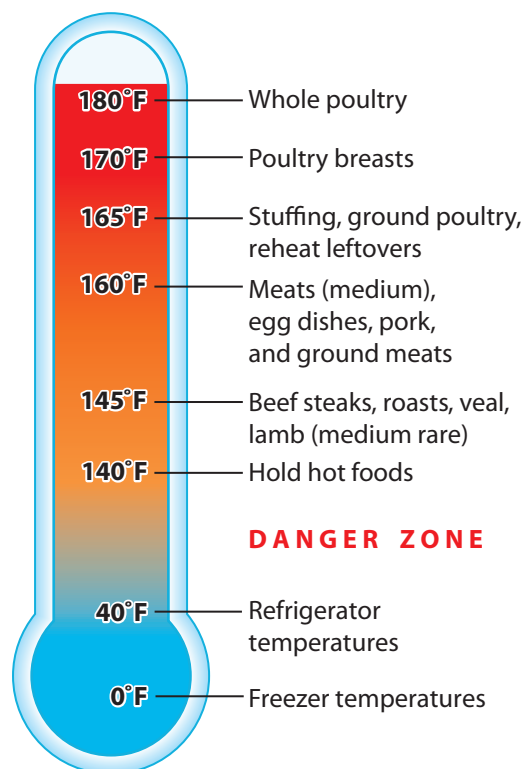
The *Dietary Guidelines for Americans* contains additional tips for making wise food choices. Some of these tips are explored in the following sections.

**Eat More Fruits, Vegetables, and Whole Grains.** Try “coloring” your plate with green, orange, red, and yellow vegetables at mealtimes. As for grains, here is a tip to remember: Make half your grains whole. In other words, choose as many whole grain as other grain products. These include whole-wheat breads, crackers, and brown rice.

**FIGURE 4.4**

## FOOD TEMPERATURES

Remember to keep hot foods hot and cold foods cold. **How does this help keep foods safe to eat?**



- Some of the calories you take in are burned off during physical activity. If you take in more calories than you burn, you gain weight. **What happens if you take in fewer calories?**



**Know Your Fats.** Did you know that some fats are more healthful than others? A fatty oil found in salmon and other fish may actually promote heart health; so does olive oil when used in reasonable amounts. These fats are mostly unsaturated. Saturated (SAT·chur·a·tuhd) fats, on the other hand, should be limited. **Saturated fats** are *fats found in many animal products such as butter, meat, and cheese*. Eating too much saturated fat may increase your body's level of cholesterol (kuh·LES·tuh·rawl). **Cholesterol** is *a waxy chemical our bodies produce and need in small amounts*. Too much, however, can lead to heart disease and stroke. Another fat to limit is trans fats. **Trans fats** *start off as oils and are made solid through processing*. Like saturated fats, trans fats are linked to heart problems.

**Limit Added Sugars.** Some food products have sugars added. Cakes, candy, and soft drinks fall into this category. So, surprisingly, do many nondessert items. Did you know many salad dressings and breads such as donuts or sweet rolls have added sugars? Like complex carbohydrates, foods high in added sugar provide food energy. However, they may be low in other nutrients. Eat only small amounts of these foods.

**Limit Salt.** Watch your intake of salt. Salt contains **sodium**, *a mineral that helps control the amount of fluid in your body*. Too much sodium can promote high blood pressure in some

people. You can find out how much sodium is in a given amount of food by reading the label.



### Reading Check

**Identify** Give two pieces of advice from the *Dietary Guidelines for Americans*.

## Tips on Snacks

Snacks are an important part of eating for teens on the go. Just try to keep them healthy. Peanuts or other nuts provide protein. They can give you more nutrients than a candy bar. Tuck a small box of dried fruits, such as raisins, into your backpack. Healthy snacks will provide some of the nutrients your body needs.



### Reading Check

**Give Examples** What is one example of a healthy snack?

### Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review



### After You Read

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

### What I Learned

1. **List** Name two foods that contain saturated fat.
2. **Recall** Why is limiting salt and fat important?
3. **Identify** What are three guidelines to follow when choosing what to eat?

### Thinking Critically

4. **Analyze** Think about the influences on your eating habits. Which factor do you think influences you most? Is this a positive or negative influence?

5. **Hypothesize** Todd, who is active in sports, burns 2,500 calories a day. He eats 2,000 calories a day. What will happen to Todd's weight over time if he keeps up this routine?

### Applying Health Skills

6. **Goal Setting** Choose a goal that will help you follow a more healthful eating plan. Describe the steps you need to take to reach your goal.



# Managing Your Weight

## Guide to Reading

### Building Vocabulary

List each term below in your notebook. As you come across it in your reading, write the definition.

- body image (p. 109)
- eating disorder (p. 110)

### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** how to maintain a healthy weight.
- **identify** problem eating behaviors
- **demonstrate** decision-making skills to help a friend.

### Reading Strategy

**Predicting** Look over the headings in this lesson. Write a question that you think the lesson will answer. After reading, check to see if your question was answered.

## Quick Write

In a few sentences tell what you think the benefits are of maintaining a healthful weight.

## Achieving a Healthful Weight

Knowing the weight that is right for you is tricky during the teen years. That's because your body is growing so fast. The only way to tell for sure is to see a health professional. This person will be able to judge whether your growth pattern is normal. Growth pattern is the rate at which you gain weight and grow in height.

If your weight is right for your height, try and keep it that way. Try to get enough physical activity to burn off some of the calories you take in. If you are concerned about your weight, talk to your doctor. He or she can help you create a healthful eating plan.

## Reading Check

**Explain** What is growth pattern?

## Weight Problems and Teens

The number of overweight young people has risen dramatically in the past twenty years. Being overweight can slow down your performance in school and other activities. Your self-esteem can be negatively affected too. Some children and teens are becoming *obese* (oh-BEES), which means they are significantly overweight. People who are obese have a very high

amount of body fat. This puts them at risk for developing other diseases such as diabetes and heart disease. You will learn more about these diseases in Chapter 11.

### Treatment for Obese Teens

Obesity is a serious health problem. Teens who are obese should be under a doctor's care. The extra weight they carry around puts them at risk for developing other health problems. These teens should reach a healthy weight slowly. Sometimes the best approach is to keep from gaining more weight as your body grows.



Reading Check

**List** Name two health problems that can occur in obese people.

### Body Image and the Teen Years

Do you see yourself as overweight? Underweight? Just right? Maybe you feel some parts of you are too wide or too narrow. Feelings like these are tied to your body image. **Body image** is *how you view your body*. Like your self-concept, your body image may differ from how others see you. You may feel you are too thin or not thin enough. You might compare yourself to people in the media. Making this comparison leads some teens to develop a negative body image. It is important to know that most people do not look like those you see on television or in magazines. Instead of comparing yourself to others, try to be realistic about your body. Remember that bodies come in all shapes and sizes. Take care of your body by eating healthfully and staying active. These habits will help you look and feel better.



Reading Check

**Define** What is body image?

- ▶ Weight problems in teens can lead to other health problems. **What are some health problems that can develop from being overweight?**

**DEVELOPING**  
**Good Character**

### Respect for Others' Bodies and Feelings

Some teens tease peers who are overweight or underweight. They may make hurtful comments or use impolite nicknames. This type of behavior shows a lack of respect. It is a form of bias, acting cruelly to those who look different. A person who does this is not demonstrating good character. **What advice would you give a person who was behaving this way?**





## Eating Disorders

Some teens, and even some adults, become overly concerned with their body weight. They may have a negative body image. They may feel they need to lose weight, even when they don't. These people are at risk for developing an eating disorder. An **eating disorder** is an *extreme eating behavior that can seriously damage the body*. Eating disorders are most common among teen girls and young women. However, males can develop them as well. Two of the most common eating disorders are *anorexia nervosa* (an·uh·REK·see·uh ner·VOH·suh) and *bulimia nervosa* (boo·LEE·mee·uh).

People with anorexia are overly concerned with weight gain. They may starve themselves. They eat far fewer calories than they need to stay healthy. They may exercise excessively. Even after they have become dangerously thin, they still see themselves as overweight.

People with bulimia eat large amounts of food, then “purge” themselves. They rid their body of food by vomiting or taking *laxatives*. These are medicines meant for people who have trouble moving their bowels. Victims of bulimia also may exercise excessively to burn off the calories from the foods they eat.

### Treatment for Eating Disorders

Eating disorders are a mental health problem. They are often associated with a negative body image. Eating disorders can affect normal growth and development. They can lead to serious health problems, including death. If you are concerned that you or someone you know may have an eating disorder, talk to a trusted adult. A person with an eating disorder should get help right away. The sooner a person gets treatment, the better his or her chances of recovering.

▲ Having a healthy body image is important to good mental/emotional health. **What are some ways you can develop a healthy body image?**

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 4.



**Compare** How are anorexia nervosa and bulimia nervosa similar? How are they different?



# Health Skills Activity

## Decision Making

### Help for a Friend with an Eating Disorder

Kara and Rachel have been friends since kindergarten. Lately, Rachel has begun to notice some changes in Kara. During lunch, Kara hardly eats anything. She claims she is not hungry. She also seems to be getting very thin. Rachel is beginning to worry that Kara may have an eating disorder. Rachel isn't sure whether she should talk to Kara about her concerns or tell someone else.

### What Would You Do?

Apply the six steps of decision making to Rachel's problem. Tell what decision you would make if you were her, and why.

1. State the situation.
2. List the options.
3. Weigh the possible outcome.
4. Consider values.
5. Make a decision and act on it.
6. Evaluate the decision.



## Lesson 4 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 being *obese* and just being overweight?
2. **Recall** Name two eating disorders.
3. **Explain** Why is it important to develop a realistic body image?

### Thinking Critically

4. **Analyze** Why do you think more teens are overweight today than in the past?

5. **Apply** Ryan has created an exercise plan to help him achieve a healthy weight. Why is it important for Ryan to start exercising slowly?

### Applying Health Skills

6. **Analyze Influences** Explain how images in the media might play a role in a teen's body image.

# Building Health Skills

## DECISION MAKING

### Choosing Health-Promoting Foods

#### DIRECTIONS

Decision making involves taking steps to make healthy and responsible choices. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

Teri was having lunch at the mall with friends. Teri wanted a salad, but the line was long. "Just get a burger," Corey said. "You need to hurry so we can get to our movie on time." Teri felt pressured. She decided to use the decision-making process to help her choose. In her mind, she went through the six steps:

##### Step 1. State the Situation.

I want a salad, but the line is long. My friends are bugging me to get a burger.

##### Step 2. List the Options.

I could tell Corey and Sheila I prefer to wait and meet them at the movie theater. I could just have a burger and do something more healthful tomorrow.

##### Step 3. Weigh the Possible Outcomes.

I'm having pizza for dinner with my family. I want something for lunch that has fewer calories and less fat.

##### Step 4. Consider Your Values.

Eating right is important to me.

##### Step 5. Make a Decision and Act.

I will wait in the salad line and ask my friends to save me a seat at the movie theater.

##### Step 6. Evaluate the Decision.

I made the right choice. I ate my salad and still made it to the movie.



## 2 Practice

Later that week, Teri faced a similar problem. She had to be at soccer practice by 4:00 o'clock. It was now 3:45 p.m. Teri wanted something that would give her a quick energy boost. She studied the choices in the school vending machine. She knew the snack cake was a source of energy but had added sugar and could also be high in fat. The other choices included peanut butter crackers, potato chips, and candy bars. Write out the decision-making steps to help Teri choose a snack.

### Skill Summary DECISION MAKING

1. State the situation.
2. List the options.
3. Weigh the possible outcomes.
4. Consider values.
5. Make a decision and act.
6. Evaluate the decision.

## 3 Apply

Think of a situation in which you need to decide what to eat. One possibility might be choosing what to eat for breakfast. Think about the type of food you generally choose in this situation. Is your usual choice healthy? Are there healthier foods you could choose? Think through your decision using the six-step model.

### Self-Check

- Did I list several food choices?
- Did I consider my values when making my decision?
- Did I use each step in the decision-making process?

**Food Diary**

Foods Eaten	Amount	Food Group
<b>Monday</b>		
Pancakes	2 cups	Grains
Orange juice	1/2 cup	Fruits
Turkey sandwich on wheat bread	2 ounces turkey 2 slices of bread	Meat and beans Grains
Baby carrots	1/2 cup	Vegetables
Carton of milk	1 cup	Milk

## Keeping a Food Diary

In this chapter, you learned about making healthful food choices using MyPyramid. You can begin to make more healthful food choices by taking a look at what foods you typically eat each day. In this activity, you will make a food diary. This will help you compare your food choices to the recommendations provided by MyPyramid for a teen your age. That way you can see what changes, if any, you need to make.

### What You Will Need

- pencil or pen
- ruler
- paper

### What You Will Do

- 1 Make three vertical columns on your paper.
- 2 In the first column, list all the foods you ate in the past few days. Be sure to include any snacks you had. Draw a horizontal line to show the end of each day. Use extra pages for your food diary as needed.
- 3 In the second column, write down the amount of each food eaten. Record the amount as a weight (such as ounces) or volume (such as cups).

- 4 In the third column, write down the name of the food group each food eaten belongs to. For example, a peanut butter sandwich would belong to the grains group, and the meat and beans group.
- 5 For each day, total up the amount eaten in each food group.

### Wrapping It Up

- 1 How well does your list for each day match the recommendations from MyPyramid?
- 2 Did you eat foods from each food group? If not, which group is missing?
- 3 Was there too much from any food group? If so, which group?
- 4 How could you improve your food choices?

# Reading Review

## 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 1–4. Find a partner, and quiz each other using these study aids.

### Lesson 1 Your Body's Nutrient Needs

#### Key Ideas

- The six main classes of nutrients are carbohydrates, fats, proteins, vitamins, minerals, and water.
- Complex carbohydrates are found in bread, rice, pasta, beans, and other vegetables. Another type of complex carbohydrate, fiber, is the tough, stringy part of raw fruits, raw vegetables, whole wheat, and other whole grains.
- Protein sources include fish, chicken, beef, eggs, milk and other dairy products, beans, nuts, and most soy-based products.
- Salad dressings, doughnuts, and fried foods are often high in fat.
- Vitamins and minerals are found in a wide variety of foods.

#### Vocabulary

- nutrients (p. 94)
- nutrition (p. 94)
- carbohydrates (p. 95)
- fiber (p. 95)
- proteins (p. 95)
- fats (p. 95)
- vitamins (p. 96)
- minerals (p. 96)

### Lesson 2 Following a Healthful Eating Plan

#### Key Ideas

- MyPyramid shows you how to balance your daily nutrient needs by eating a

variety of nutrient-rich foods. It also encourages you to stay within your calorie needs based on age, gender, and activity level.

- The five most important food groups are the grain group, the meat and beans group, the milk group, the vegetable group, and the fruit group.

#### Vocabulary

- MyPyramid food guidance system (p. 98)
- calorie (p. 100)

### Lesson 3 Making Healthful Food Choices

#### Key Ideas

- Influences on your food choices include the taste, texture, and appearance of food, your appetite, your friends, family, culture, and convenience.
- You can make healthful food choices by eating more fruits, vegetables, and whole grains, knowing your fats, and limiting added sugars and salt.

#### Vocabulary

- saturated fat (p. 106)
- cholesterol (p. 106)
- trans fats (p. 106)
- sodium (p. 106)

### Lesson 4 Managing Your Weight

#### Key Ideas

- You can maintain a healthy weight by controlling the amount you eat and by getting enough physical activity.
- People who are obese are at risk of developing other serious health problems.
- Two common eating disorders are anorexia nervosa and bulimia nervosa.

#### Vocabulary

- body image (p. 109)
- eating disorder (p. 110)



## After You Read

**HEALTH INVENTORY**

Now that you have read the chapter, look back at your answers to the Health Inventory on the chapter opener. Is there anything you should do differently?

## Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–5. After each number, write the term from the list that best completes each sentence.

- body image
- calorie
- eating disorder
- minerals
- MyPyramid
- nutrients
- proteins
- saturated fats

### Lesson 1 Your Body's Nutrient Needs

1. Nutrients that provide the building blocks your body needs for growth are called \_\_\_\_\_.
2. \_\_\_\_\_ are elements in foods that help your body work properly.
3. Substances in food that your body needs to carry out its normal functions are called \_\_\_\_\_.

### Lesson 2 Following a Healthful Eating Plan

4. A \_\_\_\_\_ is a unit of heat that measures the energy available in foods.
5. \_\_\_\_\_ is a system designed to help Americans make healthful food choices.

On a sheet of paper, write the numbers 6–9. After each number, write the letter of the answer that best completes each statement

### Lesson 3 Making Healthful Food Choices

6. According to MyPyramid, nutrients provided by the grain group include the following:
  - a. complex carbohydrates
  - b. vitamins
  - c. fiber
  - d. all of the above
7. How many cups per day from the milk group is recommended for most teens?
  - a. 2 cups
  - b. 2½ cups
  - c. 3 cups
  - d. 4½ cups

### Lesson 4 Managing Your Weight

8. Which of the following is true about obesity?
  - a. It can slow down your performance in school and other activities.
  - b. It is a health problem that can be corrected quickly.
  - c. The number of obese teens has been dropping steadily.
9. Which of the following is true both of people with anorexia and people with bulimia?
  - a. They “purge” after eating large amounts of food.
  - b. They are overly concerned with weight gain.
  - c. They eat far fewer calories than their body needs.



### Thinking Critically

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

- 10. Identify** Why is it important to use a product's Nutrition Facts panel to guide your eating habits?
- 11. Synthesize** What might you tell a friend who said he was planning to eat only vegetables from now on?

### Write About It

- 12. Analyzing Influences.** Write a paragraph describing how influences can affect your food choices.
- 13. Advocacy.** Write a story about a teen who is concerned about his or her body image? What advice might you give this teen?

**Dietetic Technician** Are you the one who helps plan family meals at your house? Are you concerned about people eating well? Then you might enjoy a career as a dietetic technician. You need a two-year associate degree and internship training to become licensed. Then you could be assisting a dietitian to help people create balanced eating plans. You might volunteer for a community meal program to prepare for this career. Visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com) to find out more about this and other health careers.

## Standardized Test Practice

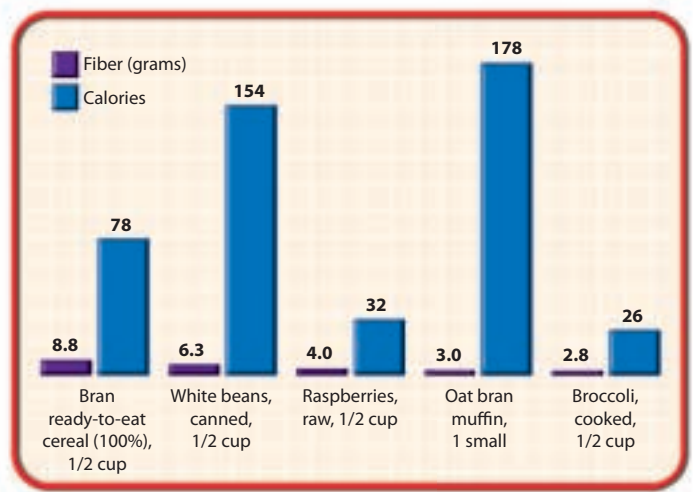
### Math

The graph below helps you determine which foods give you the most fiber without adding excess calories. Use the graph to answer the questions.

- 1.** How many calories are there in the food with the second highest amount of fiber?
  - A. 32            C. 178
  - B. 154         D. None of the above
- 2.** To get the ratio of fiber to calories, you would divide the number of calories by grams of fiber. For example, 1/2 a cup of cooked broccoli has 26 calories and 2.8 grams of fiber.  $26 \div 2.8 = 9.3$ , or a ratio of 1 to 9.3. What is the ratio of fiber to calories for 1/2 cup of raspberries?
  - A. 1 to 17        C. 1 to 60
  - B. 1 to 25        D. 1 to 8

### TEST-TAKING TIP

Questions about graphs sometimes rely on outside knowledge. If an answer is not stated directly, try eliminating choices that are clearly wrong.



# Physical Activity

## Chapter Preview

<b>Lesson 1 Physical Activity and Your Health</b> .....	120	<b>Building Health Skills</b> .....	136
<b>Lesson 2 Creating a Personal Fitness Plan</b> .....	126	<b>TIME Health News</b> .....	138
<b>Lesson 3 Safety in Sports and Physical Activities</b> .....	132	<b>Chapter Reading Review</b> .....	139
		<b>Chapter Assessment</b> .....	140

### ▲ Working With the Photo

Walking briskly is an activity that can contribute to physical fitness. **Can you name some other physical activities?**

# Start-Up Activities



## Before You Read

What do you know about the health benefits of physical activity? To find out, take this short quiz. Keep a record of your answers.

**HEALTH QUIZ** Answer *true* or *false* to each of the following questions.

1. The only way to become physically fit is by doing exercise.
2. Physical activity is important only to physical health.
3. Physical activity reduces your risk of developing certain diseases.

ANSWERS: 1. false; 2. false; 3. true

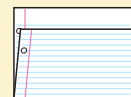
## FOLDABLES™ Study Organizer



## As You Read

Make this Foldable™ to record what you learn in Lesson 1 about the importance of physical activity. Begin with a plain sheet of 8½" × 11" notebook paper.

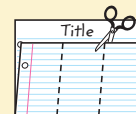
- 1 Fold a sheet of notebook paper from bottom to top leaving the heading uncovered.



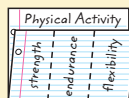
- 2 Fold into thirds from side to side.



- 3 Unfold the paper once and cut along the two lines on the top, short layer of paper. This makes three tabs.



- 4 Label the tabs as shown.



Record information about strength, endurance, and flexibility under the appropriate tabs. Give examples of ways to build each type of physical activity.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Chapter 5 crossword puzzle.

## Physical Activity and Your Health

### Guide to Reading

#### Building Vocabulary

Some terms below are related or have similar meanings. Can you tell which ones?

- physical activity (p. 120)
- lifestyle activities (p. 121)
- physical fitness (p. 121)
- strength (p. 123)
- endurance (p. 123)
- stamina (p. 123)
- flexibility (p. 124)
- exercise (p. 125)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** the benefits of regular physical activity.
- **identify** measures of physical fitness.
- **recognize** the two main types of exercise.
- **practice** healthful behaviors with your family.

#### Reading Strategy

**Organizing Information** Create a concept map that captures the main ideas in the lesson. Use the diagram below as a guide.

<i>Physical Activity</i>	
<i>Type of Activity</i>	<i>Builds Strength, Endurance, or Flexibility</i>
1. <i>running</i>	1. <i>endurance</i>
2.	2.
3.	3.

**FOLDABLES** Study Organizer Use the Foldable™ on p. 119 as you read this lesson.

### Quick Write

Write a paragraph about a sport or other activity you like playing or would enjoy learning.

### What Is Physical Activity?

Shannon swims at the community pool every chance she gets. Matt is really into rock climbing. Kate and her friends have started an inline skating club. What do all these teens have in common? They all make physical activity a part of their lives.

**Physical activity** is any kind of movement that causes your body to use energy.

How about you? Do you participate in regular physical activity? If not, it is never too late to start. Health experts recommend that teens get 60 minutes of physical activity most days. This hour can be done all at once or in moderate to vigorous 10- to 15-minute bursts. What are some ways you could fit 60 minutes of physical activity into your daily routine?

## Lifestyle Activities

Do you have daily chores you do at home, such as raking leaves or shoveling snow? Do you enjoy outdoor activities, such as hiking or skateboarding? These are examples of lifestyle activities. **Lifestyle activities** are *physical activities that are part of your day-to-day routine or recreation*. They can become part of a lifelong commitment to fitness.

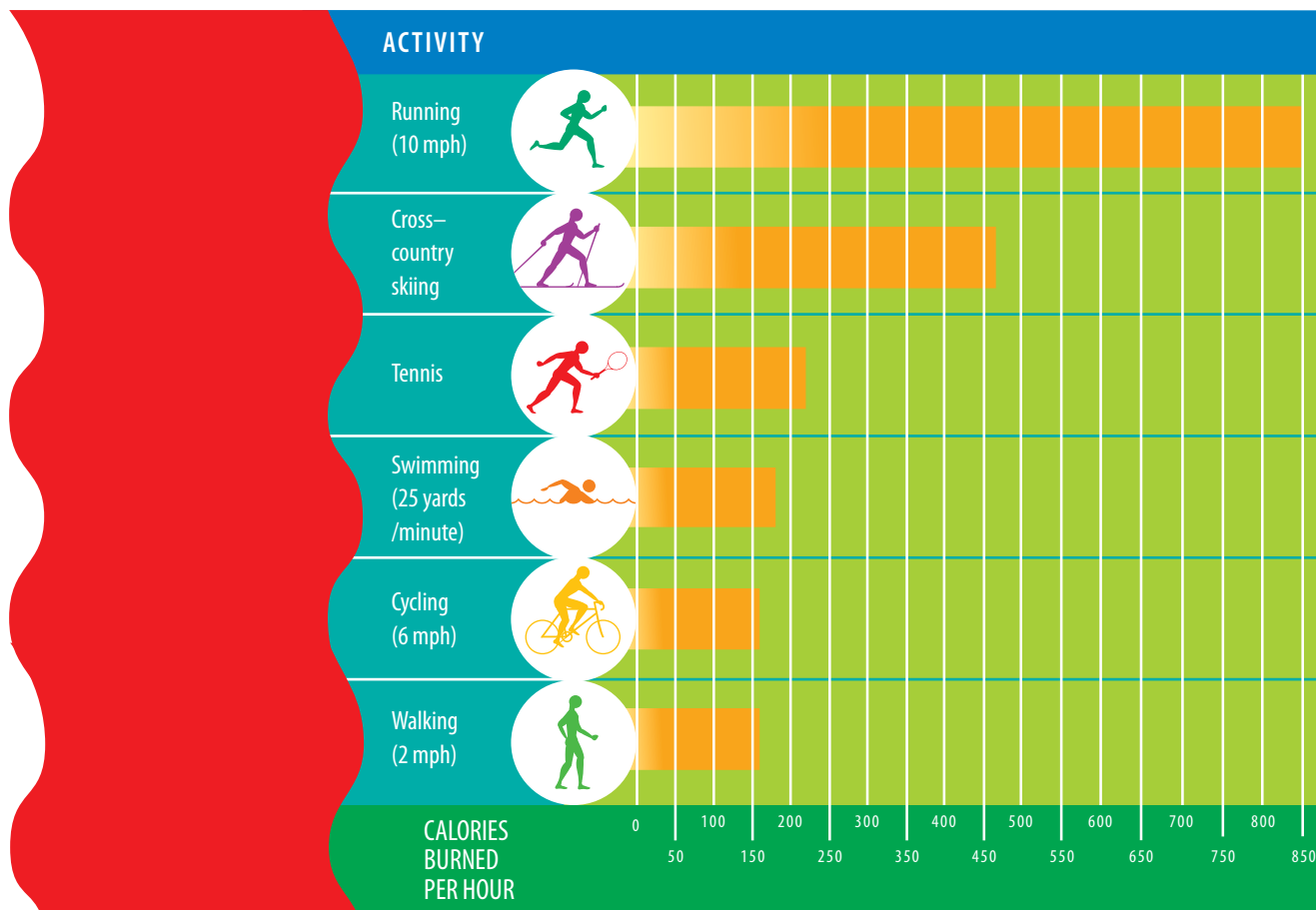
## The Benefits of Physical Activity

Physical activity helps you use, or burn, calories from the foods you eat. See **Figure 5.1** for examples of how many calories are burned during a variety of activities. Burning calories means your body won't store extra calories as fat. This will help you maintain a healthy weight. Physical activity also contributes to physical fitness. **Physical fitness** is *the ability to handle everyday physical work and play without becoming tired*. Being physically fit can reduce your risk of developing certain diseases like diabetes, obesity, and heart disease.

▼ FIGURE 5.1

### CALORIES BURNED DURING VARIOUS ACTIVITIES

The graph shows how many calories a 100-pound person burns during 60 minutes of different activities. **Which activity burns the most calories?**  
**Which activity burns the fewest?**





# Health Skills Activity

## Practicing Healthful Behaviors

### Fun for the Family

Kiara's family skis every winter. Louis and his family go camping whenever they can. These kinds of outings give family members a chance to spend time together and be physically active. Take camping, for example. Carrying a backpack, finding and carrying wood, and setting up tents all work the body's muscles.

Of course not all family activities need to take place away from home. Tossing a Frisbee in the backyard, weeding the garden, or taking a walk are all excellent ways to combine physical activity with family time.

### On Your Own

Think of an activity you could get your family involved in.

Your physical, mental/emotional, and social health all benefit when you are physically active and fit.

- **Physical benefits.** Physical activity strengthens and tones your muscles. It also strengthens your heart and lungs and builds strong bones. You will have more energy for school and other activities. Physical activity also helps you maintain a healthy weight.
- **Mental/Emotional benefits.** When you are physically fit, you sleep better. You can concentrate longer in school, deal with stress more easily, and get along better with others. In addition, developing new skills and interests can help you build your self-esteem.
- **Social benefits.** Physical activities that involve partners or teams are a great way to make friends. They also help you work together as a group and learn about other cultures. Max, for example, learned the rules of Canadian football from a classmate from Alberta. Thanks to Jorge, Greg was able to learn about the Latin sport of *pelota*. This sport is played similarly to tennis.



### Reading Check

**Identify** Name two health benefits of physical activity.



- ▲ Sports such as swimming can promote fitness. So can activities at home such as raking leaves. **What other activities can you do at home to promote fitness?**

## Measures of Fitness

To find out how physically fit you are, you would measure three things: *strength*, *endurance*, and *flexibility*.

**Strength** is the ability of your muscles to exert a force. Muscles help support your bones and make your joints stronger. You build muscle strength by pushing or pulling against a force such as gravity. Pull-ups, for instance, build muscle strength in your arms. Do you know some ways to increase the strength of your leg muscles?

**Endurance** (en·DER·uhns) is the ability to keep up a physical activity without becoming overly tired. There are two kinds of endurance. *Muscular endurance* is how long your muscles can perform a task without tiring. *Heart and lung endurance* is how well these organs can provide your body with oxygen. This type of endurance is important in many physical activities, including biking, swimming, and playing ball. Both kinds of endurance help build stamina (STA·mih·nuh). **Stamina** is your ability to stick with a task or activity for a long period of time. Building stamina will help you be active for longer periods of time without getting tired or out of breath.

### Health Online

#### Topic: Get Moving

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities that will help you choose an exercise or other physical activity.

**Activity:** Using the information provided at the link above, choose an exercise to do for one month. Keep a journal, recording how you feel on the days you exercise and the days you don't. For example, do you feel more energetic on the days you exercise?





▲ Yoga is an activity that improves flexibility.

**Why is flexibility important to your health?**

Activities that build muscular endurance include dancing, jumping rope, and biking. Activities that build heart and lung endurance include walking or running, swimming, and many team sports. It's important to recognize that many activities build *both* kinds of endurance. Playing tennis for long periods is one example. Running after the ball builds up your heart and lungs; hitting the ball works the muscles.

**Flexibility** is the ability to move body joints through a full range of motion. For the joints to be able to move easily, the muscles, tendons, and ligaments around them can't be too tight. Flexibility helps you

with everything from stopping and turning to throwing a ball. Being flexible also helps prevent injuries. You build flexibility by stretching your muscles and joints. Activities that promote flexibility include yoga, swimming, karate, and gymnastics.



Reading Check

**List** Name and explain two measures of fitness.

## Fitness for Life

Fitness is a result of regular, ongoing activity. It is an important goal for a healthy life. If you are currently physically active, stay active. If you are not, now is the time to get started. Make physical activity part of your daily routine. Walk or ride your bike to school if it's not too far. Take a walk with your family or with a friend. Even cleaning your room is a way to get your body moving.

When it comes to activities and sports, think *variety*. In the same way mixing up your diet makes eating more fun, varying activities adds enjoyment. Set fitness goals for yourself, and explore a variety of ways to achieve them so you don't get bored. Try different sports. Sign up for a dance class or karate. Shoot baskets, or skateboard in your neighborhood. Choose activities that interest you. You're more likely to stick with something you like doing.

### Exercise

In the last section, we talked about the important role physical activity plays in your overall health and well-being. One of the best ways to ensure that you get enough physical activity is

**Health Online**

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

to exercise. **Exercise** is *planned, structured, repetitive physical activity that improves or maintains physical fitness.*

There are two main types of exercise, *aerobic* (ayr·OH·bik) and *anaerobic*. Aerobic exercise is nonstop, moderate to vigorous activity. It strengthens the heart and lungs, allowing you to breathe in more oxygen. Strengthening your heart and lungs can lower your risk of heart disease and diabetes. Aerobic exercise should be done at least five times a week. Swimming, bike riding, running, and walking are great aerobic exercises. You should do them for at least 20 to 30 minutes at a time to get their full aerobic benefits.

Anaerobic exercises build muscle strength and endurance. Examples include push-ups and pull-ups. Weight lifting, gymnastics, and hiking build muscle strength, too. Anaerobic exercises should be done two to three times per week.



- ▲ Push-ups build muscle strength in the upper arms and shoulders. **Which type of exercise are push-ups, aerobic or anaerobic?**

### Reading Check

**Compare** Explain the difference between aerobic and anaerobic exercise.

## Lesson 1 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** What are *strength, endurance, and flexibility*?
2. **Identify** Name an activity that builds muscular strength. Name an activity that builds heart and lung endurance.
3. **Recall** What are the benefits of aerobic exercise?

#### Thinking Critically

4. **Apply** Why should endurance be a goal even for a weight lifter?

5. **Evaluate** What aerobic activities might you recommend for a teen who doesn't have access to a bicycle?

#### Applying Health Skills

6. **Advocacy** Create a pamphlet that explains the importance of physical fitness to teens. With your teacher's permission, distribute these around the school or post them on a bulletin board.

## Creating a Personal Fitness Plan

### Guide to Reading

#### Building Vocabulary

Find each term below in the lesson. Write its definition in your notebook.

- FITT principle (p. 128)
- resting heart rate (p. 129)
- target heart rate (p. 130)
- recovery heart rate (p. 130)
- warm-up (p. 130)
- cool-down (p. 131)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** the parts of a fitness plan.
- **develop** fitness goals.
- **describe** the benefits of warm-ups and cool-downs.
- **create** a schedule to achieve fitness goals

#### Reading Strategy

**Organizing Information** Copy the major and minor heads from the lesson onto a sheet of paper. As you read, write one sentence or phrase next to each that capture the main point.

### Quick Write

Think about an activity in your life that required developing a plan. Write a brief description of how you got started.

### Setting Fitness Goals

You wouldn't build a house without a blueprint, or plan. The same goes for starting a physical fitness program. Before you begin, you need a plan. Like any good plan, yours should start with a statement of your goals. What do you eventually hope to accomplish? Would you like to find a new aerobic exercise or improve flexibility? Maybe you want to become stronger or to have more stamina. If you're not sure, talk to your physical education teacher or coach. Students with weight problems should check with their doctors before starting a new fitness plan.

- ▶ Pickup games are a great way to stay active and meet people. **Do you know of any parks or other locations in your community where pickup games are played?**



## Healthy Fitness Zones for Ages 11 and 12

Test	Sex	Age 11	Age 12
Curl-ups	Boys	15–28	18–36
	Girls	15–29	18–32
1-mile run (in minutes and seconds)	Boys	11:00–8:30	10:30–8:00
	Girls	12:00–9:00	12:00–9:00
Pull-ups	Boys	1–3	1–3
	Girls	1–2	1–3
Sit and Reach	Boys	8	8
	Girls	10	10

FIGURE 5.2

## HEALTHY FITNESS ZONES FOR AGES 11 AND 12

Some fitness assessments, such as the 1-mile run, are formal. Others, such as walking a flight of stairs, are informal. **Can you think of other informal assessments to test your fitness levels?**

### Measuring Your Fitness Level

Once you've identified your goals, you will need to test your current fitness level. **Figure 5.2** shows several tests, called fitness assessments, commonly used to determine fitness. The chart shows typical results for teens your age. The assessments shown in the chart are formal assessments, but you can use informal assessments to measure your fitness level, too. For example, can you walk up a flight of stairs without feeling short of breath? If you've already begun a fitness program, you can use the results of these fitness assessments as guides for making changes to your program.

### Choose Activities

Now that you know your fitness level and have set some goals, it's time to choose activities that will help you meet those goals. Start by making a list of the activities you like or would consider doing. The list can include anything from team sports and exercise classes to activities you can do at home such as sit-ups and push-ups. Here are some questions to think about when choosing an activity:

- Will I need a partner or teammates?
- Are there special skills I'll need to learn?
- Will I need special equipment?
- Where will I practice?
- How much time is required?
- If it's a team sport, is there a team nearby that I can join?
- How much, if anything, will it cost?

▶ **FIGURE 5.3**

## FITNESS RATINGS FOR DIFFERENT ACTIVITIES

Different activities promote different areas of fitness. What are your fitness goals? Which activities can best help you achieve those goals?



The chart in **Figure 5.3** lists some other common activities. It also shows the fitness rating of each.



### Reading Check

**Identify** What are two questions you should ask when choosing a fitness activity?

## Achieving Your Goals

Whatever activity you choose, start small. If you've never run before, you're probably not ready to run a five-kilometer race. Begin by running short distances. For example, you might run one block and walk two. Increase your distance slowly.

As you increase the amount of activity in your life, keep the **FITT principle** in mind. The **FITT principle** is a method for safely increasing aspects of your workout without injuring yourself.

The **F** in FITT stands for "frequency." This is how often you work muscles of the body.

**I** stands for "intensity." This is how hard you work different muscle groups.

The first **T** stands for "time," meaning the length of time you spend exercising.

The last **T** stands for "type," the type of activity you choose to do.

As a teen just beginning to exercise, pay close attention to the FITT aspects of your fitness plan. If you're not sure how to determine the FITT level that is best for you, ask a coach or physical education teacher for help. This is especially important before you increase your intensity level. Overdoing it can be harmful.

Fitness Log Week 1		
Aerobic Activity	Day	Minutes
Running	Monday	30
Basketball	Tuesday	60
Strength Training		
Push-ups	Monday	10
Sit-ups	Tuesday	10
Weight Training	Wednesday	20
Flexibility		
Stretching	Monday	15
Karate	Friday	60

FIGURE 5.4

## SAMPLE FITNESS LOG

A fitness log will show your progress in the different areas of fitness. **How does a fitness log help you achieve your fitness goals?**

### Creating a Schedule

Before beginning your program, you will need to make a fitness log. A fitness log is a record of your physical activities that lets you keep track of your progress. **Figure 5.4** shows a sample log. A complete fitness program should include a balance of aerobic, strength training, and flexibility activities. Your goal should be to spend 60 minutes a day, four to five days a week, on physical activity. If you have been inactive, you may need to work up to this goal. For aerobic workouts, it is best to spend at least 20 to 30 minutes at a time. On days in which time is limited, try working in 10- to 15-minute bursts of moderate to vigorous activity.

### Checking Your Heart Rate

One way of measuring fitness is to check your *heart rate*. This is the number of times your heart beats per minute. **Figure 5.5** gives information on how to measure your heart rate. There are three heart rate readings you need to take when doing vigorous physical activity. The first is your resting heart rate. **Resting heart rate** is

FIGURE 5.5

## MEASURING YOUR HEART RATE

Measure your resting heart rate. **What number did you arrive at?**



Your heart rate is also known as your pulse. There are several ways to take your pulse. One of the easiest is shown in the picture.

1. Place two fingers on your neck at the point shown in the picture. Find the throb in your neck. This is your pulse. Your heart is pumping blood through an artery in your neck. **NOTE:** Do not use your thumb for this activity.
2. Use a watch or clock with a second hand. Time the number of throbs, or pulses, that take place in 10 seconds.
3. Multiply the number you get by 6. This gives you your pulse.

Measure your resting pulse. What number did you arrive at?



# Health Skills Activity

## Practicing Healthful Behaviors

### Exercise with “Eye Appeal”

There’s a lot more to physical activity than setting goals and working up a sweat. It’s also a lot of fun to develop and test your skills, not to mention express your creativity. Just think of the satisfaction an ice skater gets when she lands a double axel. What about the thrill of sinking a basket during a close game. Many physical activities such as dance, gymnastics, and cheerleading are also a pleasure to watch.

### On Your Own

Think of two other activities that are fun to watch as well as play. What are some activities that allow you to express your creativity?

*the number of times your heart beats per minute when you are relaxing. You should take this measurement before you begin working out.*

Once you have worked out for a while, you should take your target heart rate. **Target heart rate** is *the level at which your heart and lungs receive the most benefit from a workout.* A 12-year-old’s target heart rate is 125 to 167 beats per minute. To gain aerobic benefits from an exercise or activity, you need to maintain your target heart rate for 20 to 30 minutes. You should measure your target heart rate twice during a standard workout.

The third heart measurement is your recovery heart rate. **Recovery heart rate** is *how quickly your heart rate returns to normal right after exercise is stopped.* The higher your fitness level, the faster the drop in heart rate. An aerobic fitness goal should be to achieve a lower resting heart.

## Connect To... Math

### Hitting the Target

To find your target heart rate, first, you need to find your *maximum heart rate*. To do this, subtract your age from 220. Then determine 60 to 90 percent of that number to get your *target heart rate*. For example, using a factor of 70%, the target rate of a 12 year-old would be figured like this:  $220 - 12 = 208$ . 70% of 208 is 145.6, so you should shoot for a target heart rate of 146.



### Reading Check

**Compare** Explain the differences between your resting heart rate and target heart rate.

## Warm-Up and Cool-Down

Before beginning any workout or exercise session, you need to warm up. A **warm-up** is *gentle activity that prepares your body for exercise or sport.* The warm-up prevents injuries to muscles, joints, and connective tissue. A good warm-up usually includes an easy exercise to get your heart pumping a little faster and

blood flowing into the muscles. Walking or jogging in place for five to ten minutes are good examples of warm-up activities. Warm-up can also include practicing skills for the activity you will be doing. For example, you might warm up before playing basketball by shooting baskets, passing the ball, or dribbling.

After you have warmed up your body, you can do some basic stretches. Stretching gives your muscles, tendons, ligaments, and joints a chance to loosen and prepare for more activity. Only stretch muscles that have been warmed up. Stretching muscles that have not been warmed up could cause injury.

At the end of your workout, you need to cool down. A **cool-down** consists of *gentle activity to slow down after exercise*. The idea of the cool-down is to gradually return your body to its resting state. Stretching is an important part of a cool-down. Stretching builds flexibility and helps ease your muscles back into their resting state.

In addition, many activities and sports have their own *training techniques*. These include exercises you should do off the playing field. They help prepare your body for the next event or competition. Talk to your coach or physical education teacher about the kinds of techniques you'll need.


Health Online

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

 Reading Check

**Define** What is a *cool-down*?

## Lesson 2 Review

 After You Read

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

### What I Learned

1. **Vocabulary** Define *target heart rate*.
2. **List** What are the parts of a fitness plan?
3. **Describe** Describe what you need to do in order to warm up before physical activity.

### Thinking Critically

4. **Analyze** Calvin would like to bowl as a fitness activity. How can he determine whether this activity will provide fitness benefits?

5. **Apply** Dana plans to swim to achieve fitness. She claims that because you stretch during swimming, there is no need to cool down. How would you respond?

### Applying Health Skills

6. **Goal Setting** Choose a fitness goal. Think of two activities you can do at home that will help you meet your fitness goal. Create a schedule for yourself that shows when, how often, and for how long you'll perform these activities.



## Safety in Sports and Physical Activities

### Guide to Reading

#### Building Vocabulary

Some of the terms below may seem familiar. Write down what you think they mean. Then check your answers as you come across them in the text.

- sports gear (p. 132)
- PRICE (p. 134)
- dehydration (p. 134)
- heat exhaustion (p. 134)
- frostbite (p. 135)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** types of proper sports gear.
- **describe** treatment for sports-related injuries.
- **apply** the skill of advocacy to inform other teens about exercise.

#### Reading Strategy

**Identifying Problems and Solutions** As you read the lesson, list health problems or injuries that are described. Next to each, identify a solution.

### Quick Write

Write about a time when you became overly hot or tired while playing. Explain what you did to feel better.

### Playing It Safe

Physical activity, as you have seen, can be fun. It should also be free of injury. You have already learned two ways to make your workouts safe: warming up and cooling down. In this lesson, you'll learn techniques for making them safer still. You'll also learn how to treat some sports injuries when they occur.

### The Right Stuff

A first step to injury-free exercise is proper sports gear. **Sports gear** includes *sports clothing and safety equipment*. Depending on the sport or activity, safety equipment can include helmets, protective pads, and goggles. **Figure 5.7** shows several activities and the types of gear needed.

Note that some activities call for "approved" helmets. Be aware that different activities have different helmet requirements. For example, bicycle helmets should be certified by the Snell Memorial Foundation. Make sure you know which type is right for your activity.

▼ FIGURE 5.7

## SAFETY GEAR BY SPORT OR ACTIVITY

The chart below lists some of the safety gear needed for different activities. **Is there a sport or activity you play that is not listed? Where could you get additional information on safety gear you might need?**

Sport or Activity	Safety Gear
Skating, skateboarding, and scooter riding	Helmet, wrist pads, knee pads, elbow pads
Bicycling	Bike helmet
Contact sports, including wrestling and volleyball	Mouth guard, knee pads
Racquetball, snowboarding, street hockey	Goggles, helmet for snowboarding, eyeguards for racquetball
Hockey, football, baseball	Pads, helmet, mouth guard

Choose athletic clothing that is comfortable. It should not be so loose that it can snag or get caught on objects. Yet it should be loose enough to allow free movement. As you grow older, your body, hands, and feet will grow. It is important to update your sports gear to meet these changes.

### Drink Water

During moderate to vigorous activity, your body can lose a lot of water through *perspiration*, or sweat. It is important to replace this lost fluid. The solution is to drink plenty of water. Before beginning your activity, give your body a head start. Drink at least 8 ounces of water. Take small sips from time to time during a workout or game. You should drink about 8 ounces of water for every 30 minutes of heavy exercise. This is true even in cold weather. If there is no source of drinking water at the field or park, bring some from home.

- ▼ Getting plenty of fluid during vigorous activity is important. **Explain why this is so.**



### If the Shoe Fits

Athletic shoes are frequently advertised in the media. Although it's tempting to purchase shoes based on how they look in an ad, remember that fit and performance are more important than anything else. Many sports require special footwear. Make sure the shoe is right for the sport or activity.

**What might you say to a friend who bought a workout shoe based just on an advertisement?**



## Treating Injuries

Sometimes even when you are careful, injuries happen. Scrapes and cuts are common in sports. So is muscle soreness after a game or workout. When a muscle is stiff or aches, remember the word *PRICE*. The letters in **PRICE** stand for *protect, rest, ice, compress, and elevate*. The sooner the treatment is applied, the better. You should:

- **Protect** the injured part from further injury by keeping it still. Try not to move it too much. Moving it may make the pain worse.
- **Rest** the injured part.
- **Ice** the part using an ice pack.
- **Compress**, or put pressure on, the part using an elastic bandage. This will keep the injury from swelling. Just be careful not to wrap the bandage too tightly. This could cut off the flow of blood.
- **Elevate** the injured part above the level of the heart.

## Weather-Related Injuries

Some activities are done in very cold or very hot temperatures. Both carry health risks. When you exercise or play during very hot weather, your temperature rises. Sweating increases to try to cool you down. Unless this water is replaced, dehydration can result. **Dehydration** is a condition caused by too much water loss. It can lead to other, more serious health problems. One of these is **heat exhaustion**. This is an overheating of the body that can result from dehydration. People with heat exhaustion often feel dizzy and have a headache. Their skin feels clammy when touched. If someone you know has these symptoms, find a cool, shady spot. Give the person plenty of fluids. If the symptoms don't clear up, call for help right away.

Similar precautions need to be taken in cold weather. Winter activities, such as ice-skating, skiing, and snowboarding, require protection

- ◀ When an injury occurs, the PRICE formula can be used to treat them. **What do the letters in PRICE stand for?**

against snow and cold. To stay warm, dress in several layers of clothing. Layered clothing will trap warm air next to your body. A wind-proof jacket should be the outermost layer. Always wear a hat and gloves.

In the coldest weather, be alert to signs of **frostbite**, *freezing of the skin*. Frostbite usually affects the nose, ears, fingers, and toes. The area will be numb, pale, and stiff. Frostbite is a serious injury. Get the person inside right away. Treat the affected area by soaking it in warm, not hot, water. Get medical help as soon as possible.



◀ Wearing proper clothing can protect you during winter activities. **What are some health risks you face when participating in cold-weather sports or activities?**

### Reading Check

**Explain** What causes dehydration?

Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** What do the letters in *PRICE* stand for?
2. **Recall** Why is replacing lost water important during physical activity?
3. **List** Name two types of protective sports gear.

#### Thinking Critically

4. **Apply** Rey wants to play hockey, but he doesn't want to wear the face mask that players need to wear. What advice might you give Rey about the importance of sports gear?

5. **Apply** Maintain a three-day activity and exercise diary. How much of each did you do in this time period? What changes do you need to make to your routine?

#### Applying Health Skills

6. **Advocacy** Create a pamphlet titled *Five Things Teens Should Know Before Exercising*. Include five pieces of advice from the lesson, and put each in your own words.

# Building Health Skills

## GOAL SETTING

### Developing a Personal Fitness Plan

#### DIRECTIONS

Goal setting involves setting positive goals and taking steps to achieve them. Avoid risky behaviors. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

In health class, Enrique learned about the importance of fitness. He has used his new knowledge of goal setting to help him create a fitness goal and a plan to meet his goal. The steps in his fitness plan appear below.

##### **Step 1. Make your goal specific.**

Enrique wants to build up his endurance.

##### **Step 2. List the steps to reach your goal.**

Enrique decides to play soccer as a way of achieving his goal. He is joining a local soccer team.

##### **Step 3. Break big goals down into smaller tasks.**

The team practices two weekdays for an hour. They have games on weekends.

##### **Step 4. Get help from others.**

When Enrique feels discouraged, his father and brother are there to cheer him on.

##### **Step 5. Evaluate your progress.**

As time goes by, Enrique finds he is able to play for longer periods of time. He is also improving his soccer skills.

##### **Step 6. Reward yourself.**

Enrique's coach gave him a certificate of achievement for his efforts.



## 2 Practice

Enrique began learning about other fitness measures. He is now interested in building his muscle strength. Enrique needs to choose one or more physical activities that will help him reach his goal, such as weight lifting or push-ups. He also needs to decide how to fit these activities into his weekly schedule. Map out the steps Enrique will need to take to achieve his new goal. Use these questions to help you develop an action plan.

**Step 1.** Who could help Enrique reach his goal?

**Step 2.** How could Enrique reward himself in the event he succeeds?

### Skill Summary

#### GOAL SETTING

Goal setting steps include the following:

- Make your goal specific.
- List the steps to reach your goal.
- Break big goals down into smaller tasks.
- Get help from others.
- Evaluate your progress.
- Reward yourself.

## 3 Apply

Think about a fitness goal you would like to set for yourself. Develop a personal fitness plan to help you reach your goal. Identify people who can help along the way. Decide how you will reward yourself once you successfully complete your plan.

### Self-Check

- Did I set a realistic fitness goal?
- Did I identify people who could help me reach my goal?
- Did I use each of the goal-setting steps in my fitness plan?

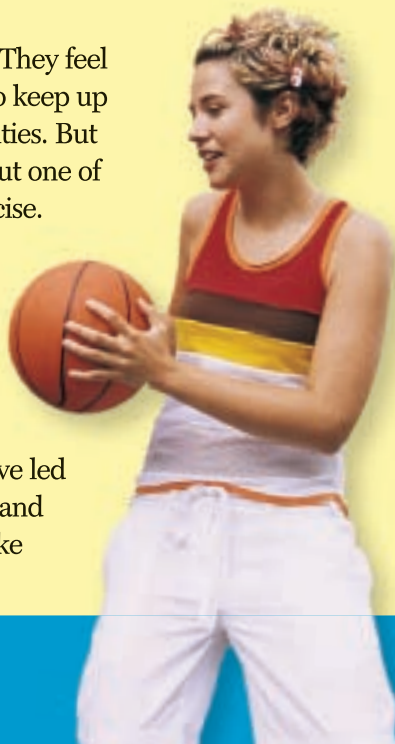
# How to Stay **FIT FOR LIFE**



**Getting the right amount of exercise is key to staying healthy.**

**K**ids are busier than ever before. They feel pressure to do well in school and to keep up with music lessons and other activities. But most kids' hectic schedules leave out one of the most important activities: exercise.

Nearly half of all young people in the United States are not active on a regular basis. This trend is a big factor in the rising rate of obesity among kids. School budget cuts and more emphasis on preparing for tests have led many schools to cut down on gym and recess time. So it's up to you to make sure you stay fit.





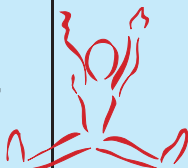
### **GOOD FOR YOUR MIND AND BODY**

Along with building muscle and preventing health problems, staying fit can give you more energy to keep up with your packed daily schedule. Experts suggest that young people get a total of 60 minutes of exercise most days. Exercise can help you relax, respond better to stress, and boost your self-confidence.

You don't need to play competitive sports to stay in shape. Riding a bike or inline skating with your friends will provide results, too. Choose activities that are fun—you'll be more likely to keep doing them in the future!

### **A FORMULA FOR STAYING FIT**

To stay strong and flexible, different parts of our bodies require different types of exercise.

<b>EXAMPLE</b>	<b>BENEFIT</b>	<b>AMOUNT</b>
<b>Aerobic Exercise</b> Running, basketball, jumping rope, dancing	 Aerobic exercise increases your heart rate and makes you breathe harder. This strengthens your heart and lungs.	Thirty minutes of aerobic exercise most days
<b>Strength Training</b> Pull-ups, sit-ups, push-ups	 Muscle strength is the ability of your muscles to exert a force. Muscle endurance is the ability to keep up a physical activity without becoming overly tired. Building both improves overall fitness.	Two or three days a week
<b>Flexibility Training</b> Sit and reach, yoga, gymnastics, Tai Chi	 Jog or warm up for five to 10 minutes before you do light stretching. After exercise, do more stretching. This helps protect you from injury.	Before and after any workout

# Reading Review

## 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 1–3. Find a partner, and quiz each other using these study aids.

### Lesson 1 Physical Activity and Your Health

#### Key Ideas

- Physical benefits of regular physical activity include strengthening your muscles, heart, and lungs. Mental benefits include better concentration in school, and greater confidence in your abilities. Social benefits include building friendships and learning teamwork.
- Measures of physical fitness include strength, muscular endurance, heart and lung endurance, stamina, and flexibility.
- Aerobic exercise works the heart and strengthens the lungs, allowing you to breathe in more oxygen. Anaerobic exercises build strength and muscle endurance.

#### Vocabulary

- physical activity (p. 120)
- lifestyle activities (p. 121)
- physical fitness (p. 121)
- strength (p. 123)
- endurance (p. 123)
- stamina (p. 123)
- flexibility (p. 124)
- exercise (p. 125)

### Lesson 2 Creating a Personal Fitness Plan

#### Key Ideas

- The parts of a fitness plan include setting fitness goals, measuring your fitness level, choosing activities, achieving your goals, creating a schedule, checking your heart rate, warming up, and cooling down.
- Warm-ups are gentle activities that prepare your body for exercise or sport. Cool-downs are gentle activities designed to slow your body down again after exercise.

#### Vocabulary

- FITT principle (p. 128)
- resting heart rate (p. 129)
- target heart rate (p. 130)
- recovery heart rate (p. 130)
- warm-up (p. 130)
- cool-down (p. 131)

### Lesson 3 Safety in Sports and Physical Activities

#### Key Ideas

- Types of sports gear include helmets, protective pads, mouth guard, goggles, and shoes.
- Sports-related injuries are best treated using the PRICE formula, whose letters stand for *protect, rest, ice, compress, and elevate*.
- To avoid weather-related injuries, drink plenty of fluid, and wear layers of clothing in cold weather.

#### Vocabulary

- sports gear (p. 132)
- dehydration (p. 134)
- PRICE (p. 134)
- heat exhaustion (p. 134)
- frostbite (p. 135)



## 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 1–6. After each number, write the term from the list that best completes each sentence.

- dehydration
- physical fitness
- heat exhaustion
- recovery heart rate
- lifestyle activities
- resting heart rate
- physical activity
- target heart rate

### Lesson 1 Physical Activity and Your Health

1. \_\_\_\_\_ is the ability to handle everyday physical work and play without becoming tired.
2. Forms of physical activity that are part of your day-to-day routine or recreation are known as \_\_\_\_\_.
3. Any kind of movement that causes your body to use energy is called \_\_\_\_\_.

### Lesson 2 Creating a Personal Fitness Plan

4. Your \_\_\_\_\_ is the number of times your heart beats per minute when you are relaxing.

5. The level at which your heart and lungs receive the most benefit from a workout is its \_\_\_\_\_.
6. Your \_\_\_\_\_ is how quickly your heart rate returns to normal right after exercise is stopped.

On a sheet of paper, write the numbers 7–10. 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 Safety in Sports and Physical Activities

7. Depending on the sport or activity, safety equipment can include helmets, protective pads, and goggles.
8. To replace water your body loses through sweat, you should drink about 20 ounces of water every 30 minutes.
9. The FITT technique can be used to treat muscle soreness and other sports-related injuries.
10. Symptoms of frostbite include dizziness and clammy skin.

## Thinking Critically

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

11. **Compare and Contrast** In what ways are warming up and cooling down similar? How are they different?
12. **Synthesize** Imagine you are playing softball on a hot day. One of your teammates becomes ill. There is no shade or water nearby. What should you do?



## Write About It

- 13. Practicing Healthful Behaviors** Write a paragraph explaining the benefits of physical activity. In your paragraph, persuade other teens to be physically active by stating facts, using supporting evidence, and giving examples.
- 14. Injury Prevention** Choose a physical activity or sport that you enjoy. Write a safety guide for players to refer to that tells them how to stay safe and prevent injury.

**Sports Medicine** Do you think you would enjoy working with athletes? Doctors in the field of sports medicine do just that. They treat sports-related injuries in athletes, gymnasts, and others who are physically active. To practice sports medicine, you need four years of college, followed by medical school. This, in turn, is followed by up-to-seven years of special training. To learn more about this and other careers, visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

A moderate to high level of flexibility has many health benefits. It helps reduce muscle strains and lower-back problems. It also improves performance in most sports and activities.

Many different stretches can be used to improve flexibility. There are stretching exercises for all major joints of the body. A complete workout should include stretches for each.

While flexibility is important, you should know your limits. It is possible to overdo stretching. A joint that is overly stretched can become injured easily. It can also cause injuries in nearby muscles. An overly stretched shoulder joint, for example, can lead to a dislocated shoulder. This is a painful condition in which the entire shoulder moves out of its normal location.

### TEST-TAKING TIP

Find the main idea in a reading passage. Then look for details that support this idea.

- Which statement best sums up the main idea of the passage?
  - Flexibility is important but impossible to measure.
  - Flexibility helps reduce muscle strains and lower-back problems.
  - Maintaining flexibility by stretching is important, but know your limits.
  - A dislocated shoulder is a painful condition that can be prevented by stretching.
- Which of the following is *not* included in the passage?
  - An example of an injury that can occur when a joint is made overly flexible.
  - Examples of stretching activities for all the different joints of the body.
  - Support for the claim that flexibility has many health benefits.
  - A warning that you should not overdo it when it comes to stretching.

## Personal Health

## Chapter Preview

<b>Lesson 1</b> Your Teeth, Skin, and Hair.....	144	<b>Lesson 5</b> Health Care in Your Community.....	163
<b>Lesson 2</b> Protecting Your Eyes and Ears.....	151	<b>Building Health Skills</b> .....	168
<b>Lesson 3</b> Choosing Health Products ...	155	<b>Hands-on Health</b> .....	170
<b>Lesson 4</b> Using Medicines Responsibly.....	159	<b>Chapter Reading Review</b> .....	171
		<b>Chapter Assessment</b> .....	172

## ▲ Working With the Photo

Whether you wear your hair short or long, keeping it neat is part of good grooming.

**What are some other good grooming habits?**

# Start-Up Activities



## Before You Read

Read the Instant Message

below. What advice might you give Courtney? Keep a record of your answer.



## IM Express

dreamz67: Court--you going to the beach with us tomorrow? 😊

courtneyk13: not sure. my mom wants me to wear this dumb hat if i go. something about the sun.

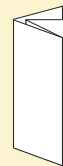
## FOLDABLES™ Study Organizer



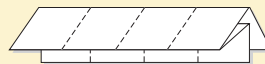
## As You Read

Make this Foldable™ to help you organize the information in Lesson 1 on teeth, skin, and hair. Begin with a plain sheet of 11" × 17" paper.

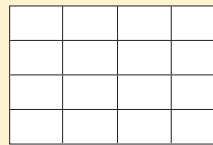
**1** Fold the sheet of paper into fourths along the short axis. This forms four columns.



**2** Open the paper and refold it into fourths along the long axis. This forms four rows.



**3** Unfold and draw lines along the folds.



**4** Label the chart as shown.

Record information about teeth, skin, and hair in the appropriate sections of the chart. Then use the chart to compare different types of personal care.

Chapter 6	Form	Function	Care
Teeth			
Skin			
Hair			

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Health Inventory for Chapter 6.

## Your Teeth, Skin, and Hair

### Guide to Reading

#### Building Vocabulary

In your own words, write definitions for the following terms. Check to make sure your definitions are correct as you read the chapter.

- hygiene (p. 144)
- plaque (p. 145)
- fluoride (p. 146)
- epidermis (p. 147)
- dermis (p. 147)
- sunscreen (p. 148)
- acne (p. 148)
- dandruff (p. 149)
- cuticle (p. 150)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **recognize** ways to keep your teeth and gums healthy.
- **identify** ways to take care of your skin.
- **describe** how to care for hair and nails.
- **apply** the skill of advocacy to inform others about proper tooth and gum care.

#### Reading Strategy

**Predicting** Read the major and minor headings throughout the lesson. Write a sentence about the kind of advice you think will be given for each heading.

**FOLDABLES** Study Organizer Use the Foldable™ on p. 143 as you read this lesson.

### Quick Write

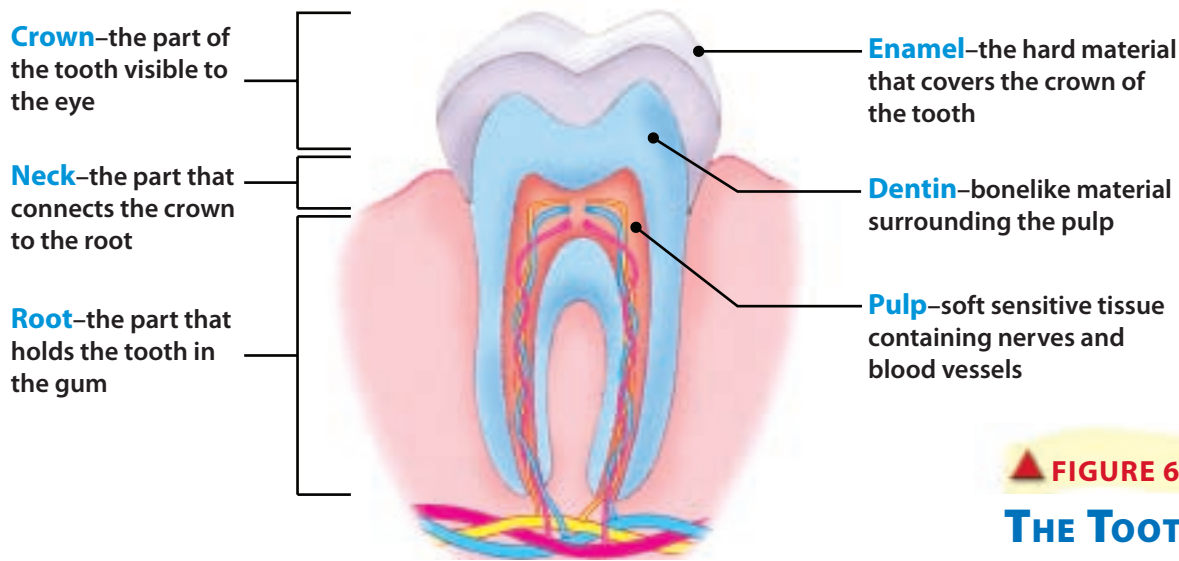
Describe the steps you take in caring for your teeth, skin, and hair.

### Looking Your Best

Think about your appearance. Are your clothes neat and clean? Is your hair combed? Did you brush your teeth this morning? Caring for your appearance includes paying attention to your personal hygiene (HY·jeen). **Hygiene** includes the *actions you take to improve or maintain your health*. Keeping your body clean is an example of good hygiene. Your hygiene and resulting appearance affect all three sides of your health triangle. When you look your best, you feel good about yourself. This improves your mental/emotional health. You are more confident around others, strengthening your social health. Good hygiene also keeps your body physically healthy. For example, washing your hands helps prevent illness.

### Reading Check

**Define** What is hygiene?



▲ **FIGURE 6.1**

## THE TOOTH

This figure illustrates the different parts of the tooth. **Which part of the tooth do you see when you look at your smile in the mirror?**

## Healthy Teeth and Gums

Your teeth and gums have important jobs. Your teeth make it possible for you to chew and grind food. They aid in forming certain speech sounds. Your teeth help shape and give structure to your mouth.

Your gums anchor your teeth in your mouth and keep them in place. About three fourths of each tooth is located below the gum line. **Figure 6.1** shows the parts of the tooth.

## Tooth and Gum Problems

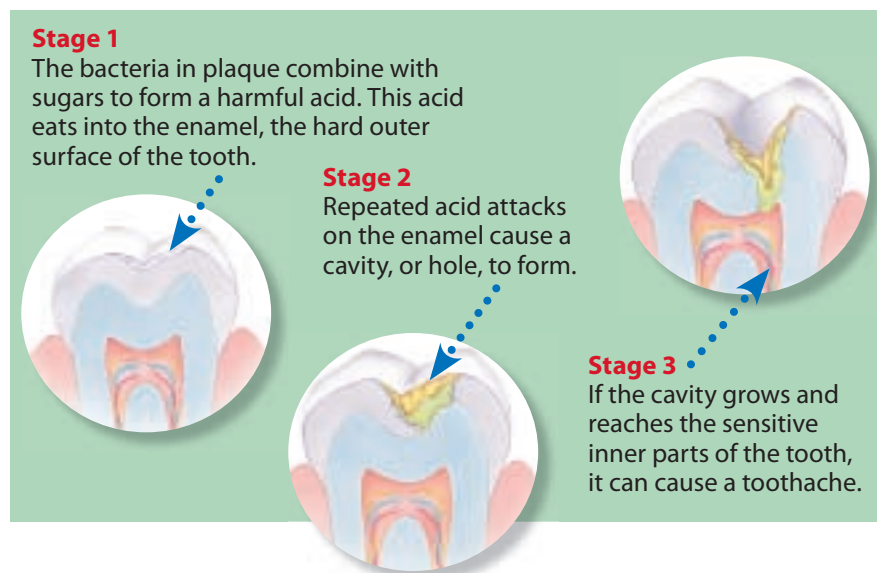
Proper care of your teeth and gums can prevent tooth decay. If this occurs and goes untreated, you can lose your teeth.

Tooth decay begins with the formation of plaque (PLAK). **Plaque** is a soft, colorless, sticky film containing bacteria that grows on your teeth. The germs in plaque cause bad breath. If left on the teeth, these germs combine with sugars to form an acid that causes tooth decay and gum disease. If plaque is not removed, it eventually hardens and becomes *tartar* (TAR·tuhr). Only a dentist or dental hygienist can remove tartar. **Figure 6.2** shows the stages in tooth decay.

▼ **FIGURE 6.2**

## TOOTH DECAY

Tooth decay and gum disease can both be prevented. **What are some steps you can take to prevent these problems?**



**Reading Check** **Explain**  
How does tooth decay occur?

## Teeth and Talking

Without your teeth, you would have difficulty speaking. To see what that would be like, try making the *th* sound without letting your tongue touch your teeth. What happens? Studying how words are formed is part of a science called linguistics.

See if you can figure out which speech sounds the tongue and lips form.

## Keeping Teeth and Gums Healthy

You can help prevent tooth and gum problems by remembering to do three important things. Two of these, brushing and flossing, are illustrated in **Figure 6.3**. Brushing cleans the teeth, removes plaque, and stimulates the gums. Flossing removes food particles and plaque from between the teeth and under the gum line that the toothbrush cannot reach. Flossing also helps to clean underneath braces.

The third way you can maintain your dental health is by eating right. Choose foods that are high in the mineral calcium, such as yogurt and milk. You should also limit foods that are high in sugar, which can cause tooth decay. When you do eat sugary foods, brush your teeth as soon as you can.

▶ **FIGURE 6.3**

## PROPER BRUSHING AND FLOSSING TECHNIQUES

To reduce plaque build-up, brush at least twice a day and floss once a day. **Why is it important to know how to brush and floss properly?**



- You should brush using a soft-bristled brush. Use toothpaste that contains **fluoride** (FLAWR•ahyd), a substance that fights tooth decay. Brush the outer tooth surfaces first. Tilt the top of your toothbrush where your teeth and gums meet. Move your brush back and forth gently, using short strokes across your teeth. Then brush the inner tooth surfaces and your chewing surfaces. Finally, brush your tongue.
- Proper flossing begins with an 18-inch piece of dental floss. Wrap the ends around the middle finger of each hand. Hold the floss tightly between your thumbs and forefingers. Now gently slide the floss between your teeth. Move it up or down to the gum line, using a gentle sawing motion. Rub the side of the tooth, and bring the floss back out gently. Repeat the process between all of your teeth.

## Regular Dental Checkups

Another important way to protect your teeth and gums is to have dental checkups twice a year. The dentist or dental hygienist will clean your teeth to help prevent tooth decay and gum disease. The dentist will also examine your teeth for cavities or other problems.

If your teeth need straightening, your dentist may refer you to an *orthodontist*. This is a dentist who specializes in correcting irregularities of the teeth and jaw. The orthodontist may apply braces to straighten your teeth. This will make your teeth look better and easier to clean.



**List** Name three habits that promote healthy teeth and gums.

## Healthy Skin

What's the biggest organ of your body? Believe it or not, the answer is your skin. The skin acts as a waterproof shield that defends your body against germs. It maintains your body temperature and allows you to feel and sense pressure and temperature.

The two main layers of the skin are shown in **Figure 6.4**. The thinner outer layer of the skin is called the **epidermis**. The thicker inner layer of the skin is the **dermis**.

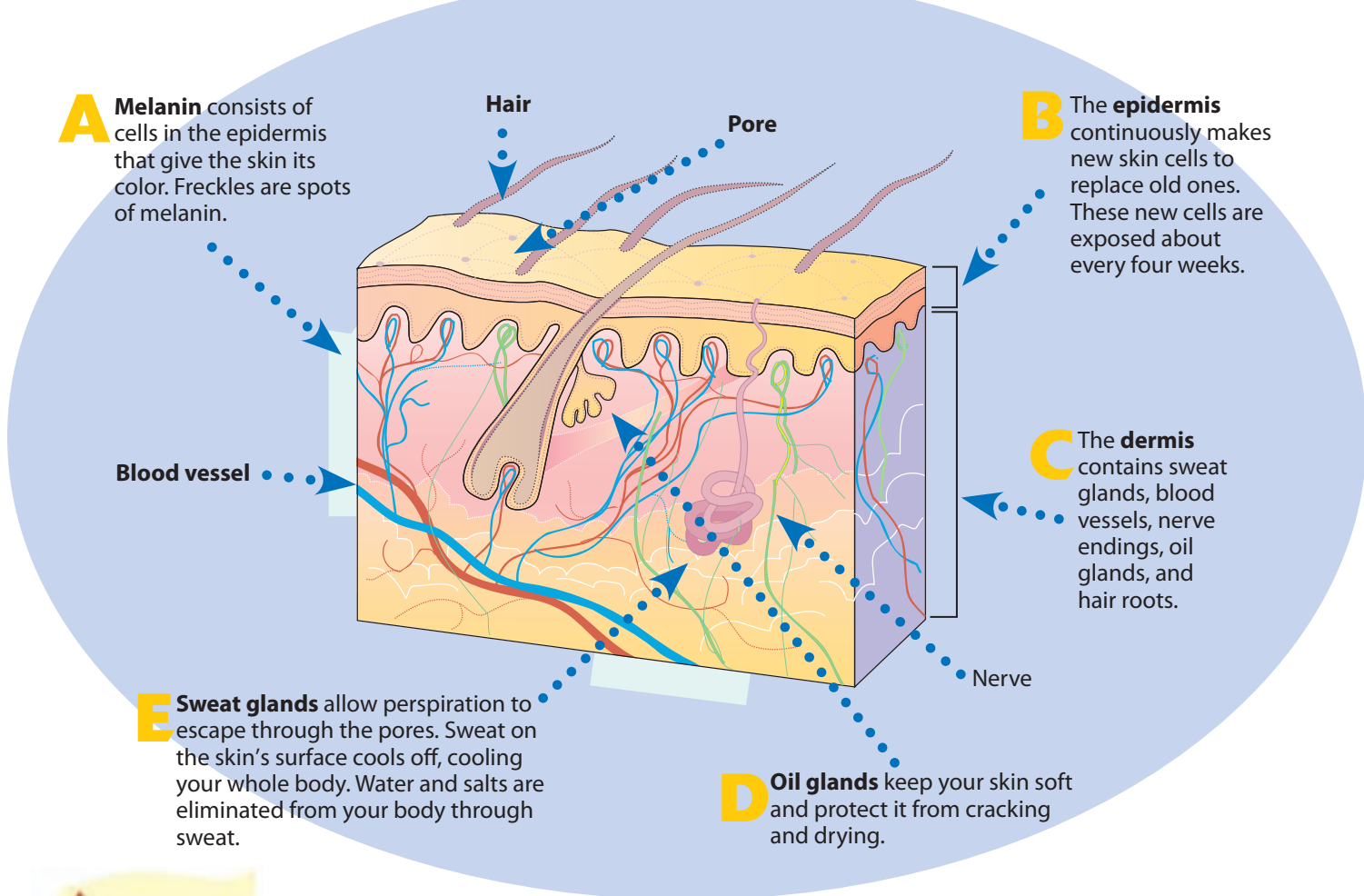
## Skin Care

The most important part of skin care is cleansing. As your body develops, sweat glands become more active. Bacteria can grow in areas where you sweat, such as under your arms. In large enough numbers, these germs give off an unpleasant odor. Washing sweat away keeps your skin clean and smelling fresh. You can also help control sweat and odor by using an antiperspirant or deodorant.

You should also protect your skin from the sun. The sun's ultraviolet (UV) rays can cause sunburn and wrinkles and can increase your risk of skin cancer. Avoid direct sunlight between the hours of 10:00 A.M. and 4:00 P.M. This is when the sun's UV rays are strongest. Whenever you do spend time in the sun,

▲ Dental braces are made of a variety of materials. **Why would someone need to wear braces?**





**▲ FIGURE 6.4**

## THE SKIN

Your skin is a very complex body organ. It has many parts. **What is the outer layer of skin called?**

wear protective clothing and use a **sunscreen**. This is a *cream or lotion that filters out some UV rays*. Choose sunscreens with a sun protection factor (SPF) of 15 or higher. Reapply sunscreen about every two hours and after swimming.

### Dealing with Acne

No matter how careful you are to keep your skin clean, some skin problems are hard to avoid. One of these problems is acne. **Acne** is a skin condition caused by overly active oil glands. This is due to increased hormone production during the teen years. The excess oil can clog pores, causing bumps on the skin's surface. Mild acne can usually be treated at home. Wash your face with mild soap, but do not scrub too hard. This can irritate skin and cause more acne. Also, avoid squeezing pimples, which can leave acne scars on your skin. For serious cases, you may need to see a *dermatologist* (DER·muh·TAH·luh·jist). This is a doctor who treats skin disorders.

**Health Online**

#### Topic: Helping Troubled Skin

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to learn more about dealing with acne.

**Activity:** Using the information provided at the link above, create a one-page fact sheet that lists the causes, effects, myths, and treatment of acne.



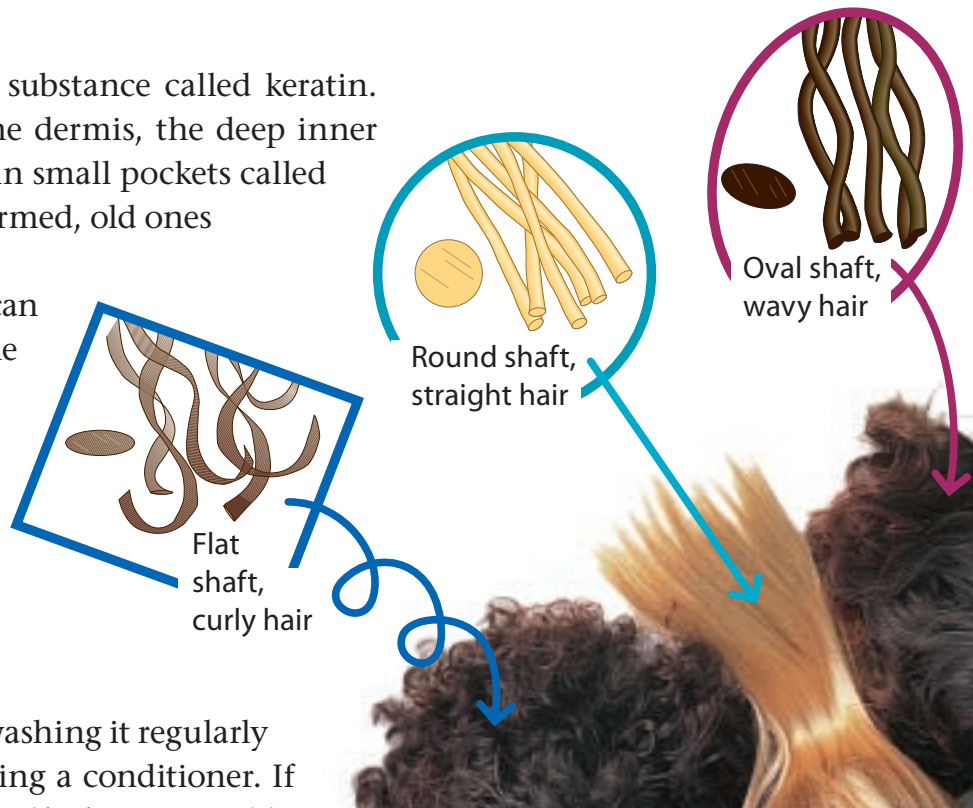
**Reading Check**

**Explain** Explain the importance of keeping your skin clean.

## Healthy Hair

Your hair is made up of a substance called keratin. The roots of the hair are in the dermis, the deep inner layer of skin. They are housed in small pockets called *follicles*. As new hair cells are formed, old ones are forced out.

The part of the hair that you can see is the *shaft*. The shape of the hair shafts determines whether your hair is wavy, curly, or straight. Like living skin, hair gets its color from the pigment melanin. The color of your hair is determined by heredity.



## Hair Care

Keep your hair healthy by washing it regularly with a gentle shampoo and using a conditioner. If possible, let your hair dry by itself. If you use a blow dryer, use low heat. Styling irons and high heat from hair dryers can make hair dry, brittle, and faded. Brushing or combing daily removes dirt and helps spread natural scalp oils down the hair shaft.

## Problem Hair and Hair Problems

Two conditions that can affect the health of your hair are dry or oily scalp. Either problem can be corrected by choosing the right shampoo. Read the label carefully. Different products are made for dry, oily, and normal hair. Chlorine in pool water can be another problem. Special shampoos can remove chlorine.

Another common scalp problem is **dandruff**. This is *flaking of the outer layer of dead skin cells*. Washing your hair regularly controls dandruff. If this does not work, try a dandruff shampoo.

Sometimes, an itchy scalp is caused by head lice. These tiny, wingless insects live in the hair. They are easy to catch from someone else. To prevent lice from spreading, avoid sharing hats, combs, and brushes. If you get lice, you can kill them with a medicated shampoo. You will also need to wash all your bedding, towels, combs, brushes, and clothing. Everyone else in your house will need to take these steps, too.

▲ No matter what kind of hair you have, it deserves proper treatment. **What are three steps you can take to keep your hair healthy?**



**List** Give two steps that are part of good hair hygiene.



▲ Proper nail care keeps your nails looking clean and healthy.

**What are some steps you can take to improve the appearance of your nails?**

## Your Nails

Like your hair, your fingernails and toenails are made of a tough substance called keratin. Around the nail is a *nonliving band of outer skin* called the **cuticle** (KYOO·ti·kuhl).

To keep nails healthy, soften your hands with warm water. Use a cuticle stick to push back the cuticle. Trim your nails using a nail clipper or small scissors. Cut your toenails straight across, so the nail is at or just beyond skin level. Use an emery board or nail file to round out the ends of your fingernails slightly and smooth out rough edges. Never bite your nails. Putting your fingers in your mouth can spread germs.

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



Reading Check

**Identify** Describe how you should trim your fingernails and toenails.

## Lesson 1 Review



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

### What I Learned

1. **Vocabulary** What is *plaque*?
2. **Recall** Between what hours are the sun's UV rays strongest?
3. **Explain** What are two ways to treat acne?

### Thinking Critically

4. **Hypothesize** What can happen to your teeth and gums if you do not floss regularly?

5. **Compare** In what ways are hair and nails similar? How are they different?

### Applying Health Skills

6. **Advocacy** Create a booklet that explains the importance of proper tooth and gum care. Include original art, if you like, with step-by-step instructions. Distribute copies to students in other classes.

# Protecting Your Eyes and Ears

## Guide to Reading

### Building Vocabulary

Write the terms below in your notebook. As you read, write a definition for each.

- farsightedness (p. 152)
- nearsightedness (p. 152)
- astigmatism (p. 152)

### Focusing on the Main Ideas

In this lesson, you will learn to

- **describe** how to care for your eyes and ears.
- **explain** how to protect your hearing.

### Reading Strategy

**Organizing Information** Copy the headings from the lesson onto a sheet of paper. Use these to make an outline of the lesson.

## Healthy Eyes

Your eyes are your windows to the world. They allow you to take in millions of bits of information, which are sent to your brain. There the information is processed into shapes, colors, and movements. The many parts of the eye are shown in **Figure 6.5**.

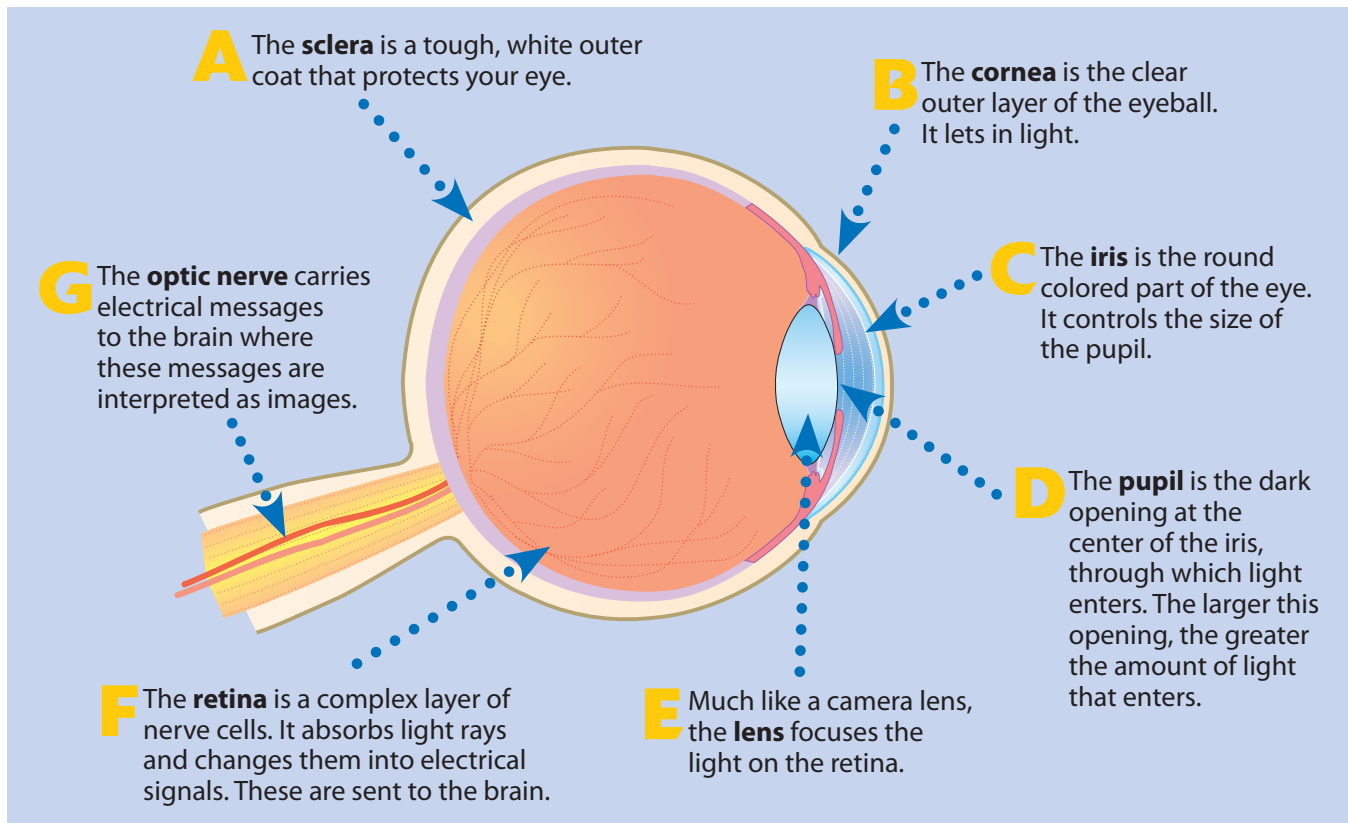
### Eye Care

The following tips can help you take care of your eyes:

- Take a break when using your computer, watching TV, and reading. Resting your eyes from time to time will help prevent eyestrain.
- Try not to sit too close to the TV or computer. The computer screen should be about two feet from your face.
- Read and watch TV in a well-lit room. Light should come from above your reading material.
- Wear safety goggles during sports or science lab. Be especially careful when you are holding sharp objects.
- Wear sunglasses outdoors on sunny days. Buy sunglasses that have UV-approved lenses.
- If your eyes hurt or itch, don't rub them. You could have allergies or an infection. Tell a parent or guardian.

### Quick Write

Write an original science fiction story about a visitor from another planet. The creature should have no ears or eyes. In your story, explain seeing and hearing to this visitor.



**FIGURE 6.5**

## THE EYE

The many parts of the eye work together to tell you about the world around you. **How do the various parts interact to make vision possible?**

- If you get something in your eye, try to blink to let tears wash it out. If this doesn't work, rinse the eye with water.
- Never share eye makeup or eye care products. Using someone else's products can spread germs.
- Get regular vision screenings and eye exams.

## Vision Problems

Two common vision problems are farsightedness and nearsightedness. **Farsightedness** is *the ability to see objects at a distance while close objects look blurry*. For example, if you are farsighted, the words on this page may look unclear. However, if you look at a sign on the wall across the room, the words will be in focus. The opposite will be true if you are **nearsighted**. This is *the ability to see objects close to you while distant objects look blurry*. A third common condition is **astigmatism** (ah·STIG·muh·tizm), *a misshaped cornea or lens causing objects to look wavy or blurred*.

Eye problems are usually corrected by using eyeglasses or contact lenses. Both help the lens of the eye focus light on the retina. An eye doctor can determine if you need corrective lenses.



**Compare** What is the difference between nearsightedness and farsightedness?

## Healthy Ears

Like your eyes, your ears allow you to receive information. Your ears also help you keep your balance. Balance is controlled by the semicircular canals, tube-like structures in the inner ear. The different parts of the ear and what they do are shown in **Figure 6.6**.

### Ear Problems

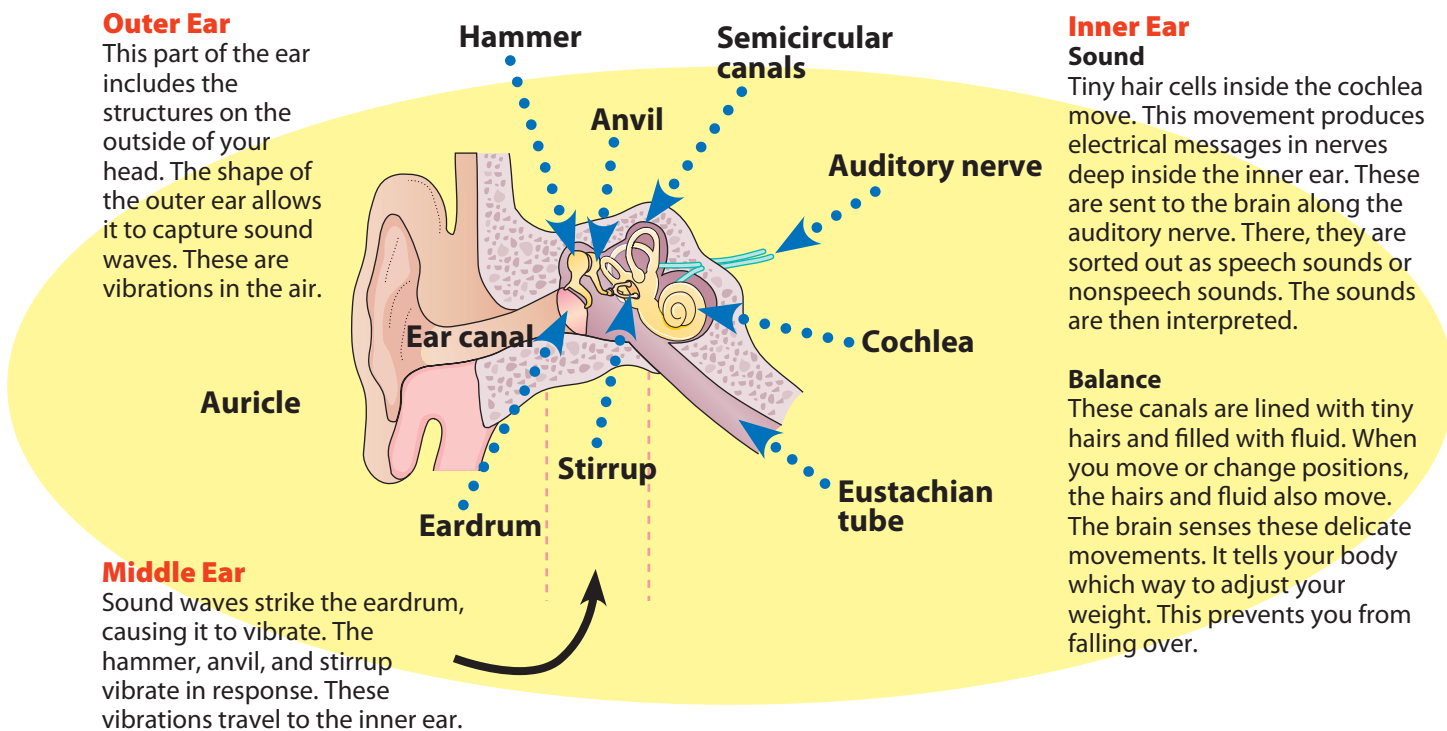
Infections in the middle ear are the most common ear problems. Germs from colds in the nose or throat can spread through the eustachian tube into the middle and inner ear. Ear infections can be treated by a doctor.

The most serious ear problems are hearing loss and deafness. These can result from injury, disease, and birth defects. Very loud noise can also cause hearing loss. Have you ever had a ringing in your ears after exposure to noise for a long period of time? This is called *tinnitus* (TIN·uh·tuhs). For some people, tinnitus is ongoing; the ringing is always present. Frequent or ongoing tinnitus is an early warning sign of inner-ear nerve damage.

▼ **FIGURE 6.6**

## THE EAR

The ears carry sound to the brain and help you stay balanced. **Which parts of the ear are responsible for these two main functions?**



### Outer Ear

This part of the ear includes the structures on the outside of your head. The shape of the outer ear allows it to capture sound waves. These are vibrations in the air.

### Auricle

### Middle Ear

Sound waves strike the eardrum, causing it to vibrate. The hammer, anvil, and stirrup vibrate in response. These vibrations travel to the inner ear.

## Connect To... Science

### Help for the Hearing Impaired

Medical science has developed a device that permits deaf and hearing-impaired people to communicate through sound. The device is called a *cochlear implant* and is placed under the skin behind the ear. Unlike a hearing aid, which makes sound louder, the device allows the person using it to identify speech sounds.

**Using online or print resources, learn more about this technology. Share your findings in a short report.**



◀ People with hearing loss may wear hearing aids. These increase the loudness of sounds. **What are some other ways people with hearing loss can communicate?**

## Ear Care

The best way to care for your ears is to protect them from loud sounds. The loudness of sounds is measured in units called *decibels* (DES·ih·belz). Normal conversation measures about 60 decibels. Repeated exposure to sounds above 85 decibels is harmful.

When listening to music, especially with headphones, keep the volume down.

Never use cotton swabs to clean the inside of your ear. Putting anything inside your ear opening can damage your ear. Instead, clean the outside of the ears with water. Allow the insides of the ear to dry on their own.

**Health Online**

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

### Reading Check

**Explain** Why is it important to limit your exposure to loud sounds?

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Vocabulary** What is *astigmatism*? How is it treated?
2. **Describe** List three habits that promote the health of your eyes.
3. **Recall** Name two jobs your ears perform.

### Thinking Critically

4. **Apply** Frank is the equipment manager for a local band. What should Frank do to protect his ears while at work?

5. **Evaluate** Why might a person living near an airport need to take special care of his or her ears?

### Applying Health Skills

6. **Decision Making** Eileen has learned that she needs glasses for a vision problem. She tried on several pairs and doesn't like any of them. What are Eileen's choices?

## Choosing Health Products

### Guide to Reading

#### Building Vocabulary

Copy the terms below into your notebook. As you come across each term in the lesson, write its definition.

- consumer (p. 155)
- guarantee (p. 157)
- unit price (p. 157)
- coupons (p. 158)
- generic (p. 158)
- fraud (p. 158)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** factors that influence your consumer choices.
- **explain** ways to choose health products wisely.
- **analyze** how the media influences consumer choices.

#### Reading Strategy

**Predicting** You probably make purchases already. Predict what kind of information would help you improve your shopping skills.

### Consumer Skills

“I can’t believe there are so many kinds of adhesive bandages,” Marty remarked. He was finding it difficult to choose which product to buy. Having consumer skills would have made Marty’s job easier. A **consumer** is *someone who buys products or services*. Consumer skills allow you to make informed choices when shopping.

### Quick Write

Make a list of health and beauty aids you use, such as shampoo and toothpaste. Explain how you decide what products to buy.

### Recognizing Influences

Many different factors influence your decisions as a consumer. One is your likes and dislikes. You might prefer one shampoo brand over another because it makes your hair shinier. Cost is also likely to be a factor.

Another factor that influences you is the media. This includes television, radio, the Internet, newspapers, and other information sources. One important influence you may not always be consciously aware of is advertising. Without knowing it, you might be tempted to buy an item that has a catchy ad.

- ▶ There are many different health care products to choose from. **What influences your decisions as a consumer?**





## Reading Product Labels

The first step in becoming a smart shopper is to understand what you're buying. With many products, this means reading the product label. Most product labels contain similar information. **Figure 6.7** shows a typical label on a health product. Take a moment to study the information on it.

Notice that the label tells you what the product is intended to do. This information appears first, under *indications*. What is the purpose of the product shown?

The label also gives directions. These tell you how much of the product to use and how often to use it. Use a product *only* as directed. If problems occur when you use the product, stop using it immediately and tell a trusted adult. There may be an ingredient in it that is causing the problem.

▼ **FIGURE 6.7**

### WHAT PRODUCT LABELS CAN TELL YOU

Product labels contain important information. **What do you think this product would be used for?**

### Comparison Shopping

When you compare two or more similar products by different manufacturers, you are comparison shopping. When comparing products, consider the benefits of one product over another. Which brand offers more of what you need and want? You should also consider the brand's reputation. Do you know anyone who has used and liked it? Finally, check to see if the





# Health Skills Activity

## Analyzing Influences

### Persuasive Advertising

Advertisers often use the following techniques to persuade you to buy their items.

- **Hidden messages.** Sometimes messages are in the form of pictures. A picture may show attractive people smiling when they use a product. This is telling you that the product will make you happier and healthier.
- **Comments by previous users.** These ads show people who claim to have used the company's product and gotten great results. These people may be paid actors.
- **Celebrity backing.** Popular actors, athletes, or celebrities promote some products. Remember that these people are paid to promote these products.

### With a Group

Find an example of an ad that uses one of the techniques described above. How might these ads influence your decision to try the product? Discuss your findings with the class.

product has a guarantee. A **guarantee** is a *promise to refund your money if the product doesn't work as claimed*. It shows that the company that makes the product actually believes in their product and is willing to stand behind it.

When comparing the costs of health products, one important factor is **unit price**. This is the *cost per unit of weight or volume*. Often, a product's unit price appears on a tab on the shelf beneath it. You can compute it yourself, if necessary.

1. Find the weight or volume given on each product container. (Make sure that both products are measured in the same type of units.)
2. Divide the price of the product by its weight or volume.
3. The result is the unit price.

For example, an 8-fluid-ounce bottle of lotion costs \$3.89. Dividing \$3.89 by 8 equals \$0.49. The unit price is 49¢ per fluid ounce. What's the unit price of each bottle of liquid soap in **Figure 6.8**? Which costs less per fluid ounce? Which is a better value?



**▲ FIGURE 6.8**

## USING UNIT PRICING

Comparing unit price can help you save money. **Which of these products is a better value?**

## Saving Money

Comparing unit prices can help you save money. So does buying personal products at discount stores. Clipping coupons is another way to save. **Coupons** are *slips of paper that save you money on certain brands*. Coupons are found in many daily newspapers and store flyers. Another way to save is by selecting the store, or **generic** (juh·NEHR·ik), brand. These are *products that imitate name-brand products but are sold in plain packages*. They cost less because the product maker spends less money on advertising.

## Spotting False Claims

Some ads and product labels make claims that sound too good to be true. Some companies go beyond making misleading claims. They commit the crime of fraud. **Fraud** is *deliberately trying to trick consumers into buying a product or service*. Health fraud is a serious issue. You can report suspicious health products at the Food and Drug Administration (FDA) Web site. Helping fight fraud allows you to use your skill as a health advocate.

### Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

### Reading Check

**Explain** What are two ways consumers can save money?

## Lesson 3 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define *consumer*.
2. **List** What are two types of information found on health product labels?
3. **Recall** What is the benefit of knowing a product's unit price?

### Thinking Critically

4. **Apply** Jessica has poison ivy. She uses twice as much cream as the product label directs. Is this a good way of getting better faster?

5. **Synthesize** Why might a less expensive product not be the best product to buy? What other factors should you consider?

### Applying Health Skills

6. **Analyzing Influences** Imagine that you are selecting a deodorant. What factors would influence your decision?

## Lesson 4

# Using Medicines Responsibly

### Guide to Reading

#### Building Vocabulary

Arrange the terms below in a word web. Place what you believe is the *main* term at the center.

- medicines (p. 159)
- prescription medicines (p. 159)
- over-the-counter (OTC) medicines (p. 159)
- vaccines (p. 160)
- antibiotics (p. 160)
- side effect (p. 160)
- tolerance (p. 160)
- drug misuse (p. 162)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **explain** how medicines help you.
- **identify** information on medicine labels.
- **access** reliable health information on medicines.

#### Reading Strategy

**Organizing Information** As you read the lesson, make notes about what medicines do and how to use them safely.

## What Are Medicines?

**Medicines** are *drugs used to treat, cure, or prevent diseases or other medical conditions*. In earlier times, medicines were taken from plant leaves. People would eat the leaves or drink tea brewed from them. Today most medicines are in the form of pills or liquids. Occasionally they are also injected into the bloodstream using needles, inhaled into the lungs, or rubbed into the skin.

There are two types of medicines. **Prescription** (prih·SKRIP·shuhn) **medicines** are *medicines sold only with a written order from a doctor*. **Over-the-counter (OTC) medicines** are *medicines available without a written order from a doctor*. These are also known as “nonprescription medicines.” Prescription medicines require a doctor’s supervision because they can carry more risks. However, OTC medicines should be used just as carefully.

- ▶ Different medicines do different jobs. **Why do you think it is important to tell a new doctor what medicines you are taking?**

### Quick Write

Describe a TV commercial you have seen advertising a medicine. Tell what the medicine is supposed to do.





## What Medicines Do

Different medicines do different jobs. Medicines that protect you from getting certain diseases are known as **vaccines**. Some medicines cure diseases or kill germs. One type of germ-fighting medicine is **antibiotics** (an·tih·by·AH·tikhs). These *kill or stop the growth of bacteria and other specific germs*. Still some medicines are used to manage *chronic*, or ongoing, conditions such as asthma. Other medicines relieve symptoms, such as itching, or pain.

- ▲ Vaccines are medicines that prevent disease.  
**What are some common vaccines given today?**



**List** Name three different kinds of medicine, and tell what job each does.

## How Medicines Affect the Body

Because everyone's body is unique, medicines affect people in different ways. Factors that determine how a medicine affects you include age, weight, and general health. Combining medicines may also affect the way they work. Some medicines don't mix well with others and can cause harmful reactions. Some people are allergic to certain medicines and cannot take them at all.

## Negative Reactions to Medicines

Even when used as directed, medicines can cause unwanted reactions. A **side effect** is *any reaction to a medicine other than the one intended*. Common side effects are drowsiness, dizziness, or upset stomach. Taking more than one medicine at a time can cause dangerous side effects if they are not supposed to be taken together. Make sure your doctor and pharmacist know *all* the medicines you are taking, including OTC medicines.

If you take a medicine for a long time, you may develop a **tolerance** (TAHL·ehr·uhns). This means *the body becomes used to the medicine and no longer has the same effect*. Greater amounts of the medicine are needed to get the same results. This can become a dangerous problem. If a medicine you are taking no longer seems to be working, tell a parent or guardian, and speak to your doctor.



**Define** What does *side effect* mean?

## Using Medicines Safely

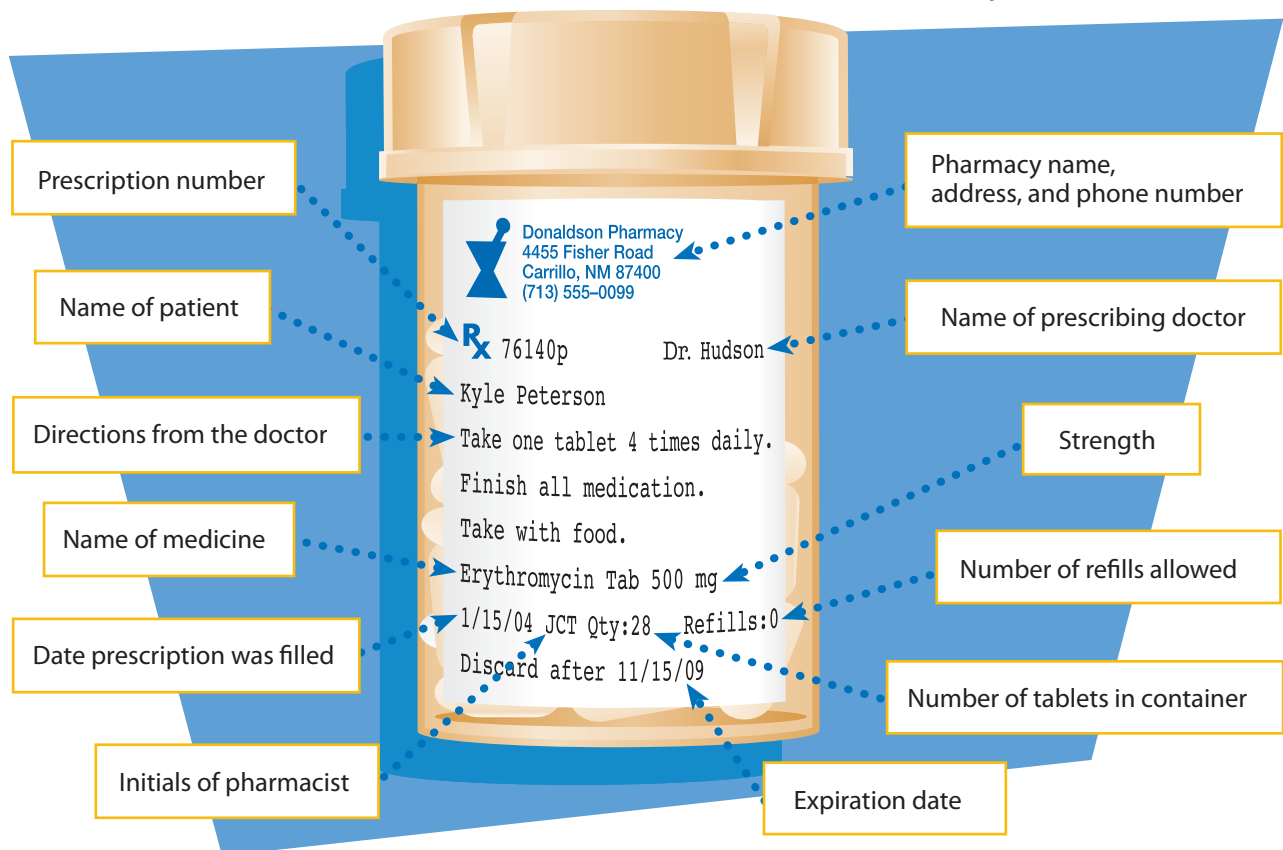
Before using OTC or prescription medicines, read the product label. The FDA requires makers of medicines to include certain information on medicine labels. Pharmacists are also required to include specific information on prescription labels. This includes the name of the patient and doctor, instructions for using the medicine, and the *dose*. This is how much of the medicine to take at one time. One especially important item on the label is the *expiration date of the medicine*. Find the expiration date on the sample prescription medicine label in **Figure 6.9**. All medicines have ingredients that can change over time and become less effective. The expiration date will tell you the date after which you can longer use the medicine.

Over-the-counter (OTC) medicines have both front and back labels. The front label contains the name of the product and type of medicine. It also lists the main ingredient. The back label lists *directions* for use, which are similar to dosage information on a prescription label. If you have questions about an OTC or prescription medicine, talk to your pharmacist or doctor.

**FIGURE 6.9**

### LABEL ON A PRESCRIPTION MEDICINE

Medicine labels include instructions on how to use the medicine safely. **If you had questions about the use of this product, whom could you ask?**



## Responsibility

You can show responsibility by sharing information about the dangers of drug misuse with your family. Urge parents or guardians to throw away any medicines that have expired.

**What are some other steps you can take to demonstrate responsibility at home?**

## Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 4.

## Improper Use of Medicines

Medicines can do serious harm as well as good. This is why they should be taken with great care. *Taking medicine in a way that is not intended* is **drug misuse**. Taking more medicine than a doctor instructs is one example of drug misuse. To avoid misusing drugs, follow these guidelines.

- Talk to your doctor or pharmacist if you are not sure how to use a medicine.
- In the case of prescription medicines, take only medicines prescribed specifically for you.
- Use all medicines only as instructed. Make sure you understand the dose and how often it should be taken. Use exactly the amount indicated on the label.
- Don't use a medicine that was prescribed for an earlier illness without a doctor's approval.
- Don't use a medicine that has expired.

Using medicines in ways that are unhealthy is a form of drug abuse. You will learn more about drug abuse in Chapter 11.

## Reading Check

**Give examples** What are three ways of avoiding drug misuse?

## Lesson 4 Review

## After You Read

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

## What I Learned

1. **Identify** What are three ways that medicines can enter the body?
2. **Recall** Name two items on an over-the-counter (OTC) medicine label.
3. **Vocabulary** Define *tolerance*.

## Thinking Critically

4. **Hypothesize** Why might a doctor prescribe different medicines for two people with the same illness?

5. **Synthesize** Why do you think the number of refills allowed is important information to include on a medicine label?

## Applying Health Skills

6. **Accessing Information** The Internet makes it easier than ever to get information about medicines. Under your teacher's supervision, visit a Web site that contains information about medicines. List the kinds of facts provided.

## Health Care in Your Community

### Guide to Reading

#### Building Vocabulary

Define the familiar terms below in your notebook. Define the unfamiliar terms as you read the lesson.

- health care (p. 163)
- specialist (p. 164)
- voluntary health agencies (p. 165)
- health insurance (p. 166)
- managed care (p. 167)

#### Focusing on the Main Ideas

In this lesson, you will learn to

- **identify** different types of health care providers.
- **explain** the importance of regular health checkups.
- **apply** the skill of advocacy to raise awareness of health problems.

#### Reading Strategy

**Classifying** As you read the lesson, list the different health care providers, groups, and agencies. Find examples of each in your own community.

### What Is Health Care?

**Health care** includes *any services provided to individuals or communities that promote, maintain, or restore health*. The health care industry is made up of a number of different health care providers, groups, and agencies. In this lesson, you will learn about the role each of these plays in your health.

### Health Care Providers

Imagine you were feeling sick. Your parent or guardian might take you to see a doctor. Your doctor provides you with primary health care. Primary care includes the treatment of illnesses or diseases that do not require hospitalization. Primary care also includes *preventive care* such as regular health checkups and immunization against disease. Preventive care is any action that helps prevent the onset of disease or injury.

Different health professionals can provide primary care. This includes doctors, nurse practitioners, and physicians' assistants. All are trained to answer many health and medical questions and to give regular health checkups.

### Quick Write

Explain in a paragraph why you think it's important to have regular medical checkups.



- ▶ Regular checkups can help you stay healthy. **Who are some of the different health professionals you could see for a checkup?**



## Annual Physical Checkups

Getting regular checkups is one way to prevent health problems and maintain wellness. During a checkup, your health care provider will check your height and weight. He or she will also check your heart and lungs. Your vision and hearing may be tested. You may also receive any immunizations you need. These help your body resist getting certain common childhood diseases, such as measles.

## Specialists and Other Health Care Providers

Sometimes the doctor or other health professional you see first will need to refer you to a **specialist** (SPEH·shuh·list). This is *a doctor trained to handle particular health problems*. Some specialists treat specific types of people. Other specialists treat specific conditions or body systems. **Figure 6.11** shows some of these specialists.

Health care today is largely a team effort. It involves more care providers than just your primary doctor and specialists. Think of the many health professionals you see. These probably include a dentist and/or dental hygienist. At school, you probably have a school nurse who can help you. You might see a counselor, either at school or in the community. All of these professionals play a role in keeping you healthy.

Specialist	Specialty
Allergist	Asthma, hay fever, other allergies
Cardiologist	Heart problems
Dermatologist	Skin conditions and diseases
Oncologist	Cancer
Ophthalmologist	Eye diseases
Orthodontist	Tooth and jaw irregularities
Orthopedist	Broken bones and similar problems
Otolaryngologist	Ears, nose, and throat
Pediatrician	Infants, children, and teens

◀ FIGURE 6.11

## SOME SPECIALISTS

Different specialists treat different conditions or types of people. **Are there other specialties you have heard of?**

### Other Sources of Health Care

Your health care doesn't stop with the individuals who treat you personally. There are groups and organizations that contribute to your health. In this country, government agencies oversee the health of communities as a whole. They make sure that our food and water are safe to eat and drink. They also fund research to help treat and cure diseases and improve medical technology.

Other groups that play a role in health care include **voluntary health agencies**, *organizations that work to treat and eliminate certain diseases*. Two examples of these agencies are the American Heart Association and American Cancer Society. These groups are privately run. This means that they receive



◀ Volunteer health agencies often raise money by sponsoring community events such as races. **Are there any events like this in your community?**



# Health Skills Activity

## Advocacy

### Doing Your Part for Community Health

Volunteer health agencies need everyone's help to stamp out disease. How can you help? Here are some suggestions.

- A number of volunteer organizations have local chapters around the country. If there is a chapter in your community, contact them and ask how you can volunteer.
- Take part in a walk or run for a cure. These are held in many places across the country. Walkers or runners find sponsors before the event. Each sponsor donates a sum of money for every mile covered. The money collected from this effort goes toward research.

### With a Group

Choose and research a major disease or health problem. Are there any local volunteer organizations for this health problem? Find out what volunteer opportunities they have for teens.

donations from individuals and groups, and not from the government, to pay for what they do. One of their most important jobs is to educate the public about diseases. They also conduct research to fight diseases.



### Reading Check

**List** Name several different types of specialists, and tell what each does.

## Paying for Health Care

Paying for health care can be difficult, especially if you have an ongoing illness. Surgery and hospital stays, for example, can cost thousands of dollars. Many people pay for health care by buying **health insurance**. This is *an insurance policy that covers most health-care costs*. These people pay a monthly fee to the health insurance company for the policy. Some employers help their employees pay the monthly fee. When a person goes to the doctor or hospital, their insurance will usually pay a large part of the health care cost. Health insurance will usually pay part of the cost of prescription medicines as well.

Because of rising costs, there are new options when choosing health insurance. One option is **managed care**. This is a health insurance plan that saves money by limiting people's choice of doctors. Patients save money when they visit doctors who participate in the managed care plan.

Two types of health insurance offered by the government are Medicaid and Medicare. Medicaid is for people with limited income. Medicare is for adults over the age of 65 and people of any age with certain disabilities.



◀ Vision insurance is one type of health insurance that helps people pay for visits to the eye doctor. **What do you think dental insurance helps people pay for?**

### Reading Check

**Explain** Tell how a patient saves money with a managed care plan.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 5.

## Lesson 5 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *health care*.
2. **Describe** Why is it important to have regular health checkups?
3. **Recall** What are some steps the government takes to oversee the health of Americans?

#### Thinking Critically

4. **Hypothesize** What kinds of information can a patient give to a primary care provider to help solve a health problem?

5. **Evaluate** How do volunteer health agencies contribute to our overall health?

#### Applying Health Skills

6. **Advocacy** Using the phone directory, make a list of health care resources for your community. Identify the kinds of health care each group offers. Convert your findings into a booklet. Share copies with other students.

# Building Health Skills

## ACCESSING INFORMATION

### Buyer Beware!

#### DIRECTIONS

Accessing Information involves finding reliable information to make healthy choices. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

The media influences what you choose to buy as a consumer. Think of the many advertisements you see, read, or hear every day. In addition, you may hear or read news reports, magazine articles, and other information about certain products.

Lindsey wanted a pair of sunglasses and read in a magazine that lenses with UV protection provide the best benefits over other types of sunglasses. At the pharmacy she saw several different styles of sunglasses that she liked. Lindsey picked up one style with UV lenses. She also picked up another style she really liked that did not have UV lenses. Lindsey asked the pharmacist for advice. The pharmacist confirmed that UV lenses would protect her eyes from potential damage from the sun.

Lindsey knew the pharmacist was a reliable source that she could trust. She felt confident choosing the sunglasses with UV lenses.



## 2 Practice

Advertisements often make claims about a product's effectiveness. Lindsey's sister, Briana, has a sore throat. Lindsey's father asks her to help choose a product that would relieve Briana's symptoms. In the pharmacy ad, they see a sale on throat lozenges. "Lasts all day," the ad reads. Another product, a throat spray, advertises that it would provide "instant relief."

Using what you have learned about accessing information, answer these questions.

1. Are advertisements good sources of information?
2. What additional information might Lindsey and her father need to make a confident decision?
3. Where could they find more reliable information to help evaluate the different products?

## 3 Apply

Working with a group, find three different advertisements for health products. Write down what claim each advertisement makes about the product. Does each claim seem believable? What additional information is needed?

Identify two sources where teens could find reliable information about these health products. Explain why these resources are reliable.

### Skill Summary

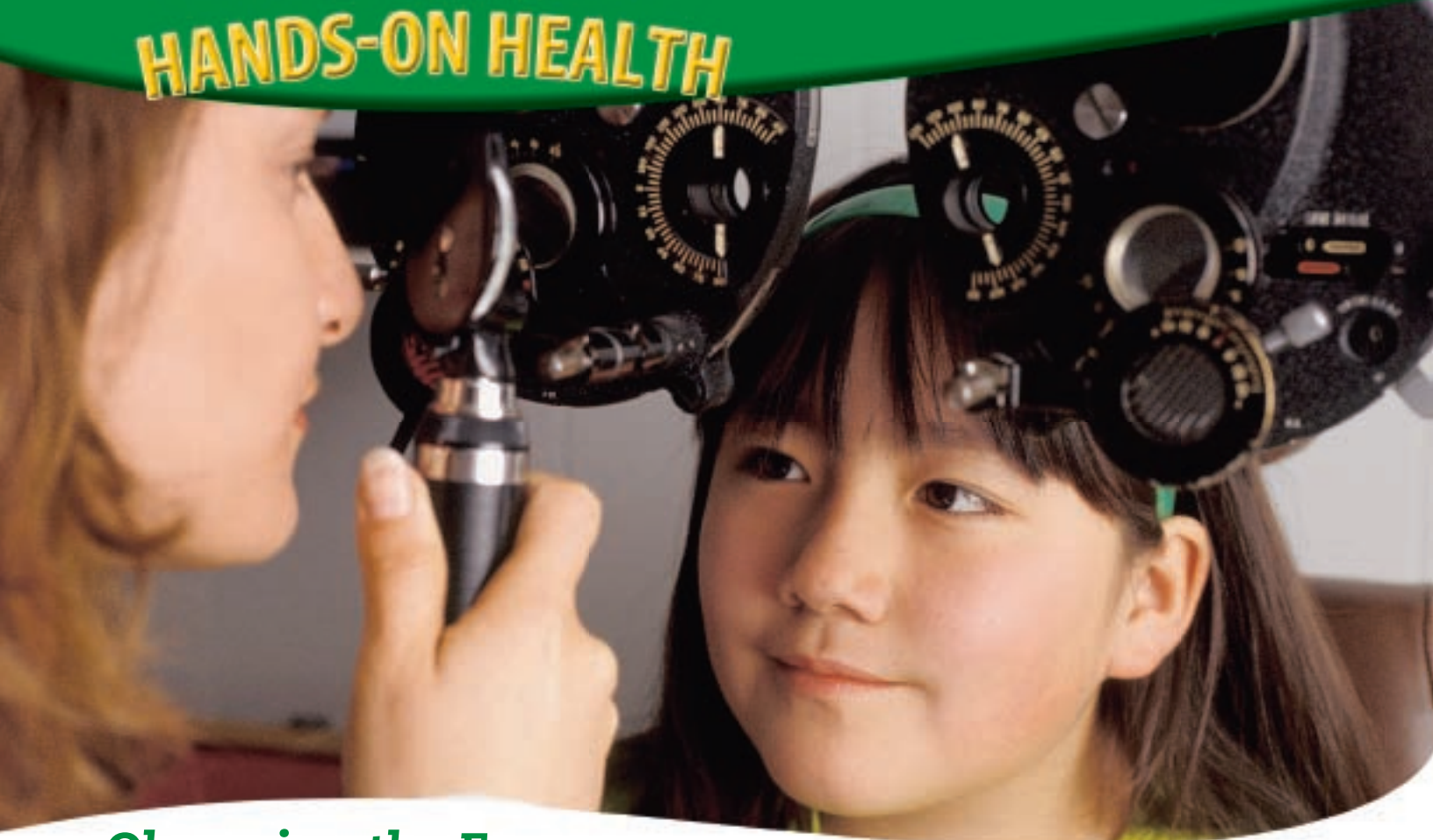
#### ACCESSING INFORMATION

Smart shopper tips:

- Be cautious about product claims made in advertisements.
- Read labels to learn what products contain, how they work, and how to use them.
- If you want more information about a health product, talk to your parent or guardian or your local pharmacist.

### Self-Check

- Did I find at least three different advertisements for health products?
- Did I name two sources of reliable health information?
- Did I explain why these resources are reliable?



## Observing the Eye

Your eyes can adjust very quickly to different levels of light. The muscles inside the eye change so that more or less light comes in. Most people can also distinguish colors with their eyes. Some, however, are born without the ability to see certain colors. Try this activity to observe how your eyes react to light and color.

### What You Will Need

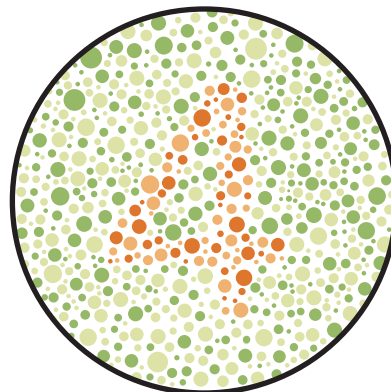
- Mirror
- Pencil or pen
- Paper

### What You Will Do

- 1 Turn off the lights. Sit in the dark for two to three minutes.
- 2 Turn the lights back on, and quickly look at your eyes in the mirror. Watch what happens in the center of your eyes. Record what you saw.
- 3 Once your eyes have adjusted to the light, do the color vision test. Look at the circle shown on this page. Can you see a number in the circle? If not, you may have trouble distinguishing between the colors red and green.

### Wrapping It Up

As a class, make a chart or graph that compares the results for all students. What do your findings show?



# Reading Review

## 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 Your Teeth, Skin, and Hair

#### Key Ideas

- Keep your teeth healthy by brushing and flossing, eating healthy, and seeing your dentist.
- Skin care includes daily cleansing and protecting the skin from the sun's UV rays.
- Hair care includes brushing and regular shampooing.
- Nail care includes trimming and pushing back the cuticles.

#### Vocabulary

- hygiene (p. 144)
- plaque (p. 145)
- fluoride (p. 146)
- epidermis (p. 147)
- dermis (p. 147)
- sunscreen (p. 148)
- acne (p. 148)
- dandruff (p. 149)
- cuticle (p. 150)

### Lesson 2 Protecting Your Eyes and Ears

#### Key Ideas

- To care for your eyes, get regular eye checkups. Read and watch TV in a well-lit room.
- Protect your ears by limiting their exposure to loud sounds.

#### Vocabulary

- farsightedness (p. 152)
- nearsightedness (p. 152)
- astigmatism (p. 152)

### Lesson 3 Choosing Health Products

#### Key Ideas

- Factors that influence you as a consumer include personal likes and dislikes, cost, and the media.
- Consumer skills can help you become a smart shopper.

#### Vocabulary

- consumer (p. 157)
- guarantee (p. 157)
- unit price (p. 157)
- coupons (p. 158)
- generic (p. 158)
- fraud (p. 158)

### Lesson 4 Using Medicines Responsibly

#### Key Ideas

- Information on medicine labels includes instructions on how to use the medicine.
- Drug misuse involves using medicines in ways other than those intended.

#### Vocabulary

- medicines (p. 159)
- prescription medicines (p. 159)
- over-the-counter (OTC) medicines (p. 159)
- vaccines (p. 160)
- antibiotics (p. 160)
- side effect (p. 160)
- tolerance (p. 160)
- drug misuse (p. 162)

### Lesson 5 Health Care in Your Community

#### Key Ideas

- Health care providers include those who provide primary care and specialists.
- Health insurance helps many people pay for health care costs.

#### Vocabulary

- health care (p. 163)
- specialist (p. 164)
- voluntary health agencies (p. 165)
- health insurance (p. 166)
- managed care (p. 167)



## After You Read

## IM Express

Now that you have read the chapter, review your answer to the I.M. Express 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 sentence.

- acne
- astigmatism
- dermis
- farsightedness
- fluoride
- nearsightedness
- health care
- specialist

### Lesson 1 Your Teeth, Skin, and Hair

1. \_\_\_\_\_ is a substance that fights tooth decay.
2. A condition caused by overly active oil glands is called \_\_\_\_\_.
3. The thicker inner layer of the skin is known as the \_\_\_\_\_.

### Lesson 2 Protecting Your Eyes and Ears

4. \_\_\_\_\_ is a condition in which near objects appear clear while those faraway look blurry.
5. A misshaped cornea or lens that causes objects to look wavy or blurred is known as \_\_\_\_\_.
6. \_\_\_\_\_ is a condition in which faraway objects appear clear while near objects look blurry.

On a sheet of paper, write the numbers 7–15. Write **True** or **False** for each statement. If the statement is false, change the underlined word to make it true.

### Lesson 3 Choosing Health Products

7. Comparison shopping involves comparing different brands of a product.
8. A unit price is your promise of a refund of your money if the product doesn't work as claimed.
9. The store brand of an item is also known as a generic brand.

### Lesson 4 Using Medicines Responsibly

10. Vaccines are medicines that kill or stop the growth of bacteria and other specific germs.
11. When you develop a side effect to a medicine, your body needs greater amounts.
12. Taking more of a medicine than the doctor instructs is an example of drug misuse.

### Lesson 5 Health Care in Your Community

13. When a problem is beyond your doctor's training, he or she might suggest that you see a specialist.
14. Voluntary health agencies are organizations that work to help prevent and cure certain diseases.
15. Managed care is a program to help people with limited income get health care.



### Thinking Critically

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

- 16. **Predict** If you don't treat a hearing problem how might it affect other areas of your health?
- 17. **Evaluate** Are consumer skills only good for saving money? Explain.

### Write About It

- 18. **Advocacy** Imagine that you are writing an article about a volunteer health agency. Explain the kinds of things the volunteer health agency does. Tell how a teen can help.

**Dental Hygienist** Would you like to help improve people's smiles? With just one to two years of training at a college or vocational/technical school, you can become a dental hygienist. These professionals assist dentists. They help clean teeth and gums, insert fillings, and take X-rays. Hygienists work with a variety of special tools. They also have a lot of contact with people. Learn more about this and other health careers by clicking on Career Corner at [health.glencoe.com](http://health.glencoe.com).

- 19. **Analyzing Influences** Write a short story about a teen who is trying to decide which health product to buy. Identify the factors that might influence the teen's decision.

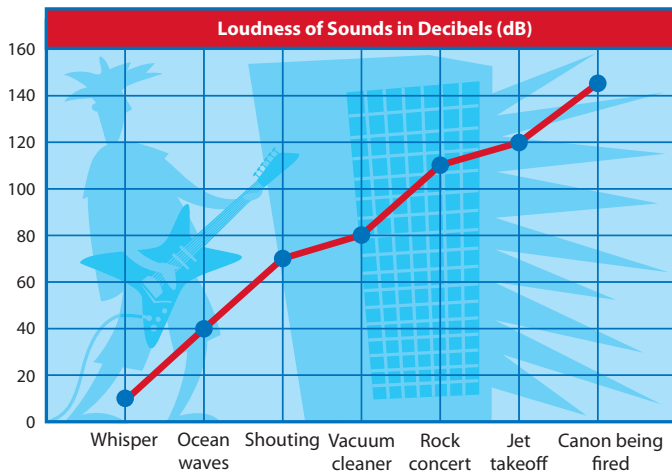
## Standardized Test Practice

### Math

Use the graph to answer the questions.

#### TEST-TAKING TIP

Make sure you understand the parts of a graph. Read the title. Look at the label next to the vertical (y) axis. Look at the label beneath the horizontal (x) axis.



1. If any noise above 85 dB is harmful, then all of the following sounds are harmful *except*
  - A. a jet takeoff.
  - B. a canon being fired.
  - C. a vacuum cleaner running.
  - D. a rock concert.
2. Based on the line graph, which inference can be made?
  - A. Two people shouting are likely to be louder than a vacuum cleaner.
  - B. Sounds under a whisper are probably too quiet to hear.
  - C. Going to the beach can harm your hearing.
  - D. Airport ground crews have hearing problems.

## Your Body Systems



## Chapter Preview

<b>Lesson 1 From Cells to Body Systems</b> .....	176	<b>Building Health Skills</b> .....	194
<b>Lesson 2 Bones and Muscles</b> .....	181	<b>TIME Health News</b> .....	196
<b>Lesson 3 Digestion and Excretion</b> .....	185	<b>Chapter Reading Review</b> .....	197
<b>Lesson 4 Heart, Blood, Lungs, and Nerves</b> .....	188	<b>Chapter Assessment</b> .....	198

## ▲ Working With the Photo

Knowing how your body systems work will help you understand how to take care of your body. **Can you name some of the main body systems?**

# Start-Up Activities

## Before You Read

What do you do to take care of your body systems? Take the short health inventory on this page. Keep a record of your answers.

### HEALTH INVENTORY

1. I wear a helmet when riding my bike.  
(a) always (b) sometimes (c) never
2. I make sure to include calcium-rich foods in my diet.  
(a) always (b) sometimes (c) never
3. I drink several glasses of water each day.  
(a) always (b) sometimes (c) never
4. I take time to stretch after exercising.  
(a) always (b) sometimes (c) never

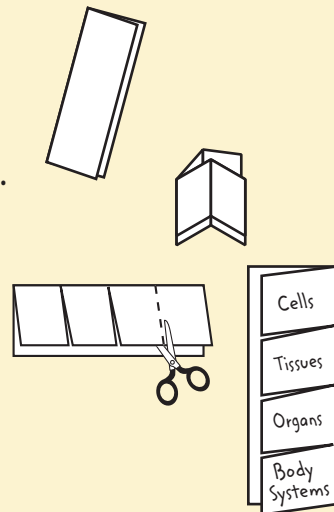
## FOLDABLES™ Study Organizer

### As You Read

Make this Foldable™ to help you organize the information on the form and function of body systems in Lesson 1. Begin with a plain sheet of 8½" x 11" paper.

- 1 Fold a sheet of paper along the long axis. Leave a ½" tab along the side.
- 2 Turn the paper. Fold in half, then fold in half again.
- 3 Unfold and cut the top layer along the three fold lines. This makes four tabs.
- 4 Turn the paper vertically, and label the tabs as shown.

Write down the definitions of the terms *cells*, *tissues*, *organs*, and *body systems*, and list examples of each under the appropriate tab.



Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the e-flashcards to preview Chapter 7 vocabulary terms.

## From Cells to Body Systems

### Guide to Reading

#### Building Vocabulary

Write each term below in your notebook. As you come across the term in your reading, write its definition.

- cells (p. 177)
- tissues (p. 177)
- organs (p. 177)
- body systems (p. 177)

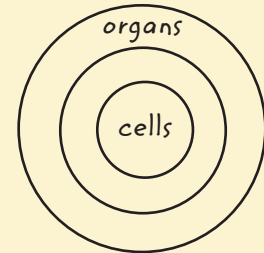
#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** the body's building blocks.
- **name** the major body systems and identify their functions.
- **list** ways to care for your body systems.

#### Reading Strategy

**Organizing Information** Make a bull's-eye diagram like the one to the right. Show how cells and other "building blocks" of the body relate.



**FOLDABLES** Study Organizer Use the Foldable™ on p. 175 as you read this lesson.

### Quick Write

Watch your hand as you form a fist and then release it. Try to name the parts you see working together.

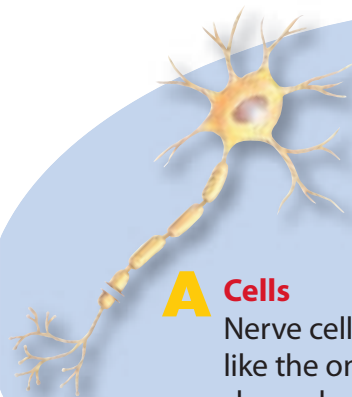
### Parts of the Body

Have you ever looked inside a computer? If you have, you know there are many parts that work together. Each part does a separate job. The same is true of your body. Like the computer, your body has a command center. It gives instructions to muscles and joints so that you can raise your arms. It is instructing your eyes to read this page right now!

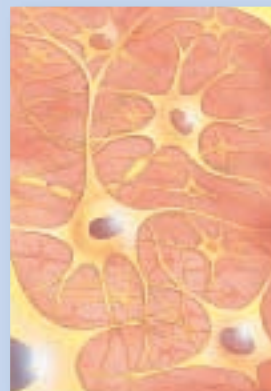
▶ **FIGURE 7.1**

### BUILDING BLOCKS OF THE BODY

The body system shown here is the nervous system. **What is the most basic building block of the nervous system?**



**A Cells**  
Nerve cells, like the ones shown here, carry messages to and from your brain.



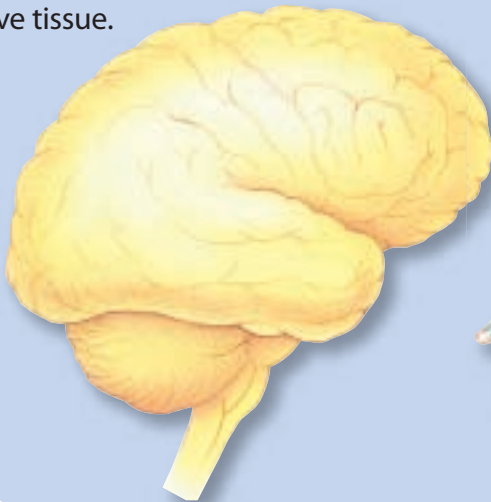
**B Tissues**  
This tissue is made up of nerve cells.

## From Cells to Systems

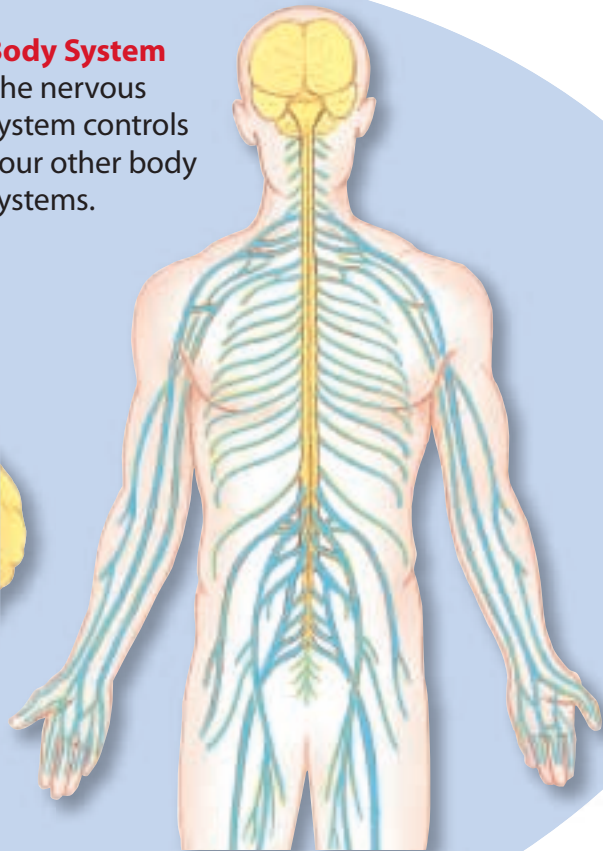
Your body is made up of many different kinds of cells, which vary in size and shape. **Cells** are *the basic building blocks of life*. Each cell does a specialized job. Nerve cells, for example, carry messages to and from your brain. Skin cells, on the other hand, are flat and rectangular. This allows them to spread out and cover the surface of your body.

*Groups of similar cells that do the same kind of work* are called **tissues**. For example, nerve cells such as those shown in **Figure 7.1** come together to form nerve tissue. Tissues come together to form organs. **Organs** are *structures made up of different types of tissues that all work together*. For example, your heart is an organ made up of muscle tissue, nerve tissue, and blood tissue. Organs perform specific jobs. Your brain is an organ that allows you to think and feel. Your stomach is an organ that stores and digests the food you eat. The next level up from organs is body systems. **Body systems** are *groups of organs that perform a body function*. For example, the digestive system breaks down food for energy.

**C** **Organs**  
This organ, the brain, is made mostly of nerve tissue.



**D** **Body System**  
The nervous system controls your other body systems.



▼ FIGURE 7.2

## MAIN BODY SYSTEMS AND THEIR FUNCTIONS

The chart shows the main body systems. Which of these work together?

Body System	Jobs
Circulatory system	Brings food and oxygen to cells and takes away cell waste
Digestive system	Breaks down food for energy
Endocrine system	Produces hormones that regulate body functions
Excretory system	Gets rid of body wastes
Muscular system	Allows movement of body parts
Nervous system	Controls all body systems; sends and receives messages; and helps you see, hear, taste, smell, and feel
Reproductive system	Involved in producing <i>offspring</i> , or children
Respiratory system	Carries oxygen to blood and removes carbon dioxide
Skeletal system	Provides a hard cage to protect body organs, gives the body structure, and works with the muscular system to allow movement

The names and functions of the major body systems appear in **Figure 7.2**. This chapter will cover all of these systems except for the endocrine and reproductive systems. Those two systems will be discussed in Chapter 8.

### The Body Systems Work Together

The body systems work together to keep the body functioning. For example, the skeletal and muscular systems pair up to support and move the body. They also form a protective shell around organs. The digestive and excretory systems also work as a team. The digestive system breaks down food for energy. The excretory system gets rid of unused food from your body as waste.

**Figure 7.3** shows the body systems in action. Notice how all systems relate during the act of running.



**List** Name three body systems, and tell what each does.

### Care of the Body Systems

How can you take care of your body systems? The key is healthy living. You've already learned about habits that promote good health and wellness. Here is a summary of some useful ideas.

### Connect To... Language Arts

#### Scientific Word Parts

Many diseases are named after the parts of the body they affect. Take, for example, the word *osteoporosis*. It is a disease that weakens the bones. The word's root, "*osteo*" means "bone." The ending, "*osis*" means "disease of." Other word parts named after the body are shown.

- Optic Eye
- Neur(o) Nerves or nervous system
- Cardi(o) Heart
- Bronch(o) Lungs

**What body system do you think is affected by bronchitis?**

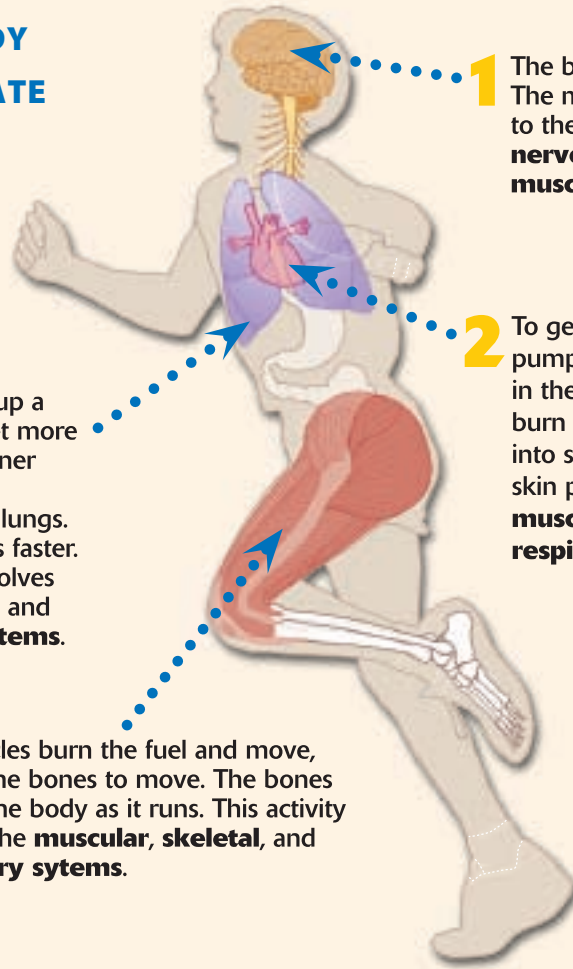
▶ **FIGURE 7.3**

## How the Body Systems Relate

The body systems depend on each other. **How many systems are active when you run?**

**4** Running burns up a lot of fuel. To get more oxygen, the runner gasps for breath provided by his lungs. His heart pumps faster. This process involves the **respiratory** and **circulatory systems**.

**3** The muscles burn the fuel and move, causing the bones to move. The bones support the body as it runs. This activity involves the **muscular, skeletal,** and **circulatory systems**.



**1** The brain sends out a message: Run! The message is carried through nerves to the muscles. This step involves the **nervous system** and the **muscular system**.

**2** To get energy, muscles need blood that is pumped by the heart. Blood contains fuel in the form of sugar as well as oxygen to burn that fuel. As blood flows, wastes pass into sweat glands that release them through skin pores. These processes involve the **muscular, circulatory, digestive, respiratory,** and **excretory systems**.

- **Eat well.** Following a balanced eating plan is important to the care of most body systems. It will keep your heart and bloodstream healthy. Foods rich in calcium build strong bones. Drinking plenty of water aids your digestive and excretory systems.
- **Get plenty of physical activity.** Teens, as you learned, are advised to get an hour of physical activity most days. Physical activity makes muscles, bones, and joints stronger. Proper warm-ups and cool-downs are also important to muscle and bone health. Aerobic activity helps your heart and lungs work more efficiently.
- **Maintain a healthy weight.** This will put less stress on your bones and organs. It will also make it easier for your heart to pump blood through your body.



- **Play it safe.** Make sure to wear the right gear when you are physically active. A helmet can protect your skull and its precious cargo, your brain. Elbow and knee pads will help prevent broken bones. Learning to lift properly, by bending at the knees, helps prevent back injuries.
- **Avoid drugs.** Alcohol can seriously damage the liver and other important organs. Smoking damages the lungs. Drugs of all kinds can damage the nervous system.

## Reading Check

**Give Examples** Name two habits that keep your body systems healthy.

- ▶ Your brain is one of your body's most important organs. **How are these teens protecting their brains?**



## Lesson 1 Review

### After You Read

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

### What I Learned

1. **Vocabulary** Define *tissues*.
2. **Give Examples** What is the function of the circulatory system?
3. **Recall** Name some behaviors that keep the skeletal system healthy.

### Thinking Critically

4. **Synthesize** Give an example of a risk a teen might take. Show how this behavior affects one or more body systems.

5. **Analyze** How might an injury to your nervous system affect your muscular system?

### Applying Health Skills

6. **Accessing Information** Different types of safety helmets are used for different physical activities. Using reliable print or online resources, research different types of approved helmets. What kind of helmet would be best to wear while riding a bike? How about when you play football?

## Bones and Muscles

### Guide to Reading

#### Building Vocabulary

Write each term below in your notebook. As you come across each term in your reading, write its definition.

- skeletal system (p. 181)
- joints (p. 182)
- muscular system (p. 183)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** the parts and functions of the skeletal system.
- **explain** the parts and functions of the muscular system.
- **determine** ways to protect the bones and muscles.

#### Reading Strategy

**Compare** As you read, look for similarities and differences between the skeletal system and the muscular system.

### The Skeletal System

Your bones are living tissue that make up the organs of your **skeletal system**. This is *a body system consisting of bones and the tissues connecting them*. Your bones are like the steel girders that support a skyscraper. They form your body's framework. They protect its soft parts from injury. Your bones also allow you to stand and move, with the help of your muscles. Adults have 206 separate bones in their bodies.

#### Bones

The bones inside your body are made up of living tissue and cells. Because bone tissue is alive, it is always being destroyed and remade to keep your bones strong. Bones are hard on the outside and have spongy tissue on the inside. This tissue produces blood cells for the circulatory system. Bones also store minerals such as calcium. Calcium strengthens your bones and teeth. When your body needs calcium, the bones release small amounts into the blood. The blood takes the calcium to where it is needed in the body.

- ▶ Regular physical activity helps keep your bones healthy.  
**What is another way to strengthen your bones?**

#### Quick Write

Write a paragraph describing why you think muscles sometimes get sore after exercise or other physical activity.



## Joints

**Joints** are places where one bone meets another. Different joints move in different ways. Some joints pivot, like your neck. The end of one bone rotates inside a ring formed by another. This joint can move up and down and from side to side. A hinge joint moves in only one direction like a door hinge. Your knee is an example of a hinge joint.

In ball-and-socket joints, the round end of one bone moves inside another's cup-shaped opening. A ball-and-socket joint can move in all directions. Your hip is an example of a ball-and-socket joint. Gliding joints allow one part of a bone to slide over another bone. They also move in a back-and-forth motion. Gliding joints are found in your wrists and ankles. **Figure 7.4** shows the four major types of joints as well as important bones.

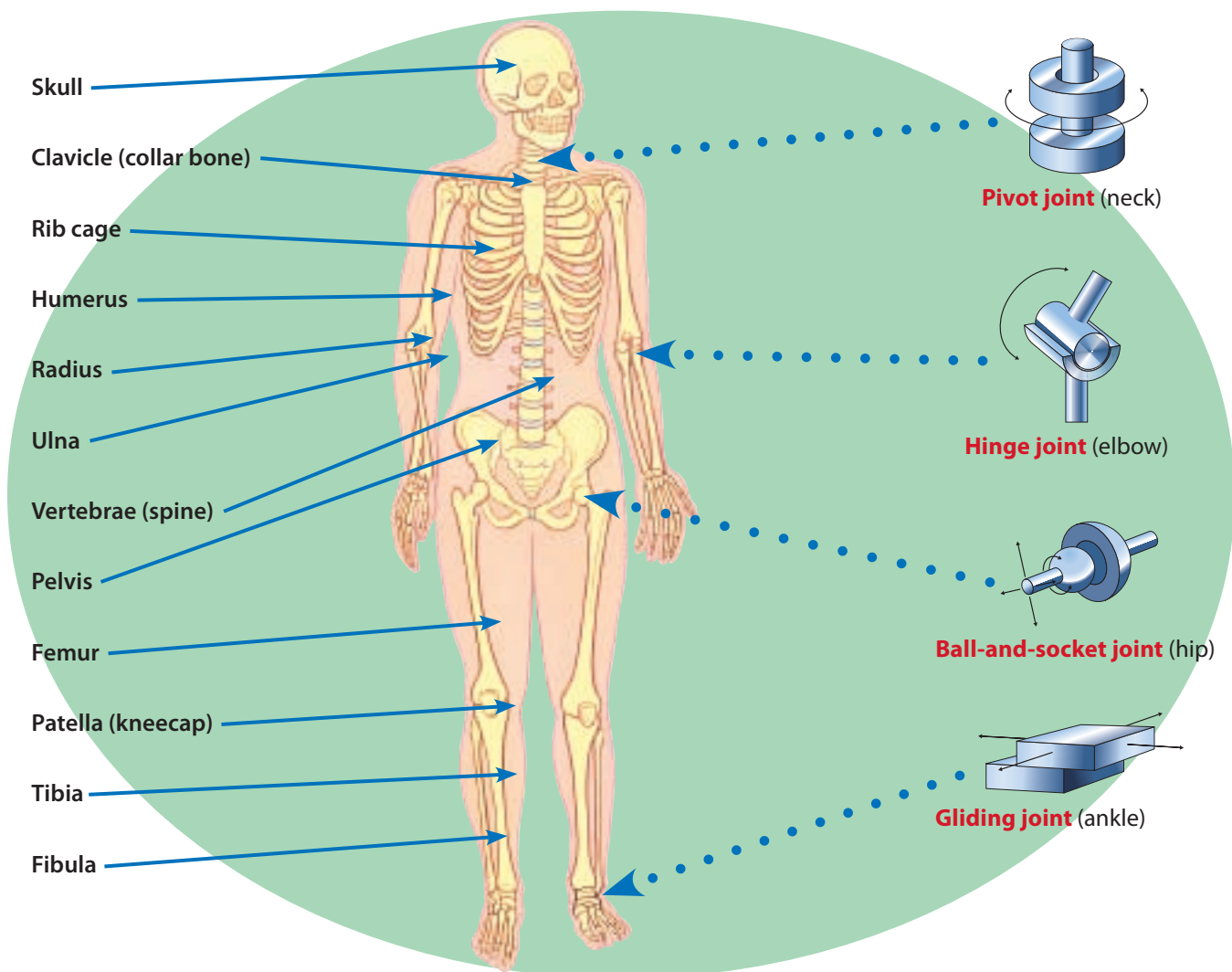
**FIGURE 7.4**

### THE SKELETAL SYSTEM

Notice the different shapes of different bones. Which of these bones have joints that pivot? Which have hinge joints?



**Define** What is the skeletal system?





# Health Skills Activity

## Practicing Healthful Behaviors

### Building Strong Bones

Your body needs plenty of calcium to keep your bones strong. Calcium is a mineral that makes bones hard. As a teen, your body is storing calcium to keep your bones healthy and strong as you get older. By eating calcium-rich foods, you help your body prepare for adulthood. The foods in the picture are all good sources of calcium.



### With a Group

Create a plan for a meal that is rich in calcium. Share your meal plan with the other groups so each student in class will have a variety of calcium-rich meals to choose from.

## The Muscular System

Your **muscular system** is made up of *all the muscles in your body*. Your muscles do several important things. They move the bones, pump your blood, and move food through the stomach and intestines.

There are three main types of muscles: skeletal, cardiac, and smooth. Skeletal muscles connect to and move your bones. You have this type of muscle in your arms, face, abdomen, back, and legs. They are considered *voluntary muscles* because you are able to control them. You are able to run, for example, by controlling the skeletal muscles in your legs.

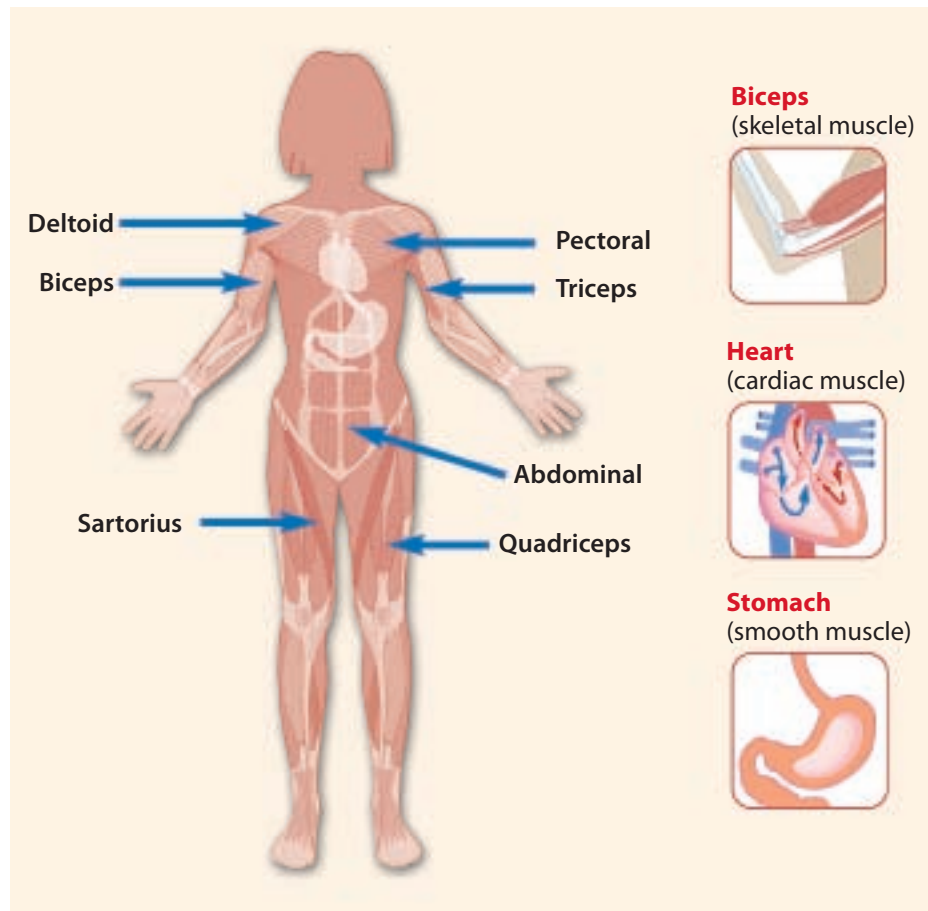
Cardiac muscles are located only in the heart. They pump blood into and out of your heart. Cardiac muscles are *involuntary*. They move automatically without you having to think about them.

Smooth muscles are found in many of your internal organs. The stomach, intestines, bladder, and blood vessels all have smooth muscles. Like cardiac muscles, smooth muscles are *involuntary* muscles. They slowly contract and relax on their own. **Figure 7.5** shows important muscle groups of the body.

▶ **FIGURE 7.5**

## THE MUSCULAR SYSTEM

Muscles do many different jobs in the body. **What are the three major types of muscles?**



### Health Online

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

## Lesson 2 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** What is the *skeletal system*? What does this system do?
2. **Identify** Name the four types of joints. Briefly describe each.
3. **Explain** Tell the difference between voluntary and involuntary muscles.

#### Thinking Critically

4. **Apply** Juan slipped on the ice. When he stood up, his leg looked fine yet it hurt. Why do you suppose this was the case?

5. **Analyze** Do you think the muscles responsible for activities such as breathing and digesting food are voluntary or involuntary? Are they smooth or skeletal muscles?

#### Applying Health Skills

6. **Practicing Healthful Behaviors** During most sports, your body parts are frequently in motion. Think of a sport, then list ways to protect the bones and muscles from injury when playing that sport.

## Digestion and Excretion

### Guide to Reading

#### Building Vocabulary

Look for ways the words below are related. Keep these connections in mind as you read the lesson.

- digestion (p. 185)
- digestive system (p. 185)
- excretory system (p. 186)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** the parts and functions of the digestive system.
- **explain** the parts and functions of the excretory system.
- **apply** the skill of advocacy to promote ways to care for the digestive and excretory systems.

#### Reading Strategy

**Sequencing** Create a flowchart that shows the path of food as your body digests it.

### The Digestive System

As explained in Chapter 4, the foods you eat contain nutrients. Nutrients are substances that nourish and provide energy for the body. *The process by which your body breaks down food into small nutrient particles is called **digestion**. The body system that controls this process is the **digestive** (dy·JES·tiv) **system**.* The digestive system has eight main parts, which are shown in **Figure 7.6**. The arrow shows the order in which the different parts enter into the process of digestion.

### The Digestive Process

The digestive process begins in your mouth. When you bite into an apple, for example, your teeth begin grinding the bite of apple into small bits. Chemicals in your saliva (suh·LY·vuh) called *enzymes* (EN·zymz) break down the apple further.

- ▶ The process of digestion begins in your mouth. **How can eating healthy foods help your digestive system?**

### Quick Write

Write a short paragraph explaining how you think digestion and excretion are related.



When you swallow, the crushed apple passes into your throat. Muscles contract and relax to push the fruit down the esophagus and into the stomach. The esophagus is a muscular tube that connects the mouth to the stomach. Strong acid, enzymes, and churning muscles in your stomach break down the food particles even further. The food particles move next into the small intestine. There, digestion breaks down the food particles into nutrients that are absorbed into the blood. The blood carries these nutrients throughout the body.



**Explain** What are enzymes? What is their role?

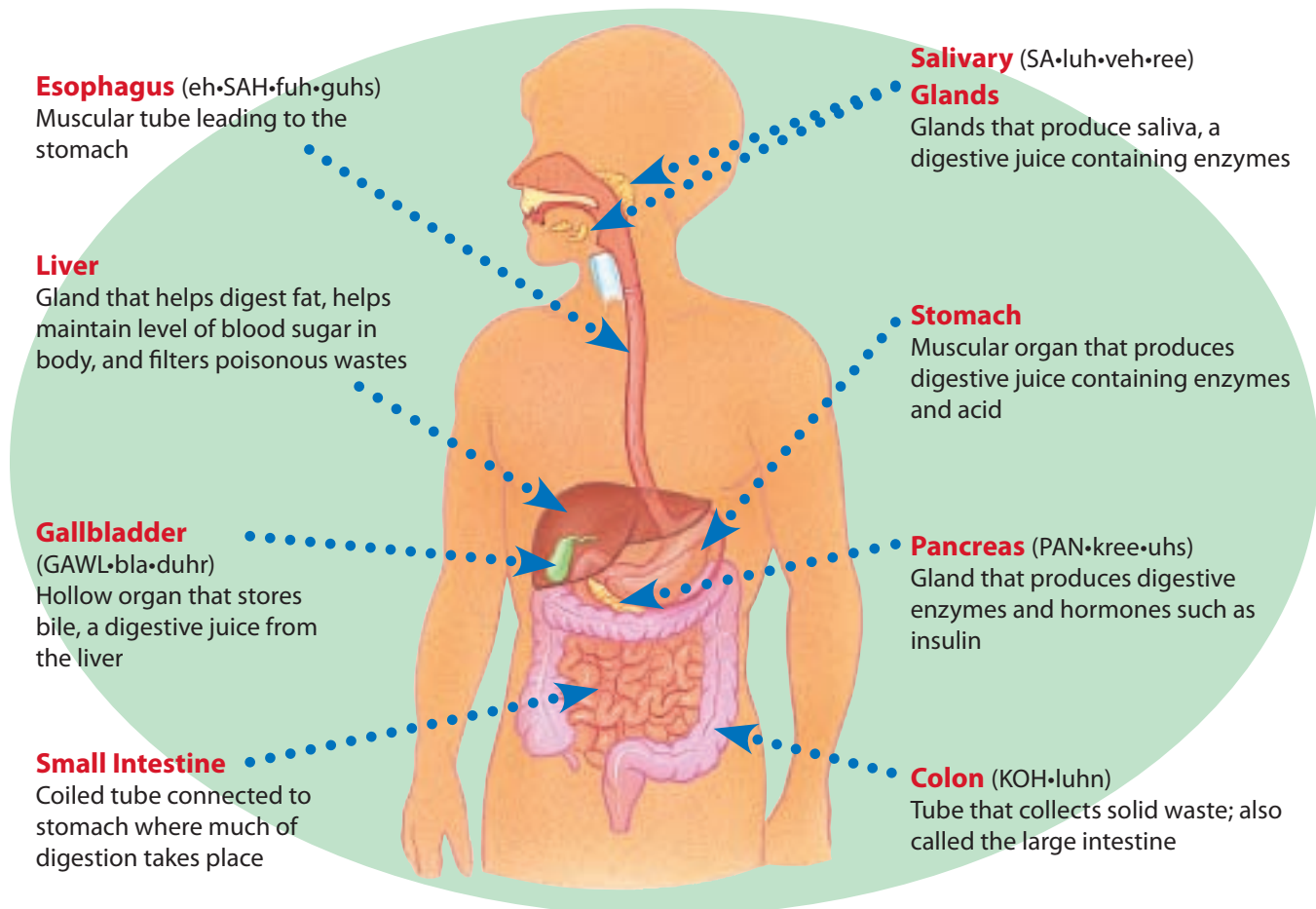
## The Excretory System

Your **excretory** (EK-skruh-tohr-ee) **system** gets rid of some of the wastes your body produces and also maintains fluid balance. The parts of the apple that can't be absorbed through digestion

**FIGURE 7.6**

### THE DIGESTIVE PROCESS

The digestive system involves many different body parts. **Where does this process begin?**



become waste and are excreted or *removed* from the body. Your respiratory system and skin are also part of the excretory system. The respiratory system gets rid of carbon dioxide when you exhale. Your skin releases liquid waste and salt in the form of sweat. Your body needs to get rid of wastes to remain healthy. If wastes are not removed, they can build up in the body and damage organs.

## Parts of the Excretory System

The major organs of the excretory system are the colon, kidneys, and bladder. Food particles that can't be absorbed in the small intestine are sent to the colon. There, most of the water is removed and absorbed by the body. When the colon fills up, the brain sends a message to the muscles in the colon telling them to contract. This action removes solid waste from the body.

The kidneys have several jobs. They filter the blood, remove water and waste, and maintain the body's fluid balance. When your brain detects too much water in your blood, your kidneys remove the excess water as liquid waste. Liquid waste from the kidneys, or *urine* (YOO·rihn), is stored in the bladder. When the bladder is full, the urine is passed out of the body.



- ▲ Drinking water helps the digestive and excretory systems function. **What is another health benefit of drinking water each day?**

### Reading Check

**List** Name two organs of the excretory system.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *digestion*, and use it in an original sentence.
2. **Recall** Once food is in the throat, how does it reach the stomach?
3. **List** Name two functions of the kidneys.

#### Thinking Critically

4. **Analyze** Do you think it would take your body longer to digest a large piece of food or one that has been cut into small pieces? Explain.

5. **Hypothesize** What do you think would happen if a person's kidneys were not working properly?

#### Applying Health Skills

6. **Advocacy** One way to maintain the health of the digestive system is to eat slowly. Research other ways to keep your digestive and excretory systems healthy. Make a list of your findings. Share this list with family members.



## Lesson 4

# Heart, Blood, Lungs, and Nerves

### Guide to Reading

#### Building Vocabulary

How are the terms below related? Which terms are muscles? Which terms are body systems?

- circulatory system (p. 188)
- heart (p. 189)
- blood pressure (p. 189)
- respiratory system (p. 191)
- lungs (p. 191)
- diaphragm (p. 191)
- nervous system (p. 192)
- neurons (p. 192)
- spinal cord (p. 192)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** how blood moves through the body.
- **understand** how your nervous system controls body functions.
- **analyze** factors in the environment that influence respiratory health.

#### Reading Strategy

**Classifying** As you read the lesson, list the parts of each body system discussed. Briefly describe the role of each part.

### Quick Write

Take a deep breath. Feel your heart beating in your chest. Write the names of the body systems that make these actions possible.

## The Circulatory System

Every modern building has pipes and wires inside the walls that carry water and energy throughout the building. Although these pipes and wires are hidden, each does an important job. The same is true of your body's **circulatory system**. This system *allows the body to move blood to and from tissues*. The blood delivers oxygen, food, and other materials to the cells. It also carries waste products away from the cells. The circulatory system, or *cardiovascular system*, consists of the heart, blood vessels, and blood. See **Figure 7.7**.

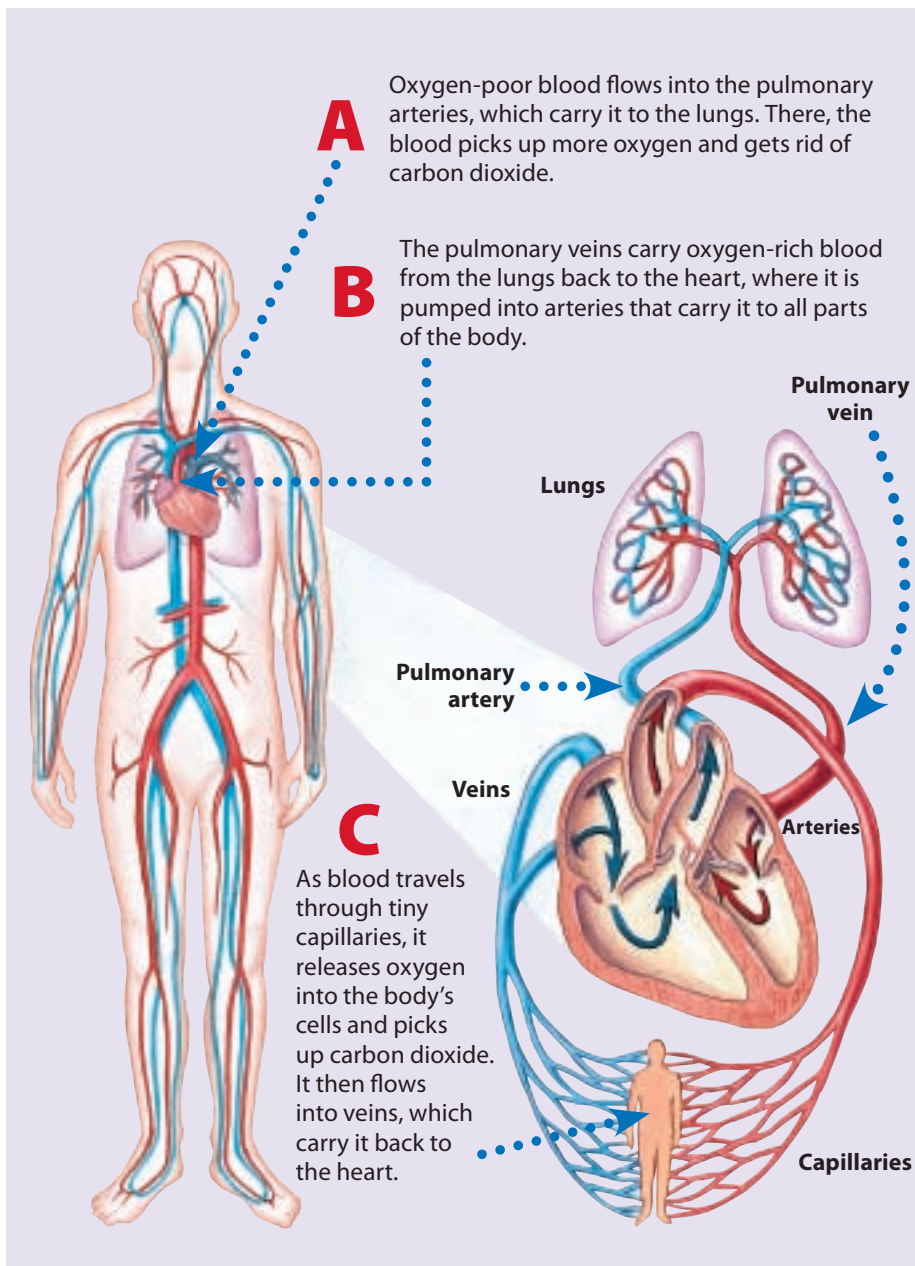


- ◀ During exercise, your circulatory system pumps extra blood to and from your body's cells. **Why do your cells need extra blood during exercise or other physical activity?**

◀ **FIGURE 7.7**

## THE CIRCULATORY SYSTEM

The blood vessels shown in blue carry oxygen-poor blood toward the heart and lungs. The red blood vessels carry oxygen-rich blood from the lungs to the heart. They also carry the blood to the rest of the body. **Why are the pulmonary arteries shown in blue?**



### The Heart: The Body's Pump

The muscle that acts as the pump for the circulatory system is the **heart**. It pushes blood through tubes called blood vessels. There are three different types of blood vessels. *Arteries* carry blood away from the heart. *Veins* return blood to the heart. Between the arteries and veins are tiny blood vessels known as *capillaries* (KAP·uh·layr·eez). The capillaries deliver oxygen and nutrients in the blood directly to the body's cells.

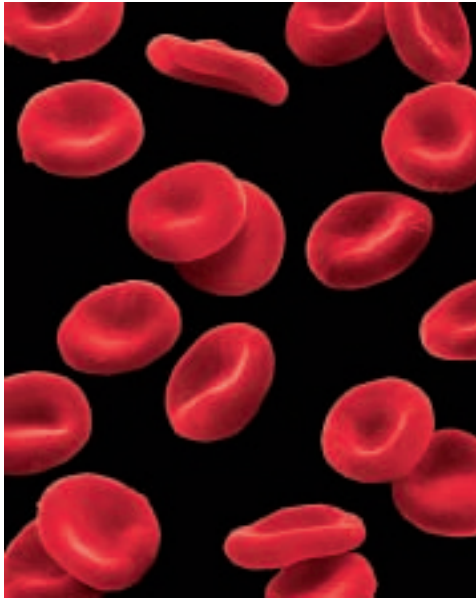
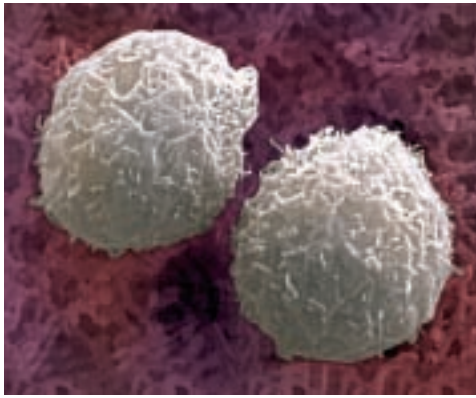
The force of blood pushing against the blood vessel walls is called **blood pressure**. Blood pressure is greatest when the heart contracts, or pushes out blood. It is lowest between heartbeats, when the heart relaxes.

### Health Online

#### Topic: Keeping Track of Your Pulse

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities that will teach you how to test your heart rate, or pulse.

**Activity:** Using the information provided at the link above, take your pulse three times a day—when you first get up, at noon before lunch, and before you go to bed—to see when your heart is working hardest.



▲ This picture shows blood cells magnified many times. **What does each type of blood cell do?**

## Parts of the Blood

Blood is made up of several different parts. These include solids as well as liquid. The liquid part of blood is *blood plasma*. Plasma makes up about half of blood's total volume. Plasma itself is about 92 percent water. Its job is to transport blood cells and dissolved food.

The solid parts of blood include the following:

- **Red blood cells.** These cells carry oxygen to all other cells of the body. They carry away some waste products.
- **White blood cells.** These help destroy disease-causing germs that enter the body.
- **Platelets.** These are small, disk-shaped structures that help your blood clot. Clotting keeps you from losing too much blood when you have a cut.

## Blood Types

When a person undergoes surgery, he or she may lose blood during the operation. Blood that is lost can be replaced through a *transfusion*. This is transferring blood from one person to another. Before blood can be transfused, doctors need to make sure the *blood types* match. Blood types are classifications based on the kind of protein the red blood cells contain.

There are four main blood types: A, B, AB, and O. Everyone is born with one type or another. During a transfusion, if you receive the correct blood type, your blood will mix smoothly with the new blood. If you receive the wrong blood type, your blood cells will clump together with the new cells. This can cause serious health problems, even death.

Blood may also contain something called an Rh factor. Blood is either Rh-positive or Rh-negative. People with Rh-positive blood can receive blood from Rh-positive or Rh-negative donors. People with Rh-negative blood can only receive blood from people who are also Rh-negative.

Today, all blood donations are carefully monitored. When a person donates blood, his or her blood type and Rh factor are checked and carefully labeled. The blood is stored in a blood bank until needed.



**Identify** Name the main parts of the circulatory system.

# The Respiratory System

Your **respiratory system** enables you to breathe. Breathing in, or inhaling, brings oxygen into your lungs. Oxygen is needed by the body for survival. The **lungs** are the main organs of the respiratory system. When you breathe out, or exhale, the lungs get rid of carbon dioxide gas. The parts of the respiratory system and their functions are shown in **Figure 7.8**.

## How You Breathe

Breathing begins with the **diaphragm** (DY·uh·fram). This is a large muscle at the bottom of the chest. When you breathe in, the diaphragm contracts. This tightening of the diaphragm allows the lungs to expand and fill with air. When you breathe out, the diaphragm expands. As it enlarges, it pushes on the lungs, forcing out the air.



Reading Check

**Explain** What do your lungs do?

**FIGURE 7.8**

## THE RESPIRATORY SYSTEM

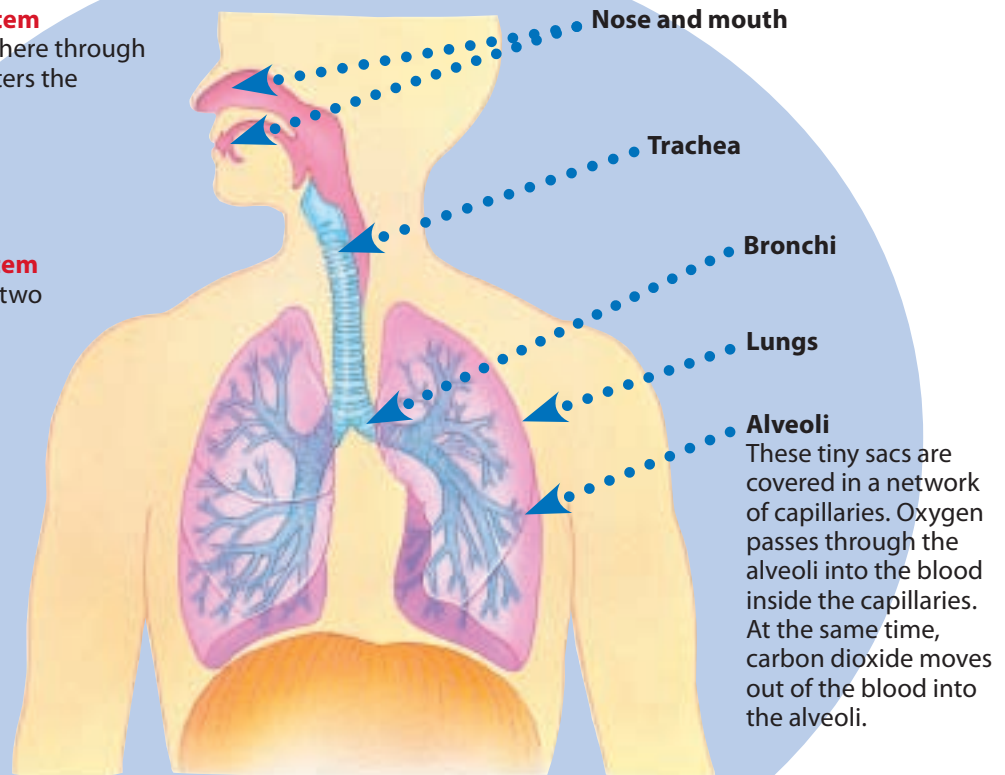
The respiratory system is divided into upper and lower sections. Each performs a different job. **In which section are the alveoli found?**

### Upper Respiratory System

Air comes into the body here through the nose or mouth; it enters the trachea, or windpipe

### Lower Respiratory System

The trachea divides into two branches called bronchi that carry air to the lungs. The bronchi divide into smaller and smaller tubes, the smallest of which end in structures called alveoli (al·VEE·uh·ly)



**Citizenship**

You can demonstrate good citizenship by sharing what you learn about protecting your health with others. For example, encourage family members to protect their brain by always wearing a helmet when riding a bike.

**What are some other ways you could promote healthy choices in your family or neighborhood?**

## The Nervous System

The **nervous system** is *the control and communication system of the body*. Its command center is the brain. The human brain does several important jobs. It processes thoughts and feelings. It also helps your body process and respond to information it receives from your senses. For example, when you smell fresh-baked cookies, your brain responds to the aroma by telling your tongue to produce saliva.

The brain is made up of billions of **neurons** (NOO·rahnz). These are *cells that carry electrical messages*, the language of the nervous system. There are three types of neurons: sensory neurons, connecting neurons, and motor neurons. Sensory neurons receive information from the outside world. For example, the smell of the fresh-baked cookies would be picked up by sensory neurons in the nose. Connecting neurons take the information picked up by the sensory neurons and pass them on to the motor neurons. The motor neurons send messages to the muscles and glands, telling them how to respond. If you like the smell of fresh-baked cookies, they will probably tell the glands in your mouth to produce saliva.

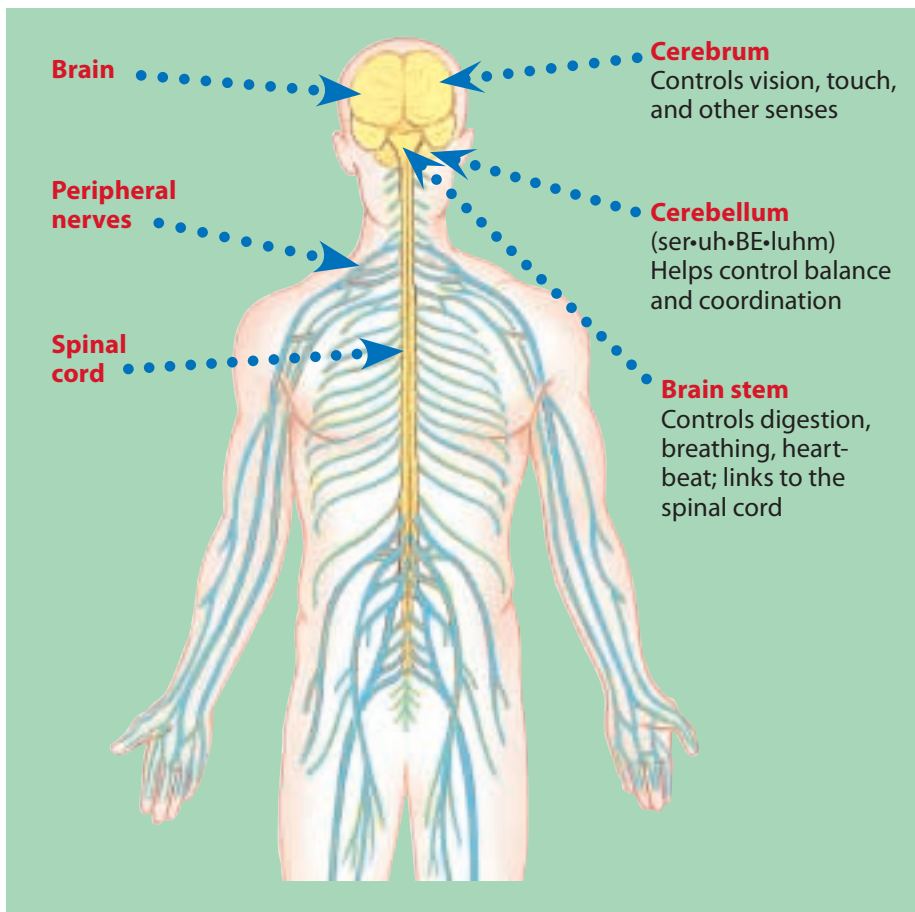
### Parts of the Nervous System

The nervous system consists of the central nervous system and the peripheral nervous system. The *central nervous system* is made up of the brain and the spinal cord. The **spinal cord** is *a tube of neurons that runs along the spine*. The brain is made up of many parts. Each part has a different function. The largest part of the brain is the cerebrum (suh·REE·bruhm). This is where thinking takes place.

The *peripheral* (puh·RIF·uh·ruhl) *nervous system* is made up of nerves branching out from the brain and spinal cord. It handles both your voluntary and involuntary movements. Voluntary movements are ones you control. Lifting your arm to throw a ball is a voluntary movement. Involuntary movements are those you cannot control. The beating of your heart is an example of an involuntary movement. The parts of both the central nervous system and the peripheral nervous system are shown in **Figure 7.9**.



**Identify** Name the two main parts of the nervous system.



◀ FIGURE 7.9

## THE NERVOUS SYSTEM

The central nervous system, shown in yellow, contains the brain and spinal cord. They work together to send messages to the peripheral nervous system, shown in blue. **Which part of the brain controls your sense of smell?**

## Lesson 4 Review

### After You Read

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

### What I Learned

1. **Recall** What are the three types of blood vessels? What are their functions?
2. **Vocabulary** What is the *diaphragm*?
3. **List** Name two types of neurons, and tell what each does.

### Thinking Critically

4. **Analyze** When Nick's father went to give blood, he was tested for his blood type. Why?

5. **Synthesize** Think about the movement of your chest as your lungs take in air. Is this voluntary or involuntary movement? Which part of the nervous system controls this action?

### Applying Health Skills

6. **Analyzing Influences** A number of factors in the environment might influence respiratory health. Make a list of these factors and discuss their role in the health of the community.

# Building Health Skills

## PRACTICING HEALTHFUL BEHAVIORS

### Maintaining Healthy Body Systems

#### DIRECTIONS

Practicing healthful behaviors involves taking specific actions to stay healthy and avoid risky behaviors. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

The different body systems work together to keep the body functioning properly. As a result, the health of one body system affects the health of others. Stacy knows that keeping her body systems healthy is important to good total health. She made a list of healthful habits to keep her body systems healthy:

1. I will eat healthy foods and drink plenty of water.
2. I will walk or ride my bike to school whenever I can.
3. I will try to get eight hours of sleep at night.
4. I will brush and floss my teeth regularly.
5. I will wear a helmet when riding my bike.



## 2 Practice

Stacy wants to try out for the track team at school. Because running requires strong lungs, she wants to develop some healthful habits that will benefit her respiratory system. Help Stacy by answering the following questions:

1. What are two habits Stacy can practice to take care of her respiratory system?
2. Will these habits help Stacy take care of any other body systems?

### Skill Summary

#### PRACTICING HEALTHFUL BEHAVIORS

Caring for your body systems includes:

- Staying physically active
- Eating well
- Drinking plenty of water
- Avoiding harmful substances
- Taking care of illnesses
- Getting enough rest
- Wearing protective gear during sports

## 3 Apply

Working with a group, choose a body system you learned about and create a report explaining how to care for this body system. Describe why caring for this body system is important. Identify at least four actions to keep this body system healthy. Explain how these actions can benefit your chosen body system. Do these actions benefit other body systems? Present your report to the class.

### Self-Check

- Did we tell why care of our chosen body system is important?
- Did we identify at least four actions that will benefit our chosen body system?
- Did we explain how these actions benefit our chosen body system?



# The Mystery of SLEEP



**You'll spend a third of your life sleeping, but that helps keep your body in shape.**

**E**veryone knows that you can't live without sleep, but no one knows exactly why or precisely how sleep works. Some researchers, such as Dr. Terrence Sejnowski, are working on a theory. He says the brain uses deep slumber to "shut off" so that it can process memories of the day. "It's like when you move out of your house so workers can renovate the kitchen," Dr. Sejnowski says. According to Sejnowski, sleep gives your brain time to refresh itself. In the morning, your brain is ready to go to work.

Scientists such as Dr. Sejnowski may have different ideas about how sleep works to keep your organs in good working order. All scientists agree, however, that just as eating right and getting enough exercise

are important, sleep is something your body needs to keep going strong. During sleep many of your body's major organs and regulatory systems continue to work actively. Some parts of your brain actually increase their activity while you are making zzzz's, and your body produces more of certain hormones that you need.

Did you know that you have an internal biological clock that regulates the timing of sleep? It programs each person to feel sleepy during nighttime hours and to be active during the day. Natural light sets your biological clock to the 24-hour cycle of day and night. And like some clocks, you wind down at the end of the day. That's when your body says it's time to get a good night's rest.

## SLEEP TIPS

A good night's sleep can help you do your best in school and at other activities. Use these tips to get the most out of snooze time.

- Set a regular time for bed each night, and stick to it.
- Follow a relaxing bedtime routine, like listening to quiet music or reading a book.
- Don't exercise too close to bedtime.
- Skip anything with caffeine, such as cola drinks, six hours before going to bed.
  - Turn off your TV, computer, video game, and other noisy gadgets 30 minutes before bedtime.



# Reading Review

## 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 1–4. Find a partner, and quiz each other using these study aids.

### Lesson 1 From Cells to Body Systems

#### Key Ideas

- The body's building blocks include cells, tissues, and organs that make up body systems.
- The main body systems are the circulatory system, digestive system, endocrine system, excretory system, muscular system, nervous system, reproductive system, respiratory system, and skeletal system.
- The body systems work together to keep the body functioning.

#### Vocabulary

- cells (p. 177)
- tissues (p. 177)
- organs (p. 177)
- body systems (p. 177)

### Lesson 2 Bones and Muscles

#### Key Ideas

- The skeletal system supports the body and protects the soft parts from injury.
- The muscular system makes movement possible. The three types of muscle are skeletal, cardiac, and smooth.

#### Vocabulary

- skeletal system (p. 181)
- joints (p. 182)
- muscular system (p. 183)

### Lesson 3 Digestion and Excretion

#### Key Ideas

- The digestive system, which includes the mouth, esophagus, stomach, and intestines, is responsible for converting food to energy.
- The excretory system, which includes the colon, kidneys, and bladder, eliminates body waste and maintains fluid balance.

#### Vocabulary

- digestion (p. 185)
- digestive system (p. 185)
- excretory system (p. 186)

### Lesson 4 Heart, Blood, Lungs, and Nerves

#### Key Ideas

- Blood moves through the body by means of the circulatory system, which consists of the heart, blood vessels, and blood.
- The respiratory system, which includes the nose, trachea, and lungs, makes breathing possible.
- Your nervous system controls body functions by sending signals around the body.

#### Vocabulary

- circulatory system (p. 188)
- heart (p. 189)
- blood pressure (p. 189)
- respiratory system (p. 191)
- lungs (p. 191)
- diaphragm (p. 191)
- nervous system (p. 192)
- neurons (p. 192)
- spinal cord (p. 192)

## After You Read

**HEALTH INVENTORY**

Look back at your answers to the health inventory in the chapter opener. Is there anything you should do differently?

## 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 sentence.

- blood pressure
- body systems
- excretory system
- joints
- muscular system
- nervous system
- organs
- skeletal system
- tissues

### Lesson 1 From Cells to Body Systems

1. Structures within the body made of tissues and which carry out specific jobs are called \_\_\_\_\_.
2. Groups of similar cells that do the same kind of work form \_\_\_\_\_.
3. Taking care of your \_\_\_\_\_ is important for good total health.

### Lesson 2 Bones and Muscles

4. \_\_\_\_\_ are places where one bone meets another.
5. The body system consisting of bones and the tissues connecting them is the \_\_\_\_\_.
6. Your \_\_\_\_\_ is made up of all the muscles in your body.

On a sheet of paper, write the numbers 7–12. For each phrase, write the letter of the body system that matches.

### Lesson 3 Digestion and Excretion

- a. Circulatory system
- b. Digestive system
- c. Excretory system
- d. Nervous system
- e. Respiratory system

7. Eliminates body wastes.
8. Breaks down food for energy.
9. Includes your liver, gallbladder, and stomach.

### Lesson 4 Heart, Blood, Lungs, and Nerves

10. Its command center is the brain.
11. Includes blood vessels.
12. Makes breathing possible.

## Thinking Critically

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

13. **Analyze** Which two body systems do you think are most closely related in their functions?
14. **Evaluate** Brainstorm ways of caring for the nervous system.



### Write About It

- 15. Analyzing Influences** Write an article for a health magazine about the factors that can influence a teen's health habits. Explain whether these factors are a positive or negative influence.
- 16. Practicing Healthful Behaviors** Write a paragraph that describes a behavior that can benefit more than one body system. Explain how this behavior benefits each body system.

**Physician** Physicians are medical professionals who have completed many years of training. One of their goals is to help patients detect problems with the function of their body systems. If a patient has a problem, the physician works to find the best way of treating it. Physicians can also help prevent problems from occurring. If you think you'd like to help people stay healthy, visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

Blood pressure is an important measure of heart health. What exactly is blood pressure, and why is it important?

An answer to the first question requires understanding how the heart beats. When you rest, your heart beats about 60 to 70 times a minute. Each time your heart beats, it pumps blood into the arteries. At these moments, your heart is pushing blood. Between beats, your heart relaxes. It does not push blood. Your blood pressure is a measurement of these two states of your heart. It is shown as a fraction, such as 120/80. The top number represents the state of your heart during pushes. The bottom number is your heart when it is not pushing.

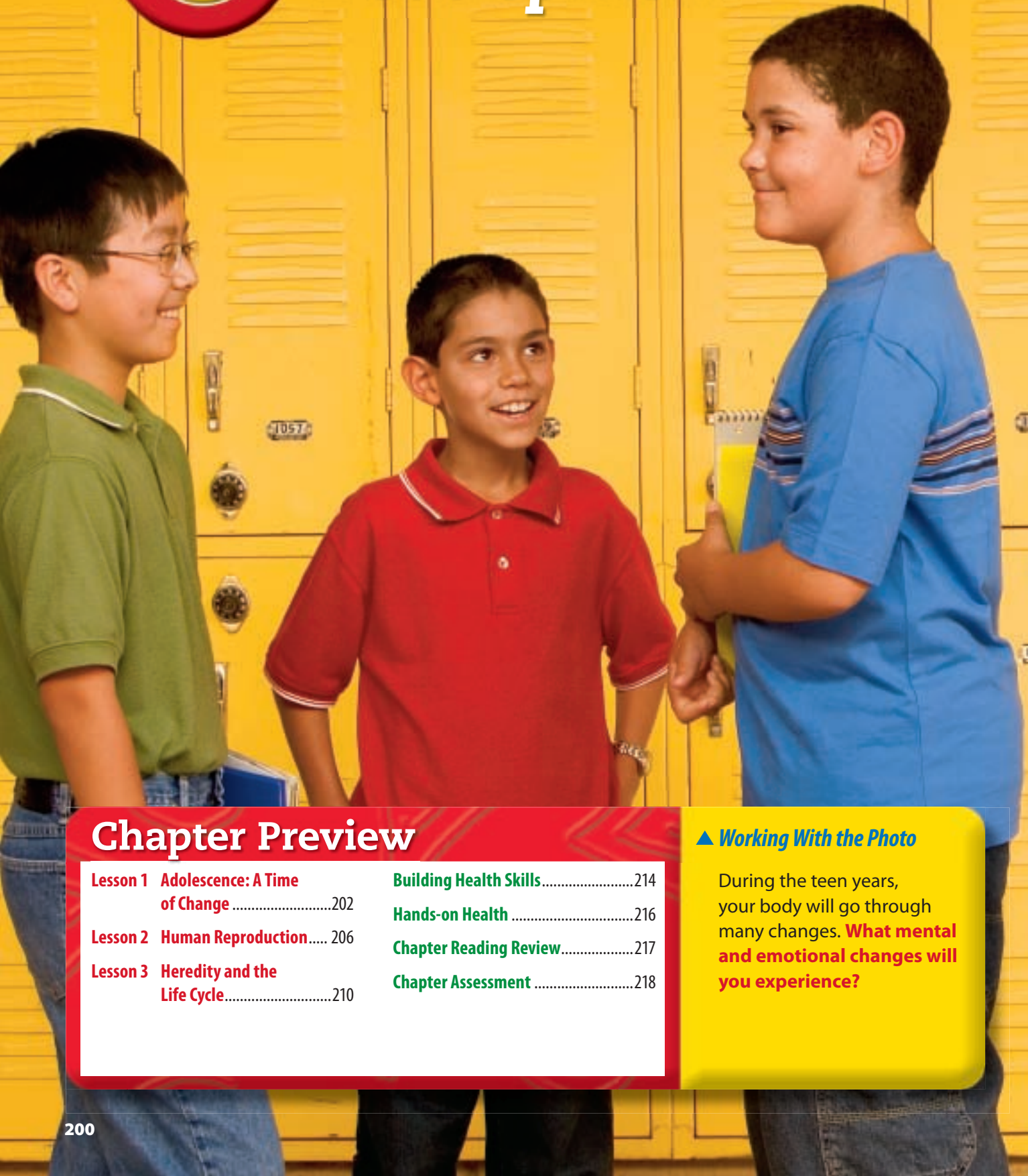
A trained medical professional can measure your blood pressure using an instrument called a *sphygmomanometer*. If your blood pressure is high, your doctor will do other tests to determine why. To lower your blood pressure, the doctor may recommend changes in lifestyle. These include getting regular exercise and eating healthy foods.

### TEST-TAKING TIP

When interpreting facts or formulas in a passage, make sure you understand the concepts.

- The author's purpose includes all of the following *except*:
  - explaining blood pressure.
  - telling why blood pressure is important as a measure of health.
  - suggesting ways of keeping your heart healthy.
  - telling about medications that reduce high blood pressure
- Which of the following can be inferred from the passage?
  - A blood pressure of 120/80 is better than a blood pressure of 120/70.
  - High blood pressure is a sign of possible heart problems and may require require lifestyle changes.
  - As a teen, your blood pressure should be lower than that of an adult.
  - Blood pressure cannot be determined in teens.

# Growth and Development



## Chapter Preview

<b>Lesson 1</b> Adolescence: A Time of Change .....202	<b>Building Health Skills</b> .....214
<b>Lesson 2</b> Human Reproduction..... 206	<b>Hands-on Health</b> .....216
<b>Lesson 3</b> Heredity and the Life Cycle.....210	<b>Chapter Reading Review</b> .....217
	<b>Chapter Assessment</b> .....218

### ▲ Working With the Photo

During the teen years, your body will go through many changes. **What mental and emotional changes will you experience?**

# Start-Up Activities



## Before You Read

Read the Instant Message below. What would you say to Troy? Keep a record of your answer.



## IM Express

jessicaw20: can't believe school's starting again. you set to go back? ☹️

troyb: don't know. i must've grown like 3 ft this summer. feel like kind of a freak.

## FOLDABLES™ Study Organizer



## As You Read

Make this Foldable™ to help you record and organize three changes that are the result of growth and development. Begin with two sheets of 8.5" x 11" paper.

- 1** Collect two sheets of paper and place them 1" apart.
- 2** Fold up the bottom edges, stopping them 1" from the top edges. This makes all 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.



Under the appropriate tab of your Foldable™, record the changes teens go through in all three areas of the health triangle.

Growth & Development Brings Changes
physical
mental/emotional
social

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Health Inventory for Chapter 8.

## Adolescence: A Time of Change

### Guide to Reading

#### Building Vocabulary

As you read the lesson, write the definition for each of the following terms.

- adolescence (p. 202)
- endocrine system (p. 203)
- puberty (p. 203)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **describe** three kinds of changes you go through during the teen years.
- **identify** the structure and function of the endocrine system.
- **analyze** how a teen is influenced by peers.

#### Reading Strategy

**Organizing Information** Divide a sheet of paper into three columns. Name each column for one of the sides of the health triangle. Write two changes that occur on each side.

**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 201 as you read this lesson.

### Quick Write

Think about ways your body has changed in the past few years. Make a list of some of these changes.

### Changes During Adolescence

Look at any group of teens, and you'll probably see big differences between the individuals. One teen may be a head taller than another who is the same age. Some teens may look younger or older than they really are. These differences are caused by the changes teens go through during **adolescence** (a-duhl·EH·suhns). This is *the period between childhood and adulthood*. Although all teens experience these changes, they occur at different times and speeds for everyone. You are just beginning your adolescent years now.

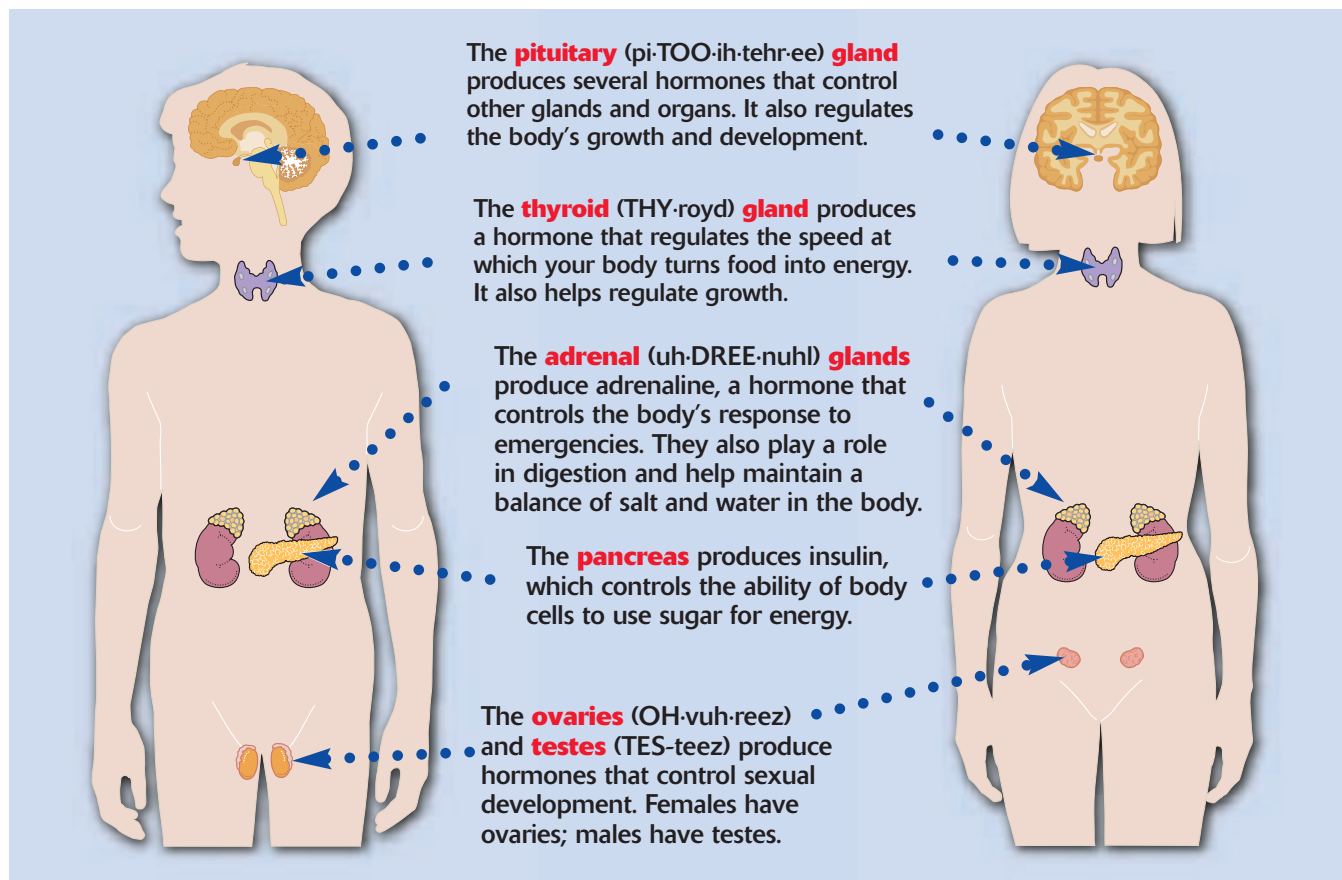


◀ Mood swings are a normal part of adolescence. **What causes mood swings?**

▼ **FIGURE 8.1**

## THE ENDOCRINE SYSTEM

The glands that make up this system perform many different jobs in your body. **Which glands regulate growth?**



Adolescence brings changes in all three areas of your health triangle. You develop physically, mentally/emotionally, and socially. Many of these changes are caused by *hormones*. As noted in Chapter 2, hormones are chemicals made by the body. Specifically, they are produced in the **endocrine system**. This is *a body system containing glands that regulate growth and other important activities*. **Figure 8.1** describes many important functions of the endocrine system.

### Physical Changes

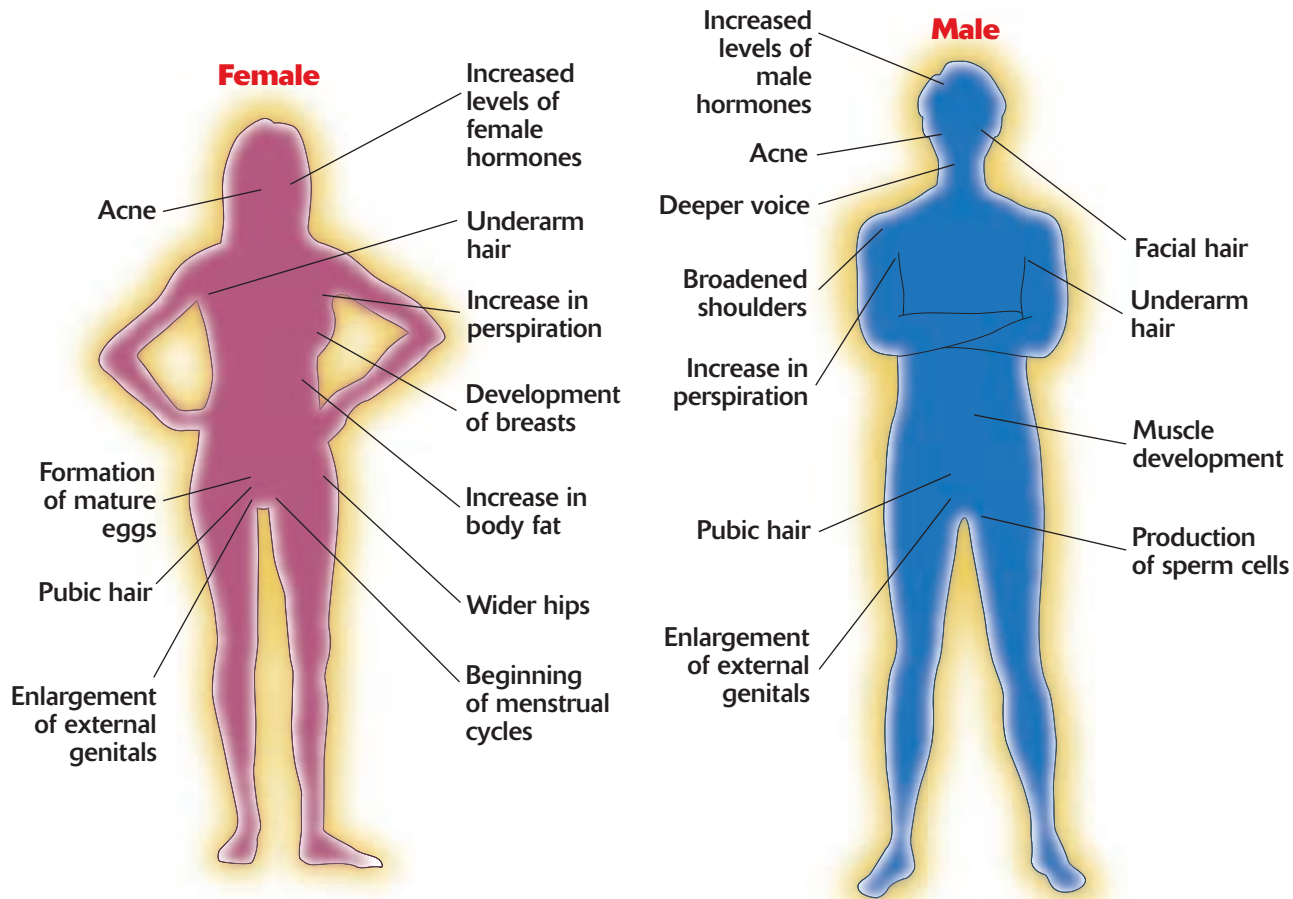
Over the past summer, Phil noticed his voice beginning to change. Acne is appearing on Marie's face. Changes such as these signal the arrival of **puberty** (PYOO·bur·tee). This is *the time when you start developing the physical characteristics of adults of your gender*. Other changes that occur during puberty include the growth of body hair and increased sweating, or perspiration.



**FIGURE 8.2**

## PHYSICAL CHANGES DURING ADOLESCENCE

Notice that boys and girls go through some similar changes.  
Give an example of a change both boys and girls go through.



### Health Online

#### Topic: Understanding Puberty

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to get answers to questions teens are asking about growth and development.

**Activity:** Using the information provided at the link above, create a small card that has three resources printed on it where teens can access reliable information on growth and development.

The shape of your body changes, and you grow taller. These and other changes are shown in **Figure 8.2**.

Puberty begins at different times for different people. Typically, it starts between the ages of 8 and 14. During puberty, some body parts may grow faster than other parts. This is especially true of the hands and feet. These changes may make some teens feel awkward or self-conscious. Others, for whom puberty comes later, can feel “left behind.” Although these situations can be troubling, remember that they are only temporary.

### Mental/Emotional Changes

During adolescence, you begin to think about things in new ways. You learn to appreciate different opinions or points of view. You will begin to identify your own values and beliefs. You will also become aware of how your opinions, decisions, and actions affect others.

Changes in hormones can affect your feelings as well as your thoughts. You may feel strong emotions that you do not always understand. You might be happy one moment and sad the next. These sudden shifts in emotion are called mood swings and are common in adolescence. Talk about your feelings with others. This will help you manage your feelings in a healthy way.

## Social Changes

Adolescence brings about changes in the way you relate to others. You become more independent. Your parents may give you more responsibility. For example, you may be asked to help care for a younger sibling or to prepare meals.

During this time, your friends can become very important. Like you, they are going through changes and can understand how you feel. As a result, their opinions and actions may influence you without you even knowing it. Choose friends that support you and influence you in a positive way. This will help you make good choices during your teen years.



Reading Check

**Identify** What is puberty?

**Health Online**

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

## Lesson 1 Review



After You Read

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

### What I Learned

1. **Vocabulary** Define *endocrine system*.
2. **Recall** Name two physical changes that occur during puberty.
3. **Identify** What are some social changes that occur during adolescence?

### Thinking Critically

4. **Apply** Richard feels funny about his voice changing. What advice might you give him to make him feel less awkward?

5. **Evaluate** How do you think the changes you experience during puberty help you prepare for adulthood?

### Applying Health Skills

6. **Analyzing Influences** Peers can have a strong influence on your actions during adolescence. Give one example of how this can be positive. Give another example of how it can be negative.

## Human Reproduction

### Guide to Reading

#### Building Vocabulary

Create a word web for the terms below. Decide which term belongs at the center.

- reproductive system (p. 206)
- egg cell (p. 206)
- fertilization (p. 207)
- menstruation (p. 207)
- sperm (p. 208)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** the parts and functions of the male and female reproductive systems.
- **explain** how to care for the reproductive system.

#### Reading Strategy

**Comparing and Contrasting** As you read the lesson, compare the female and male reproductive systems.

### Quick Write

Write about what you think teens can do to care for their reproductive systems.

- ▼ Talking to a trusted adult can help you feel better about the changes you are experiencing. **Who are some adults you could talk to about reproductive health?**

## Human Reproduction

So far, all the body systems you've learned about are the same for females and males. The **reproductive system**, however, is different. This is *the body system that makes it possible to create offspring, or have babies*. During puberty, the female and male reproductive systems undergo changes.

## The Female Reproductive System

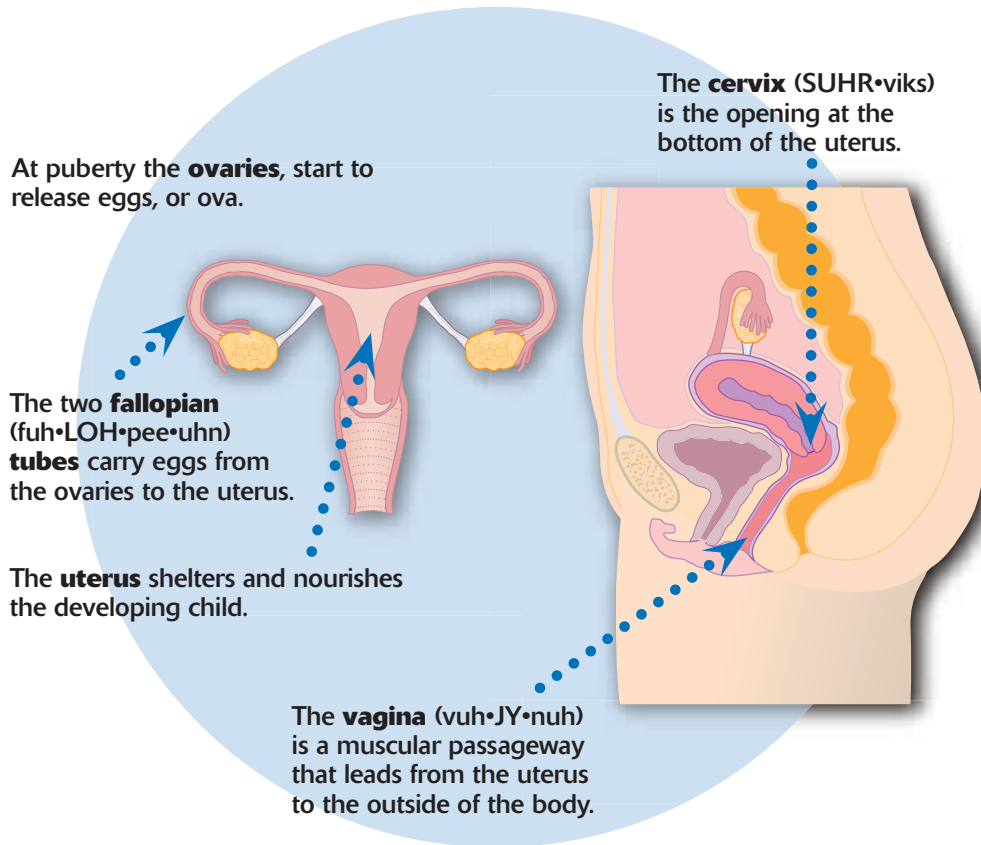
The female reproductive system, shown in **Figure 8.3**, has two main functions. One is to store egg cells. An **egg cell**, also called an *ovum*, is *the female reproductive cell*. The second function is to reproduce, to create offspring. This process begins when the egg cell joins with a male reproductive cell. The *ovaries* (OH·vuh·reez) are the two female reproductive glands that store the egg cells. The ovaries also release hormones that control growth and play a role in the proper functioning of the reproductive system. During puberty, the egg cells begin to mature. The ovaries begin to release eggs cells. If an egg cell is fertilized, a baby will



◀ **FIGURE 8.3**

## THE FEMALE REPRODUCTIVE SYSTEM

This illustration shows the parts of the female reproductive system. **What is the function of this system?**



eventually grow from it. **Fertilization** is the joining of a female egg cell with a male reproductive cell. A newly fertilized egg will travel to the uterus (YOO·tuh·ruhs), the organ in which the baby will develop.

### Menstruation

Each month, the uterus forms a lining of nutrient-rich blood and tissue to prepare for pregnancy. If fertilization does not occur, the lining breaks down. *Blood, tissue, and the unfertilized egg flow out of the body.* This flow is called **menstruation** (men·stroo·AY·shuhn).

Menstruation is often referred to as a “period.” A period usually happens about once a month. It may last for three to five days, or as long as seven days. Most girls can expect to begin menstruation anywhere from age 9 through 16. However, this differs from female to female.

During menstruation, change sanitary pads or tampons several times a day. You may also experience some cramping. Exercise can sometimes ease the pain of cramps. Talk to your doctor if you have unusual pain or heavy bleeding.



Reading Check

**Explain** What is menstruation?

## Male Reproductive System

Like the female reproductive system, the male reproductive system makes reproductive cells. *The male reproductive cells* are called **sperm**. These cells are made inside the testes.

The testes begin making sperm cells during puberty. The sperm cells travel through the vas deferens to the urethra where they leave the body.

The testes also produce a hormone that controls the development of the male reproduction system shown in **Figure 8.4**.



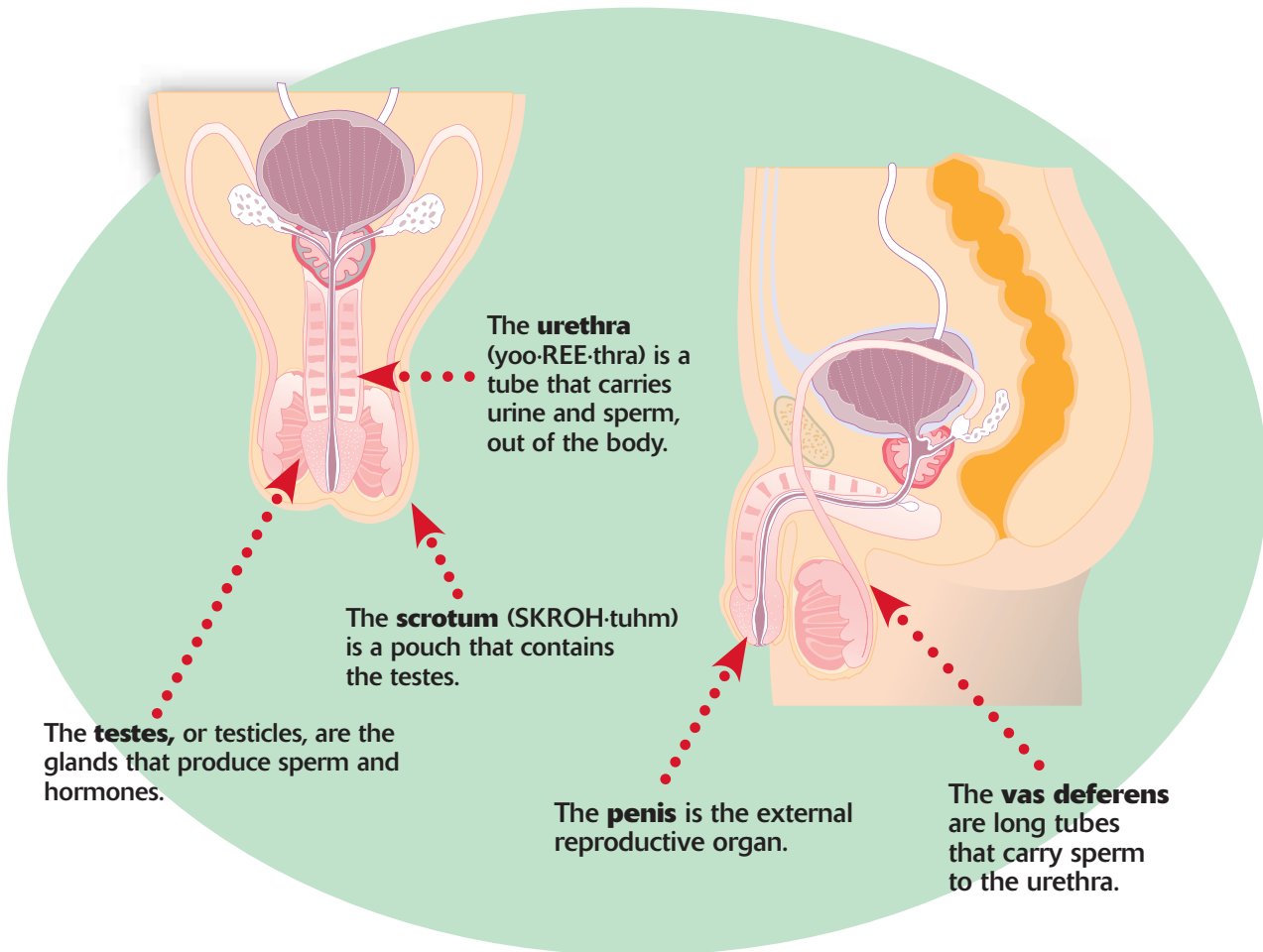
**Explain** What do the testes do?

**FIGURE 8.4**

### THE MALE REPRODUCTIVE SYSTEM

This illustration shows the parts of the male reproduction system.

**What is the job of the male reproductive system?**





# Health Skills Activity

## Practicing Healthful Behaviors

### Care of the Reproductive System

Like any body system, the reproductive system needs care. You can protect the health of your reproductive system by practicing the following healthful behaviors:

- Practice good hygiene, this includes showering or bathing regularly.
- Avoid wearing clothing or underwear that is too tight.
- Visit your doctor for regular checkups.
- Practice abstinence to prevent sexually transmitted diseases.
- Males who play contact sports should always wear protective gear.
- If you have questions about your reproductive health, talk to your parent or guardian, your doctor, or another trusted adult.

### On Your Own

Make a list of other healthful behaviors you can practice that will help you look and feel your best during adolescence.

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Recall** Name two functions of the female reproductive system.
2. **Vocabulary** Define *fertilization*?
3. **Identify** Where in the male reproductive system are sperm made?

### Thinking Critically

4. **Compare** How are the female and male reproductive systems similar? How are they different?

5. **Analyze** James will be catcher this year for his baseball team. What special precautions should James take to prevent injury to his reproductive system? Give details to explain your answer.

### Applying Health Skills

6. **Advocacy** Caring for your body during puberty is important. With a small group, design and print a pamphlet that explains the kinds of care needed.

## Heredity and the Life Cycle

### Guide to Reading

#### Building Vocabulary

Review the terms below. See if you know which term represents a part of another term.

- chromosomes (p. 210)
- genes (p. 210)
- fetus (p. 212)
- prenatal care (p. 212)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **explain** how inherited traits are passed along.
- **identify** changes to the developing baby.
- **recognize** stages in the life cycle.

#### Reading Strategy

**Analyzing a Graphic** Using the diagram to the right as a guide, describe the stages of development before birth.

The Developing Baby

After 3 months:



After 6 months:



After 9 months:

### Quick Write

Observe physical traits in your class, such as eye and hair color.

Write a short paragraph noting which traits are most common and why you believe this.



## Heredity

Do you remember reading about heredity in Chapter 1? This is the process by which parents pass certain traits to their children. Hair color and body build are two examples of inherited traits. Children may also inherit talents and abilities from parents. The likelihood of developing certain diseases and health problems is also passed along.

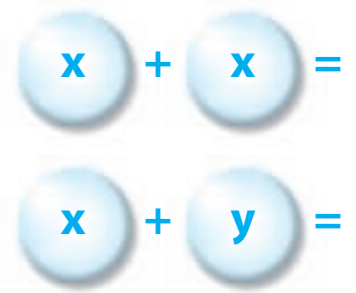
Traits are passed along by chromosomes (KROH·muh·sohmz). **Chromosomes** are *tiny strands of matter that carry the codes for inherited traits*. They are arranged in pairs in your body's cells. One chromosome in each pair comes from your father. The other is from your mother. Chromosomes are made up of smaller bits of matter called genes (JEENZ). **Genes** are *the basic units of heredity*. Each gene defines a particular trait.

- ◀ Parents and their offspring often have similar characteristics because of heredity. **What are some characteristics that can be passed along through heredity?**

## Chromosomes and Fertilization

Every type of cell in the human body except one contains 46 chromosomes. That one exception is the reproductive cell. Egg cells and sperm cells each have half the usual number of chromosomes. Each has exactly 23. When these cells unite during fertilization, their chromosomes are joined. The newly fertilized egg cell has 46 chromosomes.

Among each sperm's 23 chromosomes, one alone determines the gender of the fertilized egg cell. This chromosome is represented by the letter X or Y. If a sperm carries an X chromosome, a female will result. If the sperm has a Y chromosome, a male will result.



▲ Female egg cells carry only an X chromosome. **Which of the two unions shown in this illustration will produce a boy?**



Reading Check

**Define** What are genes?

## Development Before Birth

A female becomes pregnant when one of her egg cells is fertilized by a male sperm cell. Much happens during the first days of pregnancy. The newly fertilized cell travels down the fallopian tube to the uterus. It attaches itself to the wall of the uterus. There it begins to divide, first into two cells, then into four. This process of doubling, or cell division, continues millions of times. From these cells, the tissues, organs, and body systems are eventually formed. **Figure 8.5** shows the stages of development from fertilization through birth.

▼ **FIGURE 8.5**

### THE DEVELOPING BABY

After fertilization, it takes about nine months before a baby is born.

**About how much does a baby weigh at birth?**

Time	Size	Features	Development
fertilization	microscopic	single cell	undeveloped
3 months after fertilization	about 3 inches long; weighs about 1 ounce	arms, legs, fingers toes, eyes, ears	heart is beating, nervous system is forming; cannot survive outside uterus
6 months after fertilization	about 14 inches long; weighs about 2 pounds	hair, eyebrows, fingernails, toenails	can move and kick, sucks thumb, can hear sounds; might survive outside uterus
9 months after fertilization	18–20 inches long; weights 7–9 pounds	smooth skin, fully developed organs	eyes open and close, fingers can grasp, body organs and systems can now work on their own; ready for birth



### Responsibility

Independence is an important goal for many teens, but with it comes added responsibility. There are lots of ways you can show you are responsible and ready for more independence. For example, you could offer to help with extra chores at home. **What are some other ways you could show you are responsible?**

- ▼ Spending time with different generations of your family is one way to build strong family relationships. **What are some other ways?**



In the uterus, the developing baby receives oxygen and nutrients through a tube called the *umbilical cord*. Waste products are also removed through this cord. *The developing unborn baby, from the eighth week until birth, is known as a fetus.*

Pregnancy is a time of change for both parents-to-be. Having a child is a joyful event, but it also means added responsibility. Preparations must be made to care for the baby when it arrives and for his or her future. For the mother, changes are taking place in her body that affect her shape, weight, and emotions. Once the baby is born, he or she requires a lot of attention and care. New parents often don't get a lot of sleep and may experience added stress or other emotional changes.

Throughout pregnancy, an expectant mother needs **prenatal care**. This is *special care to ensure that the mother and her baby remain healthy*. Prenatal care includes eating healthy foods, getting enough rest, and seeing the doctor regularly. The mother-to-be also should avoid using tobacco, alcohol, and other drugs not prescribed by her doctor.

### Reading Check

**Explain** Describe the way a fertilized egg cell divides.

## The Life Cycle

Being born is the first step in a life-long journey full of new experiences and change. The entire journey is often called the "life-cycle." It is divided into six main parts or stages:

- **Infancy.** During their first year of life, infants grow very fast. Their height can double and weight triple. Babies also grow mentally and emotionally during this time. Infants need loving care and attention to prepare them for childhood.
- **Childhood.** This period lasts from age 1 through 11. During this time children are busy taking in all sorts of new information. Encouragement and support from others during this stage builds positive self-esteem.
- **Adolescence.** Adolescence begins at age 12 and ends around age 18. This is a time of transition from child to adult. Skills such as decision making, goal setting, and good communication help prepare adolescents for adulthood.

- **Early adulthood.** Early adulthood lasts from age 19 until around age 30. Many young adults are busy pursuing an education or training for a career. They may choose to get married and start a family during this time. Working to achieve career and family goals often extends into middle adulthood.
- **Middle adulthood.** This stage begins in the 30s and continues until roughly age 60. People in this life stage may begin looking for ways to contribute to their communities. For example, they may volunteer to coach youth sports or raise money for charity. They may also begin planning for retirement.
- **Late adulthood.** This stage begins around age 60 when adults are beginning to think of retirement. Retirement gives some people the opportunity to develop new interests or spend more time with family members. Maintaining good health will help you stay active during late adulthood.



Reading Check

**Identify** Name two stages in the life cycle.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review



After You Read

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

### What I Learned

1. **Vocabulary** Define *chromosomes*.
2. **Recall** How many chromosomes are there in most cells of the human body? What is the one exception?
3. **Identify** Name two developments that may take place during early adulthood.

### Thinking Critically

4. **Explain** What determines whether a baby will be male or female?

5. **Apply** Yvonne hopes to become a lawyer when she reaches adulthood. What skills can she develop now during her teens to help her achieve her career goals?

### Applying Health Skills

6. **Accessing Information** Sometimes a missing or defective gene causes a health problem known as a genetic disorder. With a group, research different genetic disorders. Share your findings in an oral group report.

# Building Health Skills

## ACCESSING INFORMATION

### Coping With Changes During Puberty

#### DIRECTIONS

Accessing information involves finding reliable information to make healthy choices. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

When Shaun returned to school in the fall, he was surprised to find that most of his classmates had grown a lot during the summer. Suddenly, he was the shortest one in his group. He began to worry that something might be wrong with him. Why wasn't he growing as fast as his friends? Finally, Shaun decided to get some help with his concerns.

Shaun talked to his older brother, Greg. Like Shaun, Greg had grown slower than his classmates. Greg told him to be patient, that he would eventually catch up with the rest of his class.

Next Shaun decided to talk to his dad, who told him that different people grow at different rates. His dad also pointed out that he and Shaun's mother were both tall. This, he explained, meant that Shaun had a good chance of being tall, too.



## ② Practice

A while later, Shaun began developing acne on his face. At first, it was just a few small blemishes, but then it seemed to get worse. Shaun knew that many teens get acne. He saw several kids at school with acne, too. Shaun wanted to know what he could do to clear up his acne. Using what you know about accessing information, answer the following questions.

1. Where could Shaun get reliable information about treating acne?
2. Name a person Shaun could speak to for help with his acne?

### Skill Summary

#### ACCESSING INFORMATION

Accessing Information includes:

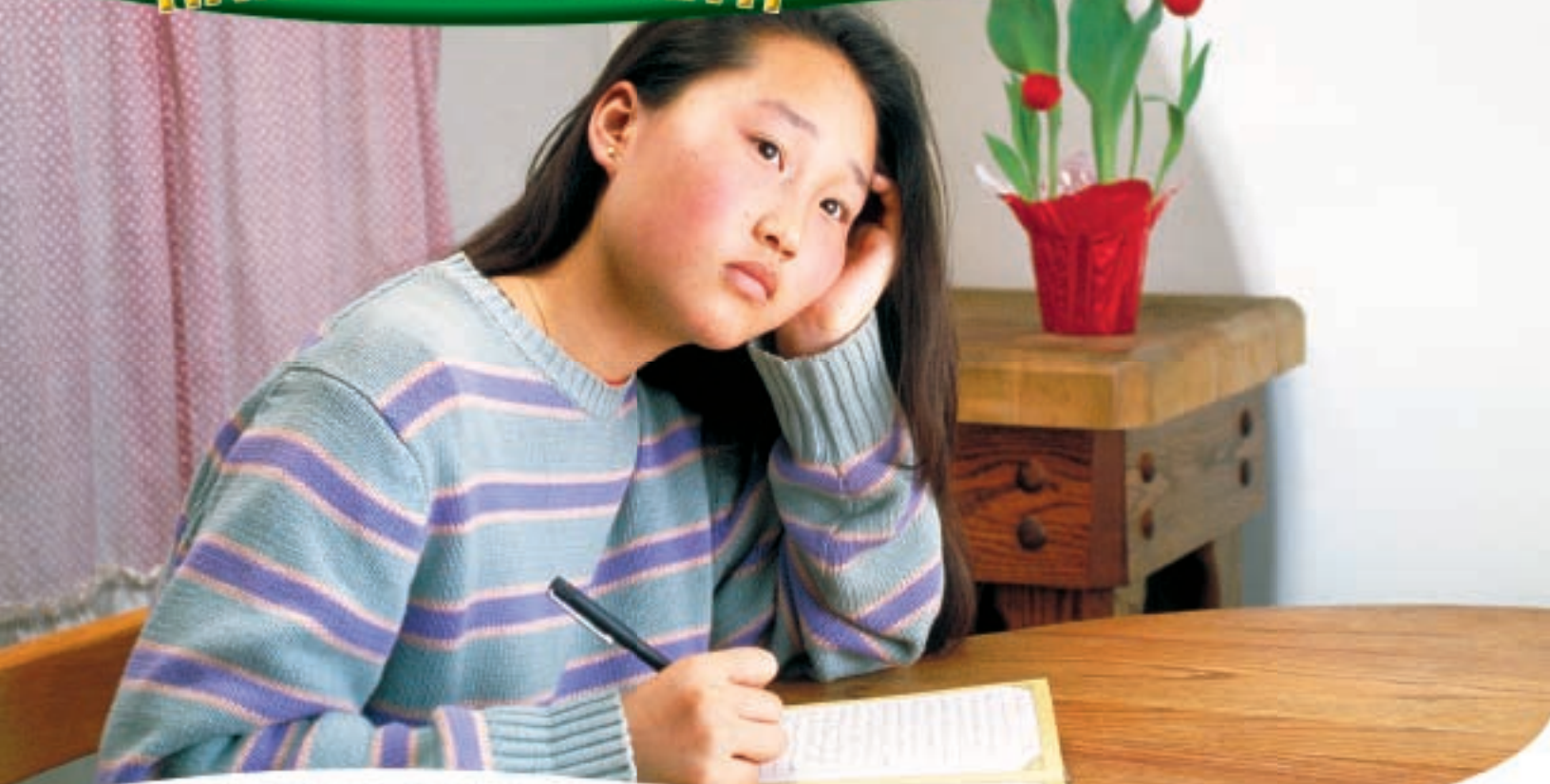
- Speaking with people you feel will understand you and try to help.
- Speaking with a trusted adult.
- Checking reliable sources of information.

## ③ Apply

With a partner, plan a brief presentation about another problem some teens might experience during puberty. The problem might relate to emotional or social changes that occur during adolescence. Discuss how a teen can get help for the problem. Include a list of reliable sources to go to for help.

### Self-Check

- Is our problem related to adolescence?
- Did we discuss how to get help for the problem?
- Did we include a list of reliable sources?



## Looking Ahead

Preparing for adulthood also involves behaving in a more mature and responsible way. This activity will give you a chance to do some adult-like thinking and see how you feel about questions that you may face as an adult.

### What You Will Need

- pencil or pen
- paper

### What You Will Do

Number a sheet of paper from 1–10. For each statement below, decide whether you would answer each statement as “always,” “sometimes,” or “rarely.” Then write your answer next to each numbered item.

- 1 I try to think through problems, looking at all possible solutions.
- 2 I am able to communicate well with my parents or other adults.
- 3 I am able to list my four most important beliefs.

- 4 I think about the consequences before I act.
- 5 I like who I am; I don't try to be something I'm not.
- 6 I do some things alone or with friends that I used to do with my family.
- 7 I listen to other people's ideas even when they are different from mine.
- 8 I am concerned about problems in the world today.
- 9 I have one or two close friends with whom I can talk about almost anything.
- 10 I think about how my actions affect other people.

### Wrapping It Up

When you are finished, look at how many questions you answered “always” and “sometimes.” This shows that you are already beginning to think and act in a mature and responsible way. As a class, brainstorm some other ways you can demonstrate mature and responsible behavior.

# Reading Review

## 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 1–3. Find a partner, and quiz each other using these study aids.

### Lesson 1 Adolescence: A Time of Change

#### Key Ideas

- During adolescence, you undergo physical, mental/emotional, and social changes.
- Your endocrine system contains glands that regulate growth and other important activities within the body.

#### Vocabulary

- adolescence (p. 202)
- endocrine system (p. 203)
- puberty (p. 203)

### Lesson 2 Human Reproduction

#### Key Ideas

- The female reproductive system has two main functions: to store egg cells and to reproduce.
- The male reproductive system makes sperm, which fertilizes a female's egg cell to create offspring.
- Reproductive care includes good hygiene and regular checkups. For males, protection should be used during contact sports.

#### Vocabulary

- reproductive system (p. 206)
- egg cell (p. 206)
- fertilization (p. 207)
- menstruation (p. 207)
- sperm (p. 208)

### Lesson 3: Heredity and Childbirth

#### Key Ideas

- Inherited traits are passed along by chromosomes and the genes they contain.
- A baby begins as a fertilized egg cell. This cell divides many times, ultimately forming tissues, organs, and body systems.
- The life cycle is a series of stages of development that occur throughout life. These stages include infancy, childhood, adolescence, early adulthood, middle adulthood, and late adulthood.

#### Vocabulary

- chromosomes (p. 210)
- genes (p. 210)
- fetus (p. 212)
- prenatal care (p. 212)

## After You Read

## IM Express

Look back at your answer to the Instant Message on the chapter opener. Now that you have read the chapter, have your ideas changed? If so, how?

## 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 sentence.

- adolescence
- chromosomes
- egg cell
- endocrine system
- genes
- reproductive system
- puberty
- sperm

### Lesson 1 Adolescence: A Time of Change

1. \_\_\_\_\_ is the period between childhood and adulthood.
2. The time when you start developing physical characteristics of adults of your gender is \_\_\_\_\_.
3. The \_\_\_\_\_ is a body system containing glands that regulate growth and other important activities.

### Lesson 2 Human Reproduction

4. The body system that makes it possible to create offspring is the \_\_\_\_\_.
5. The female reproductive cell is known as the \_\_\_\_\_.

6. The male reproductive cells are known as \_\_\_\_\_.

### Lesson 3 Heredity and the Life Cycle

On a sheet of paper, write the numbers 7–9. Choose the letter of the word or phrase that best completes each statement or question.

7. Which statement about genes is TRUE?
  - a. They are made up of chromosomes.
  - b. They are tiny strands of matter that carry the codes for inherited traits.
  - c. They define particular traits.
  - d. They are different for identical twins.
8. Which of the following is part of pre-natal care?
  - a. The newly fertilized cell travels down the fallopian tube to the uterus.
  - b. The mother-to-be eats healthfully and gets enough rest.
  - c. The baby is born.
  - d. None of the above.
9. The stage of the life cycle in which many people begin training for a career is
  - a. adolescence.
  - b. early adulthood.
  - c. middle adulthood.
  - d. late adulthood.



## Thinking Critically

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

- 10. Analyze** In what ways are emotional and physical changes during adolescence related? Give an example to support your views.
- 11. Synthesize** Why do you think the teen years are not a good time for becoming a parent?

## Write About It

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

- 12. Communication Skills** Write a paragraph persuading teens to use good

**Pediatrician** Pediatricians are medical doctors who specialize in the care of children through adolescence. To become a pediatrician, you need a four-year college degree. After that, you need to attend four years of medical school. Finally, you need to have three years of residency training. For more on this career, visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

communication skills to help cope with mood swings.

- 13. Practicing Healthful**

**Behaviors** Explain the importance of practicing healthful behaviors during adolescence.

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

Gregor Mendel was born in 1822 in what is now the Czech Republic. He developed an interest in gardening on his father's farm. As a young man, Mendel studied to become a priest. His teachers noticed his great interest in nature, especially plants. They urged him to become a teacher himself. In 1854, he earned a degree from the University of Vienna and became a teacher. In his spare time, Mendel continued to garden. One day, he noticed differences in pea plants in his garden. Some appeared shriveled, but others did not. Mendel wondered about this. As a result, he tested 28,000 different plants. His experiments led him to identify laws of heredity. Today, Mendel is still considered to be the father of this science.

#### TEST-TAKING TIP

Cause-and-effect relationships can be determined by word clues. Some of these clues are single words, for example, *because*. Others are phrases. Examples include *due to* and *as a result*.

- Gregor Mendel's interest in gardening led to
  - his becoming a teacher.
  - his attending the University of Vienna.
  - his noticing differences in pea plants in his garden.
  - his returning to his homeland after finishing college.
- Which best sums up the main idea of the passage?
  - Most scientific breakthroughs happen by accident.
  - Gregor Mendel's love of gardening led him to discover the laws of heredity.
  - Gregor Mendel was a better teacher than a priest.
  - Gregor Mendel was a better scientist than a teacher.





## Chapter Preview

<b>Lesson 1 Tobacco: A Harmful Drug</b> .....	222	<b>Building Health Skills</b> .....	234
<b>Lesson 2 Teens and Tobacco</b> .....	227	<b>TIME Health News</b> .....	236
<b>Lesson 3 Staying Tobacco Free</b> .....	230	<b>Chapter Reading Review</b> .....	237
		<b>Chapter Assessment</b> .....	238

### ▲ Working With the Photo

This teen has become an advocate for a smoke-free environment. **What are some ways you can encourage others to say no to tobacco.**

# Start-Up Activities



## Before You Read

How much do you know about tobacco? Take the short quiz below to find out.

**HEALTH QUIZ** Answer *true* or *false* for each of the following questions. Keep a record of your answers.

1. Tobacco contains a number of harmful chemicals.
2. One form of tobacco that is perfectly safe and harmless is smokeless tobacco.
3. Smokers who make up their mind to quit can easily break the tobacco habit.

ANSWERS: 1. true; 2. false; 3. false

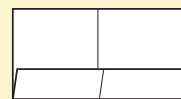
## FOLDABLES™ Study Organizer



## As You Read

Make this Foldable™ to help you organize information in Lesson 1 on the harmful effects of tobacco. Begin with a plain sheet of  $8\frac{1}{2}'' \times 11''$  paper.

- 1 Fold a sheet of paper in half along the short axis.
- 2 Open and fold the bottom edge up to form a pocket. Glue the edges.
- 3 Label the cover as shown. Label the pockets "Causes" and "Effects." Place an index card or quarter sheet of notebook paper into each pocket.



List and describe the causes and effects of tobacco addiction on the index cards or sheets of notebook paper cut into quarter sections. Store these cards in the appropriate pockets of your Foldable™.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Chapter 9 crossword puzzle.

## Tobacco: A Harmful Drug

### Guide to Reading

#### Building Vocabulary

Explain how each vocabulary word below is related to tobacco.

- nicotine (p. 222)
- carbon monoxide (p. 222)
- tar (p. 222)
- addiction (p. 223)
- emphysema (p. 223)
- snuff (p. 226)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** how tobacco damages your health.
- **explain** how tobacco leads to addiction.
- **practice** the skill of advocacy to inform others about the dangers of tobacco use.

#### Reading Strategy

**Finding the Main Idea** Copy the headings from the lesson onto a sheet of paper. After each heading, write a sentence that describes the main idea of each section.

**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 221 as you read this lesson.

### Quick Write

Write a paragraph about the reasons many people choose to remain tobacco free.

### What's in Tobacco

Tobacco contains a number of harmful chemicals. One of these, **nicotine** (NIH·kuh·teen), is *a drug found in tobacco that speeds up the heartbeat and affects the central nervous system*. It narrows blood vessels to and from the heart. Nicotine is also found in garden insect sprays.

Tobacco also contains **carbon monoxide** (KAR·buhn·muh·NAHK·syd). This is *a poisonous, odorless gas produced when tobacco burns*. It attaches to red blood cells, preventing them from carrying a full load of oxygen. Carbon monoxide is also an ingredient in car and truck exhaust. Breathing carbon monoxide can lead to death by suffocation.

A third substance, **tar**, is *a thick, oily, dark liquid that forms when tobacco burns*. Tar deposits cover the linings of the lungs. If tar is allowed to build up, breathing problems and lung disease can result.



- ▲ More and more locations are displaying this sign. **Why do you think this is happening?**

### Reading Check

**Identify** What are two harmful chemicals found in tobacco?

## How Tobacco Harms the Body

“How much harm can one cigarette do?” People who ask that question might be surprised by the answer. Just one puff releases harmful chemicals into the mouth, throat, and lungs. It can cause feelings of dizziness and light-headedness.

Over time, the effects of tobacco build. Long-term nicotine use is linked to heart and lung disease. The tar from tobacco coats the inside of the lungs. It greatly increases the smoker’s risks of lung cancer and emphysema (em·fuh·SEE·muh). **Emphysema** is a disease that occurs when the tiny air sacs in the lungs lose their elasticity, or ability to stretch. This reduces the amount of oxygen passing from the lungs into the blood. Breathing becomes more difficult for the smoker. Teens who smoke may find it harder to play sports and stay physically active. **Figure 9.1** on pages 224–225 shows other harmful effects of tobacco use.

### Nicotine and Addiction

Another serious problem related to tobacco use is that nicotine is a powerfully addictive drug. **Addiction** is the body’s physical or mental need for a drug or other substance. Addiction causes users to depend on the substance in order to feel good. They begin to need the substance just to function normally. Once addicted, quitting becomes extremely difficult. People who try to break their addiction may experience unpleasant symptoms. These include shakiness, headache, nervousness, and sleeping problems. Once a person has overcome his or her addiction, these symptoms will go away and the person will feel much better.



Reading Check

**Define** What does *addiction* mean? Use it in a sentence.

- ▶ Tobacco effects the body in many ways. **What affect can tobacco have on a person’s appearance?**



Connect To...  
Math

### Just Do the Math

Using tobacco is an expensive habit. A single pack of cigarettes costs approximately \$3.81. If a person smokes one pack of cigarettes each day, calculate the following:

- Approximately how much would a smoker spend on cigarettes in one month?
- How much would he or she spend in one year?

**Imagine you had that much money to spend. What are some other ways you would choose to spend the money?**

▶ **FIGURE 9.1**

## **THE HARMFUL EFFECTS OF TOBACCO**

The chemicals in tobacco harm many parts of the body. **What is the harmful effect on the blood vessels?**

### **Health Online**

#### **Topic: Avoiding the Harmful Effects of Tobacco**

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to learn more about what cigarette smoke does to the body and how to help smokers quit.

**Activity:** Using the information provided at the link above, write a letter to the editor of your local paper talking about what you feel should be done to help make your community smoke free.

#### **Skin**

Smoking ages the skin, causing it to wrinkle earlier than a nonsmoker's skin.

#### **Mouth, Teeth, and Throat**

Cigarette smoke and smokeless tobacco lead to bad breath and stained teeth. Chemicals in tobacco cause mouth and throat cancers. Smokeless tobacco can cause leukoplakia—white sores in the mouth that can lead to cancer—as well as bone loss around the teeth. It also wears away tooth enamel.

#### **Throat**

#### **Lungs**

The tar in cigarette smoke coats the inside of the lungs. This prevents them from working efficiently. Chemicals in tobacco smoke can also contribute to lung cancer.

#### **Heart**

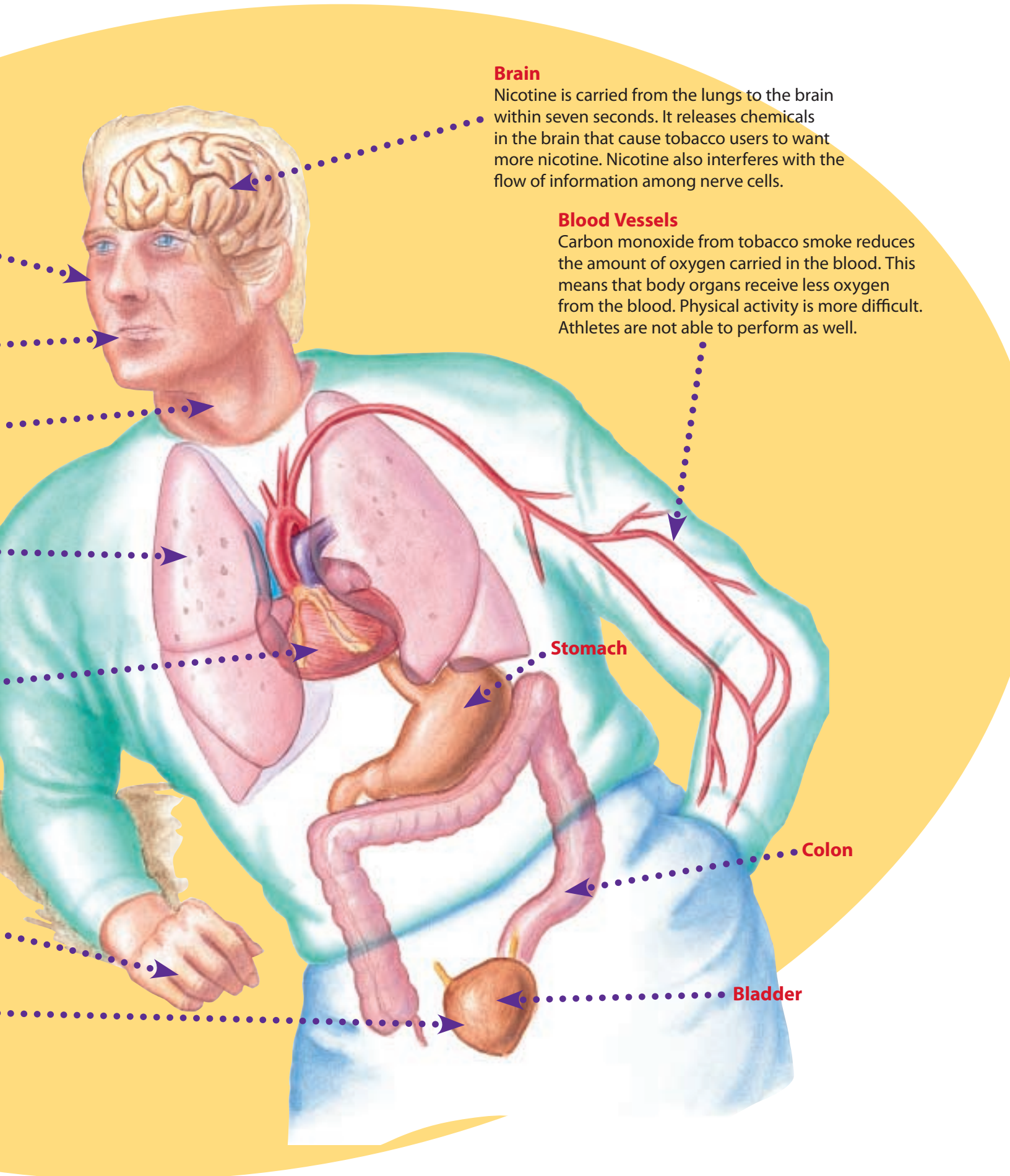
Nicotine increases the heart rate and causes blood vessels to become narrower. Narrow vessels make the heart pump harder to move blood through the body. This extra effort raises blood pressure and can result in heart attack or stroke.

#### **Fingers**

Over time, tobacco use can cause fingers to yellow and stain.

#### **Stomach, Bladder, and Colon**

Harmful substances in tobacco smoke can lead to stomach ulcers and bladder and colon cancers. Compared to nonsmokers, smokers are more than twice as likely to get bladder cancer.



**Brain**

Nicotine is carried from the lungs to the brain within seven seconds. It releases chemicals in the brain that cause tobacco users to want more nicotine. Nicotine also interferes with the flow of information among nerve cells.

**Blood Vessels**

Carbon monoxide from tobacco smoke reduces the amount of oxygen carried in the blood. This means that body organs receive less oxygen from the blood. Physical activity is more difficult. Athletes are not able to perform as well.

**Stomach**

**Colon**

**Bladder**



## Other Forms of Tobacco

Cigarettes are not the only delivery system for tobacco. Tobacco smoke is also brought into the body through cigars and pipes. Bidis—hand-rolled, flavored cigarettes—are another smoked tobacco product. All do harm to the body.

One form of tobacco some people mistakenly believe to be safe is smokeless tobacco. This product is either chewed in a coarsely ground form or taken in as snuff. **Snuff** is *finely ground tobacco that is inhaled or held in the mouth or cheeks*.

Just like cigarettes, smokeless tobacco products can become habit-forming. In addition, harmful substances in smokeless tobacco can form white spots on your gums and inside your cheeks. These can eventually turn into cancer.

Smokeless tobacco also causes bad breath and stains the teeth. Grit and sugar in tobacco can cause cavities and gum disease.

▲ Major sports are discouraging the use of smokeless tobacco among players.

**How might this influence fans?**

**Health Online**

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

**Reading Check**

**Explain** What are some of the dangers of smokeless tobacco?

## Lesson 1 Review

**After You Read**

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

### What I Learned

1. **List** How does nicotine affect the body?
2. **Vocabulary** What is *emphysema*?
3. **Identify** Name two forms of smokeless tobacco.

### Thinking Critically

4. **Analyze** Anne was pressured by a girl at school to try tobacco. “You can always quit any time you want,” the girl said. How might Anne reply?

5. **Apply** What advice would you give someone who asks you about smokeless tobacco?

### Applying Health Skills

6. **Advocacy** Conveying accurate health information and ideas to both individuals and groups shows good citizenship. Create a poster that informs students about the dangers of smoking.

## Teens and Tobacco

### Guide to Reading

#### Building Vocabulary

Read the terms below. If you have come across these in earlier chapters, review your notebook definitions. If you have not, copy their meanings as they appear in this lesson.

- negative peer pressure (p. 228)
- media (p. 228)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** factors that influence teens to try tobacco.
- **recognize** negative influences on teens to use tobacco.
- **access** reliable information on teens and tobacco use.

#### Reading Strategy

**Organizing Information** Using information from the lesson, create a graphic organizer showing beliefs and facts about tobacco use.

### Quick Write

Think about influences that might lead some teens to try tobacco. Write a paragraph explaining how a teen can resist these influences.

### Facts about Teens and Tobacco

Some teens mistakenly believe tobacco helps them fit in better among their peers. If anything, the *opposite* is true. The Centers for Disease Control and Prevention (CDC) and other organizations report a steady drop in teen tobacco use over the past decade.

Yet despite this positive trend, some teens continue to become first-time smokers. According to the same sources, every day 4,000 young people try their first cigarette. Why do some teens start smoking?

**Figure 9.2** summarizes reasons teens give for trying tobacco. It also shows why their beliefs about tobacco use may not be accurate.



- ▶ Friends can influence the choices you make. **Why is it important to choose friends who don't smoke?**



▼ FIGURE 9.2

## REASONS FOR TEEN TOBACCO USE AND THE REALITIES

These are some of the reasons teens give for using tobacco. **Are there other reasons or realities you can add to either list?**

Some Teens Believe	In Reality
Smoking makes a person look cool.	Tobacco stains teeth, leads to bad breath, and causes wrinkled skin.
Tobacco makes teens more accepted among their peers.	Between 70 and 80 percent of teens have never tried tobacco. Teens who use tobacco are also more likely to get in fights, carry weapons, and use alcohol and other drugs.
Using tobacco makes teens seem more grown-up.	The number of adult tobacco users is also on the decline.
Tobacco won't hurt your health for many years.	Some of tobacco's effects begin with the first use. Tobacco use is habit-forming. Once a person starts using tobacco, it can be very difficult to quit.

## Resisting Negative Influences

Many teens decide to try tobacco because they are influenced by others around them. One such influence is **negative peer pressure**. This is *pressure you feel to go along with harmful behaviors or beliefs of your peers*. A teen whose friends use tobacco is more likely to try it as well.

The same is true of teens with family members who use tobacco. Studies show that teens from homes where tobacco is used are far more likely to start smoking.

Yet another negative influence is the media. The **media** include *the various methods of communicating information, including newspapers, magazines, radio, television, and the Internet*. Several years ago, two government agencies researched the media's influence on teen tobacco use. The study examined 200 popular films and 1,000 popular songs. The findings showed that tobacco was used in more than three-fourths of movies intended for young viewers. The study also showed that nearly a third of pop songs glamorize tobacco use.



**Define** What is *negative peer pressure*? What part does it play in tobacco use among teens?



### The Truth about Tobacco

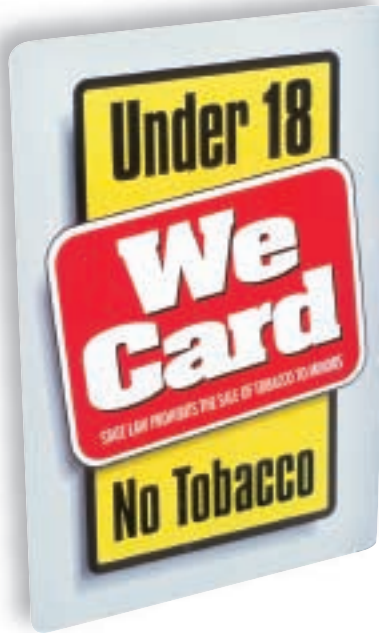
The truth® Campaign was the largest anti-tobacco campaign ever targeted at teens. Using TV ads, print ads, and the Internet, the Campaign educated teens on the dangers of smoking. How effective was the truth® Campaign? Between 2000 and 2002, 85 percent of teens said that the ad they saw gave them good reasons not to smoke.

**What are some other ways to inform teens about the dangers of smoking?**

## Tobacco Advertising

One especially powerful influence is advertising. Estimates show that the tobacco industry spends \$10 billion a year advertising its products. Some of these ads have been proven effective at reaching young people. Another effective method of advertising is “point-of-sale” promotions. These include giveaways and catchy displays near cash registers at stores that sell cigarettes. Recently, cigarette advertisers have even begun to place ads targeted at teens on the Internet.

- ▶ Signs like this are used to help prevent teens from smoking. **Can you think of some other ways to help teens avoid tobacco use?**



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

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Give Examples** Name two factors that might influence teens to try tobacco.
2. **Vocabulary** Define *media*.
3. **Recall** What are two negative pressures teens might face when it comes to tobacco use?

### Thinking Critically

4. **Apply** Identify an example of negative peer pressure to use tobacco. Tell what could do or say to resist this pressure.

5. **Hypothesize** Tobacco advertising on TV was outlawed some years ago. Why do you think this law was passed?

### Applying Health Skills

6. **Accessing Information** The lesson mentioned several reliable sources of health information. Gather additional facts or statistics from these or other reliable sources on teen tobacco use. Share your findings with classmates.

## Staying Tobacco Free

### Guide to Reading

#### Building Vocabulary

Copy the terms below in your notebook. As you read the lesson, write the definitions for each term.

- secondhand smoke (p. 232)
- passive smokers (p. 232)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **demonstrate** ways to say no to tobacco use.
- **explain** how someone can quit using tobacco.
- **understand** the rights of nonsmokers.

#### Reading Strategy

**Identifying Problems and Solution** After reading this lesson, state the problem with secondhand smoke. Then think of a solution for how to build a tobacco-free environment.

### Quick Write

Write a poem or story about a planet that is smoke-free.



- ▲ Nicotine patches can help a person quit smoking. **What other sources of help are available to those who want to quit smoking?**

### Using Refusal Skills

Saying no to tobacco is important, but it is not always easy. Some teens feel pressure from peers to use tobacco. Others see family members smoking and are curious about what it's like.

When faced with real-life pressures, refusal skills can help you say no effectively. Be prepared with some reasons for saying no to tobacco. You can find some examples in **Figure 9.3**. You may be offered tobacco when you least expect it, so it is best to be prepared. Practice saying no in an assertive style, one that shows you are serious but respectful to others. Speak in a firm voice with your head and shoulders up. This will tell others that you mean what you say.

### Kicking the Tobacco Habit

The human body was not designed to inhale smoke of any kind. Some of the damage done by smoking can never be reversed. Once the small airways inside your lungs have been damaged, they cannot repair themselves. Quitting tobacco, however, prevents further damage to the body and will improve a person's overall health.

▼ FIGURE 9.3

## SAYING NO TO TOBACCO

If someone offers you tobacco, here are some ways to say no.  
What are some other ways of refusing tobacco?



One way to quit tobacco use is the cold turkey method. In this method, the user simply stops all use of the tobacco product. This method can be difficult for many people. They need help breaking an addiction to nicotine. One source of help is nicotine replacement therapies (NRT). These are products to assist a person in breaking a tobacco habit. They include nicotine gums, lozenges, and patches worn on the skin.

Community support groups are another option. Local chapters of the American Cancer Society sponsor programs to help users quit. The American Lung Association and American Heart Association have similar programs. Some schools also now have programs to help teens who want to quit using tobacco.

### Reading Check

**Give Examples** Identify three ways of saying no to tobacco.

### DEVELOPING Good Character

#### Good Citizenship

One important character trait is citizenship. Good citizens look out for the welfare of the community. The term *community* means more than just your neighborhood. It also includes the environment, the air we breathe. Obeying laws that regulate smoking is one way of showing good citizenship. **What are some other ways of showing good citizenship when it comes to tobacco?**



# Health Skills Activity

## Advocacy

### Spreading the Word about Tobacco

You can do your part to help other teens avoid smoking. Here are steps you can take to help your peers help themselves.

- Make colorful posters encouraging teens to avoid using tobacco. Include information on the health dangers of tobacco. With permission from school administrators, hang your posters on hallways at school.
- Create a brochure telling what harmful ingredients are contained in tobacco products and how they damage the body. Distribute your brochure to students and adults in your community.
- Offer to make signs for local retailers where teens frequent, urging teens to say no to smoking. Ask retailers to place these signs in a location where they will be seen.

### With a Group

Brainstorm other ways of encouraging students and adults in your community to avoid the risks of tobacco use.

## Tobacco and the Nonsmoker

The dangers of tobacco exist not only for the smoker but for the nonsmoker as well. Tobacco use affects the health of the people around you and in the community.

When a smoker lights up, she or he releases **secondhand smoke**. This is *a mixture of the smoke given off by the burning end of tobacco products and the smoke exhaled by smokers*. Secondhand smoke pollutes the air around the smoker. *Nonsmokers who breathe in secondhand smoke* are called **passive smokers**. Passive smokers develop some of the same health problems as smokers. They may develop coughs, breathing problems, heart disease, and lung cancer. About 3,000 nonsmokers die of lung cancer each year.

Secondhand smoke causes other health problems. Children with respiratory infections may not recover as quickly when exposed to secondhand smoke. Children with asthma may also have more frequent and severe attacks.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com)  
and complete the Interactive  
Study Guide for Lesson 3.

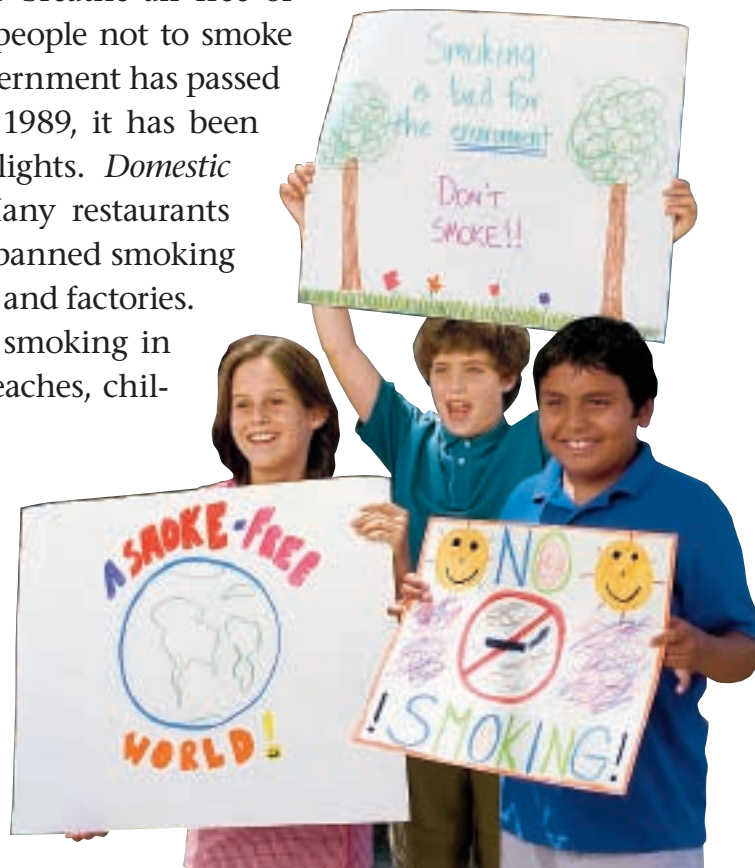
## Rights of the Nonsmoker

As a nonsmoker, you have the right to breathe air free of tobacco smoke. You have the right to ask people not to smoke around you. For this reason, the federal government has passed laws protecting nonsmokers' rights. Since 1989, it has been illegal to smoke on domestic airplane flights. *Domestic* means "within the country's borders." Many restaurants have set aside specific areas for smokers or banned smoking altogether. The same is true of many offices and factories. Some towns and cities have even banned smoking in certain outdoor locations. These include beaches, children's play areas, and public gardens.

### Reading Check

**Explain** In what way is tobacco use harmful to nonsmokers?

- You can help make your community smoke-free. **How can you go about achieving the goal represented by the signs in this picture?**



## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *secondhand smoke*. Use it in a sentence.
2. **List** What are two reasons for refusing to use tobacco?
3. **Recall** What have some communities done to protect the rights of nonsmokers?

#### Thinking Critically

4. **Evaluate** Why do you think it is important to practice refusal skills in advance?

5. **Apply** Tina would like to get her grandfather to stop smoking. When she asked him to stop, he said it was too difficult. What might Tina suggest?

#### Applying Health Skills

6. **Communication Skills** With classmates, develop a skit showing polite ways to ask a smoker to put out a cigarette. The skit should illustrate ways of asking that are assertive.

# Building Health Skills

## REFUSAL SKILLS

### Taking a Stand Against Tobacco

#### DIRECTIONS

Refusal Skills involve saying no to behavior that is unhealthy or unsafe. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.



#### 1 Model

Refusal skills can help you say no to negative peer pressure. Read about how a teen named Claire handled peer pressure to use tobacco.

During the baseball game, Elise showed Claire a cigarette she found on the grass near the center field bleachers. She said someone in the stands must have dropped it.

Elise asked Claire to try the cigarette with her after the game. Claire said no in a firm voice. She told Elise that she would rather

go to the batting cage after the game. When Elise started making chicken noises, Claire decided the conversation was over. She walked away to watch another teammate hit the ball.

## 2 Practice

Claire uses refusal skills again when she is offered tobacco by a classmate, Jennifer. Read the following conversation, then answer the questions at the end.

**Jennifer:** Try one of these special flavored cigarettes.

**Claire:** No thanks. From what I've read, all cigarettes can affect your health.

**Jennifer:** You can't believe everything you read.

**Claire:** I still don't want one. Let's go play my new computer game instead.

**Jennifer:** Ok, let's go.

1. Which refusal skills did Claire use?
2. What words would you use if you were in a similar situation?

## Skill Summary

### REFUSAL SKILLS

When you're pressured to do something you know is unhealthy, remember the word *S.T.O.P.*:

- Say no in a firm voice..
- Tell why.
- Offer other options.
- Promptly leave the situation.

## 3 Apply

With a classmate, develop a situation where a teen feels pressure to use tobacco. Choose another form of tobacco, such as smokeless tobacco. Write a conversation between two or more teens. Use all the skills you have learned to refuse tobacco. In your refusal, include reasons why tobacco is an unhealthy choice.

## Self-Check

- Did we use all of the refusal skills?
- Did we include reasons why tobacco is unhealthy?



Across the country, more and more teens are working together to stamp out smoking. They say it's time to...

# KICK BUTTS

**D**id you know that with every puff of a cigarette, a smoker inhales more than 4,000 chemicals? These dangerous substances include ammonia—an ingredient in toilet cleaner, and arsenic—a powerful rat poison.

Scary facts like these have inspired teens all across the United States to take part in Kick Butts Day (KBD), an annual event sponsored by the Campaign for Tobacco-Free Kids. The day, which is run by teens for teens, is about giving young people information to make the right decision about smoking.

## A DAY TO TAKE ACTION (AND HAVE FUN!)

“When I found out that tobacco kills 13,400 people every day,” says Megan Shaheen, 13, from Washington, D.C., “I knew I had to do something.”

Megan heard about KBD from a friend and decided to get involved. Megan especially liked KBD's motto, which is “Stand out, speak up, and seize control.”

What does the motto mean to Megan? “It means I can make my opinions known about smoking,” she says. “Now I'm going to

speak out to tell my friends and other kids about the dangers of smoking.”

Megan's not alone in getting her message heard. For over ten years, thousands of teens have used KBD as a chance to speak up. They get their anti-tobacco messages across through fun activities, such as school and neighborhood carnivals, track meets, and battles of the bands.

## TEENS REACHING TEENS

The good news is youth movements like KBD seem to be working. According to the Campaign for Tobacco-Free Kids, smoking among high school students decreased from

36.4 percent in 1997 to 21.9 percent in 2003.

“Kids talking to kids sometimes works better than adults talking to kids,” says Josh Parker, 15, from East Lansing, MI. “The numbers show when we put our minds to something, teens can make a change.”

**SURGEON GENERAL'S WARNING:**  
Smoking Causes Lung Cancer,  
Heart Disease, Emphysema, and  
May Complicate Pregnancy



# Reading Review

## 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 1–3. Find a partner, and quiz each other using these study aids.

### Lesson 1 Tobacco: A Harmful Drug

#### Key Ideas

- Tobacco increases your risk of cancer and other serious diseases. It also stains your teeth, causes bad breath, and ages the skin.
- The nicotine in tobacco leads to addiction. Smokers begin to depend on nicotine to feel good and function normally.
- The chemicals in tobacco harm many parts of the body. Tobacco damages the lungs, heart, fingers, brain, and blood vessels.
- Smokeless tobacco is also addictive. It can form spots in the mouth that can turn to cancer and cause sores in the mouth, throat, and stomach.

#### Vocabulary

- nicotine (p. 222)
- carbon monoxide (p. 222)
- tar (p. 222)
- addiction (p. 223)
- emphysema (p. 223)
- snuff (p. 226)

### Lesson 2 Teens and Tobacco

#### Key Ideas

- Teens use tobacco for many reasons. They believe that tobacco makes them feel grown-up, helps them fit in better, and has no short-term health risks.
- Negative influences that can lead teens to try tobacco include media messages, negative peer pressure, and family members who use tobacco.
- Tobacco advertising can be a powerful influence on teens.

#### Vocabulary

- negative peer pressure (p. 228)
- media (p. 228)

### Lesson 3 Staying Tobacco Free

#### Key Ideas

- Refusal skills can help you say no effectively. Be prepared with some reasons to say no to tobacco.
- Ways of kicking the tobacco habit include going “cold turkey,” using aids such as nicotine gums or patches, and getting support from a community group.
- Passive smokers can develop some of the same health problems as smokers.
- Nonsmokers have the right to breathe air free of tobacco smoke and to ask others not smoke around them.

#### Vocabulary

- secondhand smoke (p. 232)
- passive smokers (p. 232)

## 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. Have your ideas changed? What would your answers be now?

## Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–5. After each number, write the term from the list that best completes each sentence.

- carbon monoxide
- tar
- addiction
- emphysema
- media
- negative peer pressure
- secondhand smoke
- passive smokers

### Lesson 1 Tobacco: A Harmful Drug

1. \_\_\_\_\_ is a disease in which tiny air sacs in the lungs are damaged and lose their elasticity.
2. \_\_\_\_\_ is the body's physical or mental need for a drug or other substance.
3. \_\_\_\_\_ is a thick, oily, dark liquid that forms when tobacco burns.

### Lesson 2 Teens and Tobacco

4. Pressure you feel to go along with harmful behaviors or beliefs of your peers is known as \_\_\_\_\_.
5. Newspapers, radio, television, and the Internet are examples of the \_\_\_\_\_.

### Lesson 3 Staying Tobacco Free

On a sheet of paper, write the numbers 6–10. Choose the letter of the word or phrase that best completes each statement or question.

6. It is illegal in many states for teens to
  - a. listen to tobacco advertisements.
  - b. use tobacco products.
  - c. advocate for a smoke-free environment.
7. *Cold turkey* is
  - a. a type of cigarette product in which the tobacco is flavored.
  - b. a type of tobacco product that is held in the mouth rather than smoked.
  - c. a method of quitting tobacco in which the user simply stops using all such products.
8. Each of the following is a nicotine replacement therapy *except*
  - a. nicotine gum.
  - b. patches worn on the skin.
  - c. group counseling
9. All of the following statements are true about passive smokers *except*
  - a. They are nonsmokers.
  - b. They are smokers who are unaware of the dangers of smoking.
  - c. They develop some of the same health problems as smokers.
10. Since 1989, it has been illegal to
  - a. smoke on domestic airplane flights.
  - b. be a passive smoker.
  - c. release secondhand smoke into the environment.



### Thinking Critically

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

- 11. **Evaluate** Why do you think it is difficult for smokers to quit smoking?
- 12. **Analyze** Explain why a teen whose parents use tobacco might be more likely to do the same.

### Write About It

- 13. Imagine getting a letter from a friend living in another city. In the letter, your friend tells you about a new group of friends that smoke. Your friend is thinking of trying a cigarette too. Write a letter to your friend giving advice on the dangers of smoking.

**Anesthesiologist** People undergoing surgery or certain medical treatments need drugs so they don't feel any pain. These drugs are called anesthetics. The physician who gives anesthetics is called an *anesthesiologist*. Like other doctors, anesthesiologists need at least four years of medical school and advanced training. Find out more about this and other health careers by clicking on *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

- 14. Write a paragraph explaining how a smoke-free environment would benefit both smokers and nonsmokers.

## Standardized Test Practice

### Math

#### Trends in Smoking Among Americans

Use the table to answer the questions.

Year	Smokers per 100 Americans
1965	41.9
1974	37.0
1979	33.3
1985	29.9
1990	25.3
1995	24.6
2000	23.1
2002	22.4

### TEST-TAKING TIP

When questions involve graphs or tables, study the data carefully. Make sure you understand the information being presented.

- 1. In which year shown did the number of smokers per hundred Americans drop below 25?
  - A. 1985
  - B. 1990
  - C. 1995
  - D. 1994
- 2. Which of the following does the table show?
  - A. The percentage of American smokers has steadily declined.
  - B. The percentage of American smokers has steadily risen.
  - C. The number of smokers over age 41 has declined.
  - D. The percentage of smokers below age 23 has risen.

# Alcohol and Other Drugs



## Chapter Preview

<b>Lesson 1</b> The Dangers of Alcohol Use.....	242	<b>Building Health Skills</b> .....	260
<b>Lesson 2</b> Alcoholism and Addiction .....	246	<b>Hands-on Health</b> .....	262
<b>Lesson 3</b> What are Illegal Drugs? .....	249	<b>Chapter Reading Review</b> .....	263
<b>Lesson 4</b> Drug Abuse.....	253	<b>Chapter Assessment</b> .....	264
<b>Lesson 5</b> Avoiding Alcohol and Drugs .....	256		

### ▲ Working With the Photo

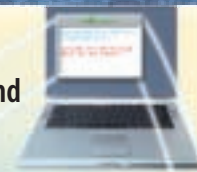
Drugs, including alcohol, can damage your health. **How can you help spread the word about the dangers of alcohol and other drug use?**

# Start-Up Activities



## Before You Read

Read the Instant Message below. Imagine you are mona\_k15. How would you respond to carrie\_64's offer? Keep a record of your answer.



## IM Express

mona\_k15: i want to go to nikki's party but my cold is worse. i'll have to wait till saturday to see. ☹

carrie\_64: i have some medicine i got from my doctor last time i was sick. i'll give it to you when i see you in english class.

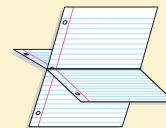
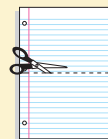
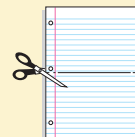
## FOLDABLES™ Study Organizer



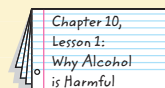
## As You Read

Make this Foldable™ to record information on alcohol and its harmful effects, presented in Lesson 1. Begin with two sheets of notebook paper.

- 1** Fold one sheet in half from top to bottom. Cut about 1" along the fold at both ends, stopping at the margin lines.
- 2** Fold the second sheet in half from top to bottom. Cut the fold between the margin lines.
- 3** Insert the first sheet through the second sheet and align folds.
- 4** Fold the bound pages in half to make a booklet, and label the cover as shown. Then label each page as instructed by your teacher.



Take notes on alcohol's harmful effects on the appropriate page of your booklet.



**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Health Inventory for Chapter 10.

## The Dangers of Alcohol Use

### Guide to Reading

#### ● Building Vocabulary

In your notebook, write definitions of what you think the terms below mean. Make corrections as needed when you come upon the definitions in the lesson.

- alcohol (p. 242)
- drug (p. 242)
- cirrhosis (p. 243)
- blood alcohol content (BAC) (p. 243)

#### ● Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** how alcohol affects the body and mind.
- **explain** why some teens use alcohol.
- **recognize** factors that influence alcohol's effects.

#### ● Reading Strategy

**Sequencing** Make a flow chart that shows where alcohol travels in the body once it is swallowed. Describe what the drug does to each body part it passes through.

**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 241 as you read this lesson.

### Quick Write

Write about a story you have read or heard involving the dangers of alcohol use.

## What Is Alcohol?

Have you ever seen food that is spoiled and has mold on it? This change is caused by a chemical reaction. A similar change leads to the creation of alcohol. **Alcohol** (AL·kuh·hawł) is a *substance produced by a chemical reaction in carbohydrates*. Alcohol is a drug. A **drug** is a *substance that changes the structure or function of the body or mind*. Like other drugs, alcohol can cloud judgment, making it difficult to think and act responsibly. Over time, alcohol can also cause disease and damage body organs. One of the greatest dangers of using alcohol is that its effects are unpredictable. There is no telling how a person's mind or body might react when he or she has been drinking.

### Alcohol's Effects on the Body

Alcohol begins to affect the body systems soon after it is consumed. In the stomach, it increases the flow of acid used for digestion. Over time, the extra acid can cause sores to develop in the stomach lining. These sores are called *ulcers*.

From the stomach, alcohol moves into the bloodstream and causes the blood vessels to expand. More blood passes through

the blood vessels making the body feel warm. As blood flows close to the surface of the skin, the body loses heat. In cold weather, this can cause the body temperature to drop dangerously low before the drinker feels cold.

Consuming alcohol regularly over a long period of time puts a strain on the liver. Heavy drinkers are particularly at risk of developing **cirrhosis** (suh·ROH·sis). This is *destruction and scarring of the liver tissue*. Cirrhosis can lead to death.

Drinking large amounts of alcohol in a short time can lead to alcohol poisoning. The drinker may vomit, become unconscious, or have trouble breathing. If this occurs, the user may be at risk of serious harm or even death.

### Alcohol's Effects on the Brain

When alcohol reaches the brain, it slows the body's functions and reaction time. Reaction time is how long it takes a person to respond to a situation. People whose reaction time has been slowed by alcohol are dangerous behind the wheel of a car. They cannot react quickly enough to avoid other vehicles or pedestrians.

Drinking alcohol makes it hard for people to think and speak clearly. They may say or do things they would not normally say or do. A person under the influence of alcohol is also more likely to engage in high-risk behaviors.



#### Reading Check

**Define** How does alcohol affect the brain?

### Factors that Influence Alcohol's Effects

Different people react to alcohol in different ways. How a person reacts depends on several factors, including his or her **blood alcohol content (BAC)**. This is *a measure of the amount of alcohol present in a person's blood*. It is expressed as a percentage. A BAC of 0.02% will cause most people to feel lightheaded. A BAC of 0.08% interferes with a person's ability to drive a car safely. Police officers use this percentage to determine if a driver is legally drunk. A BAC of 0.40% can lead to coma and death.



## DEVELOPING Good Character

### Being a Responsible Friend

One way of showing you are a responsible person is by looking out for the well-being of others. Don't let a friend get in a car with a driver who has been drinking. If your friend is using alcohol, urge him or her to get help. Don't hesitate to talk to an adult yourself if your friend is unwilling to reach out. This is not breaking your friend's trust. It is taking the first step in getting your friend the help he or she needs. **What are some other ways you can show you are responsible and care about a friend's health?**

- ▼ Drunk driving is a major cause of traffic accidents. **Explain how alcohol contributes to auto accidents.**



A number of other factors can influence how alcohol affects an individual. These factors include the following.

- **The person's body weight.** The less a person weighs, the greater the effect the alcohol will have.
- **The person's rate of consumption.** Drinking quickly can overload the liver. When this happens, alcohol builds up in the body and continues to affect the brain and blood vessels.
- **The amount the person consumes.** The size of a drink and the alcohol content will influence its effects. **Figure 10.1** compares the alcohol content of different alcoholic beverages.
- **The amount the person has eaten.** Food slows the absorption of alcohol into the bloodstream. When the stomach is empty, alcohol enters the bloodstream and affects the body much quicker.
- **The presence of other drugs in the person's system.** When you combine alcohol with other drugs, including medicines, they react with each other. This can cause serious harm or even death.

▼ **FIGURE 10.1**

## ALCOHOL CONTENT IN DIFFERENT DRINKS

The three drinks here are different sizes. Yet all contain the same amount of alcohol. All have the same effect on the brain and body. **How many ounces of beer would produce the same effect as 6 ounces of wine?**



## Teens Who Drink

In the United States, drinking alcohol is illegal for anyone under the age of 21. Therefore, teens caught drinking can be arrested. They may also be suspended or expelled from school. Teens who use alcohol risk developing health problems as well. Research has shown that the brains of teenagers continue to develop until the age of 20. Alcohol can affect this development by interfering with the brain's learning and memory functions. When the brain doesn't function properly, it is difficult to do well in school.

In spite of the health and safety risks, some teens still choose to drink. Why? Some believe that alcohol helps them relax, fit in, and be accepted by their peers. Others feel that drinking helps them escape their problems. In reality, alcohol usually makes problems worse. If you have a problem, talk to a friend or trusted adult.



▲ Finding healthy activities to do with your friends will help you avoid alcohol. **What are some other healthy activities you can enjoy with your friends?**

### Reading Check

**Identify** What reasons do teens give for drinking?

## Lesson 1 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *alcohol*, and use it in an original sentence.
2. **Recall** Give two examples of how alcohol affects the body.
3. **Identify** What do the letters *BAC* stand for? What does *BAC* measure?

#### Thinking Critically

4. **Evaluate** Which of alcohol's effects do you think is the most harmful?

5. **Analyze** Why is a person under the influence of alcohol more likely to engage in other high-risk behaviors?

#### Applying Health Skills

6. **Goal Setting** Identify some goals you have set for yourself, such as college or playing on a sports team. Explain the effects alcohol use could have on these plans.

# Alcoholism and Addiction

## Guide to Reading

### Building Vocabulary

Copy the terms below into your notebook. Define each as you come across them in your reading.

- tolerance (p. 247)
- alcoholism (p. 247)
- fetal alcohol syndrome (FAS) (p. 248)

### Focusing on the Main Ideas

In this lesson, you will be able to

- **describe** the cycle of addiction to alcohol.
- **identify** the health risks of drinking during pregnancy.
- **communicate** ways that teens can reduce stress without using alcohol.

### Reading Strategy

**Predicting** Quickly look at the main headings, figures, and captions. Predict the kinds of information that will be covered.

## Quick Write

Write a paragraph describing how you think alcoholism might affect a person's life.

## Why You Should Avoid Alcohol

Using alcohol carries a number of short- and long-term consequences. People who have been drinking alcohol may do or say things they will regret later. Teens whose judgment has been clouded by alcohol may take part in high-risk behaviors. These include using other drugs, engaging in sexual activity, or riding in a car driven by another drinker.

When used over time, alcohol can damage a person's health. For teens, it also can negatively affect relationships with parents and other family members. It also can affect performance in school and have a lasting effect on a teen's future.

## Addiction and Alcoholism

People who use alcohol regularly over a long period of time risk becoming addicted to alcohol. As noted in Chapter 9, addiction is a physical or mental need for a drug. The cycle of addiction is sometimes represented by a downward spiral, as shown in **Figure 10.2**. The spiral shows how addiction to alcohol starts off by having an occasional drink. Soon, drinking becomes a habit. He or she begins drinking larger amounts of alcohol. As time goes on, the person develops a tolerance. **Tolerance** is a need for increasing amounts of a substance to achieve the same effect.

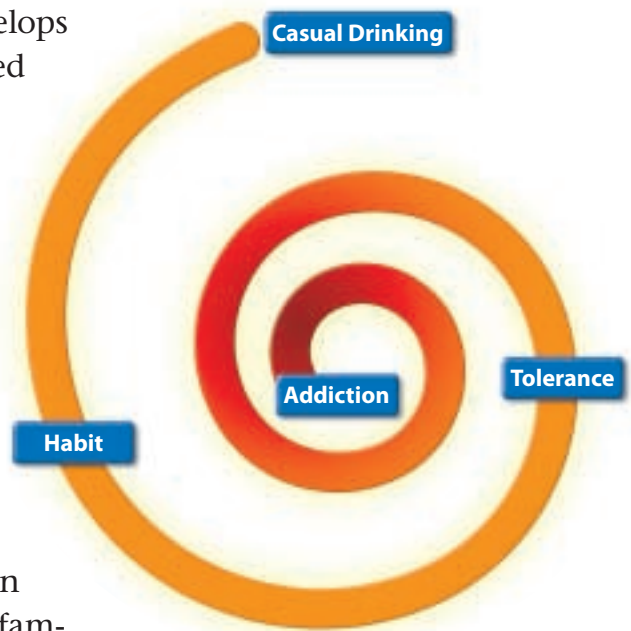
If this cycle isn't interrupted, the person develops an addiction to alcohol. A person who is addicted to alcohol suffers from **alcoholism**. This is a disease in which a person has a physical and mental need for alcohol. A person with this disease is called an alcoholic.

### Help for Alcoholics and Their Families

Alcoholism cannot be cured, but it can be treated. Treatment includes cleansing all alcohol from the body. An alcoholic also needs help dealing with the physical and emotional desire to have a drink.

Alcoholism is a problem that affects more than the alcoholic. It can be a painful experience for family members as well. Children of alcoholics sometimes blame themselves. They believe something they did drove a parent to drink. This is not the case. A child is never to blame for a parent's alcoholism.

When a family member suffers from alcoholism, other family members can try to help. There are community support groups that can help the alcoholic and his or her family. Alcoholics Anonymous (AA) helps people with alcoholism. Al-Anon provides support for family members living with an alcoholic. Alateen, a group within Al-Anon, helps teenage children of alcoholic parents learn to cope with problems at home. Listings for these organizations can be found in phone directories and on the Internet.



▲ FIGURE 10.2

### SPIRAL OF ADDICTION

The spiral of addiction begins with casual drinking. **Where does the spiral end?**

#### Reading Check Identify

What are two steps in the cycle of addiction?

- ▶ Help is available for alcoholics and their families. **Name two organizations that can help.**



## Pregnancy and Alcohol

Have you seen warning labels like the one shown on this page? They warn women not to drink alcohol during pregnancy. Alcohol consumed during pregnancy passes from the mother into the developing baby's bloodstream. This places the baby at risk of developing **fetal** (FEE·tuhl) **alcohol syndrome**, or **FAS**. This is *a group of permanent physical and mental problems caused by alcohol use during pregnancy*. Babies with FAS often weigh less than average. They may suffer from birth defects, mental retardation, or learning disabilities that may go unnoticed until they are in school. To protect the health of their babies, pregnant women should completely avoid consuming alcohol.



GOVERNMENT WARNING:  
 (1) ACCORDING TO THE SURGEON GENERAL,  
 WOMEN SHOULD NOT DRINK ALCOHOLIC  
 BEVERAGES DURING PREGNANCY BECAUSE  
 OF THE RISK OF BIRTH DEFECTS.  
 (2) CONSUMPTION OF ALCOHOLIC BEVERAGES  
 IMPAIRS YOUR ABILITY TO DRIVE A CAR OR  
 OPERATE MACHINERY, AND MAY CAUSE  
 HEALTH PROBLEMS.

### Reading Check

**Define** What do the letters *FAS* stand for? What is FAS?

- ◀ All alcoholic beverages are required by law to carry the warning label shown here. **What two uses of alcohol does this label warn against?**

## Lesson 2 Review

### After You Read

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

#### What I Learned

- Vocabulary** Explain the connection between *tolerance* and *alcoholism*.
- Compare** How are Alateen and Al-Anon similar? How are they different?
- Explain** Who is at risk when a pregnant woman drinks? Explain.

#### Thinking Critically

- Analyze** In what ways can alcoholism affect a family?

- Evaluate** Sid was at a party where teens were talking about drinking. He was told that trying alcohol once won't hurt him. Explain whether this statement is accurate.

#### Applying Health Skills

- Stress Management** Some people use alcohol to reduce stress. As a class, brainstorm ways that teens can reduce stress without the use of alcohol.

## What Are Illegal Drugs?

### Guide to Reading

#### Building Vocabulary

Review the terms below. Write each, along with its definition, in your notebook.

- illegal drugs (p. 249)
- marijuana (p. 249)
- inhalants (p. 250)
- stimulants (p. 250)
- anabolic steroids (p. 251)
- narcotics (p. 251)
- hallucinogens (p. 252)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** the dangers of illegal drugs.
- **explain** the risks of using marijuana and inhalants.
- **identify** the risks of using stimulants, narcotics, anabolic steroids, and hallucinogens

#### Reading Strategy

**Identifying Cause-and-Effect** Make a two-column chart. In the first column, write the names of the drugs you learned about. In the second, list the effects of these drugs.

### Illegal Drugs

Drugs that are made and sold without getting approval from the government are illegal. **Illegal drugs** are *drugs that are made and used purely for their effects*. Anyone who is caught making, selling, or using illegal drugs can be arrested. Punishment can include stiff fines and lengthy jail sentences. Using illegal drugs can damage your health and can even cause death. In this lesson, you will learn about several types of illegal drugs and how they can affect your health.

### Marijuana

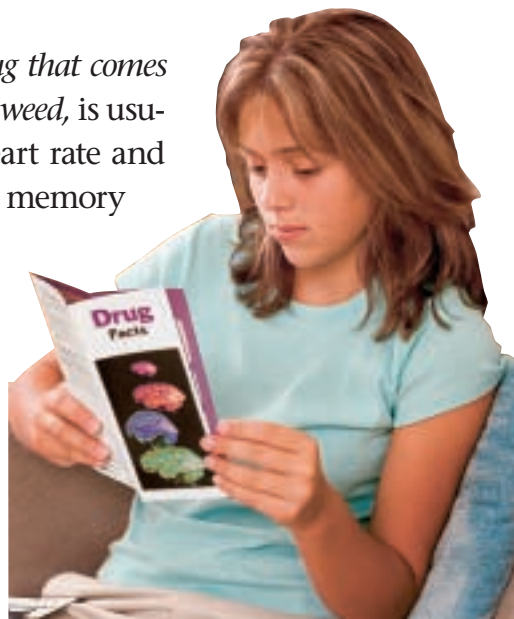
**Marijuana** (mar·uh·WAHN·uh) is *an illegal drug that comes from the hemp plant*. Marijuana, also known as *pot* or *weed*, is usually smoked. Using marijuana can increase your heart rate and decrease your energy level. It can also interfere with memory and concentration. Users may also experience hallucinations and panic attacks. They may see or hear things that aren't real and feel terrified for no reason. Over time, marijuana can cause brain damage. People who use marijuana are more likely to try other dangerous drugs.

### Quick Write

Write a list of problems that people might develop from using illegal drugs.

- ▼ Knowing the facts about illegal drugs can help you avoid using drugs.

**What are some ways to get information about illegal drugs?**



- Talking to a trusted adult can help teens cope with problems without using drugs. **Who are some adults you could turn to for help?**



## Inhalants

**Inhalants** (in·HAY·luhnts) are *substances whose fumes or vapors are inhaled, or breathed in*. Most toxic or poisonous inhalants are common household products like adhesives, lighter fluids, cleaning solvents, and paint. Breathing in these fumes or vapors can cause hallucinations. They can also damage brain cells. Damaging brain cells can make a person lose consciousness and go into a coma. A coma is a deep state of unconsciousness. If the brain has been permanently damaged, a person can die or never wake up.



**Compare** Compare and contrast marijuana and inhalants.

## Stimulants

**Stimulants** (STIM·yuh·luhnts) are *drugs that speed up the body's functions*. They cause increases in the heart and breathing rates. They can also cause loss of coordination, physical collapse, heart failure, and brain damage. Illegal stimulants include cocaine and methamphetamines.

### Cocaine and Crack

One highly addictive illegal stimulant is cocaine (koh·KAYN). Cocaine's effects are unpredictable and very dangerous. Using cocaine even once can cause the user's blood pressure and heart rate to rise to dangerous levels. Cocaine use can also cause feelings of restlessness, anxiety, and loss of appetite. Cocaine is inhaled or injected with a needle. Crack cocaine, or *rock*, is an especially pure

and powerful form that is heated and smoked. It has been linked to many deaths. People who use crack cocaine often engage in other high-risk behaviors such as sexual activity.

## Methamphetamine

Another dangerous stimulant whose use has increased in recent years is methamphetamine (meth·uhm·FEH·tuh·meen). Nicknamed *meth* or *crank*, methamphetamine is very addictive. It is available as pills, capsules, powder, and chunks. Effects of the drug include an abnormal or exaggerated level of activity and decreased appetite. Long-term use can damage brain cells, cause breathing problems, and even cause a stroke.



**Give Examples** How do stimulants harm the body?

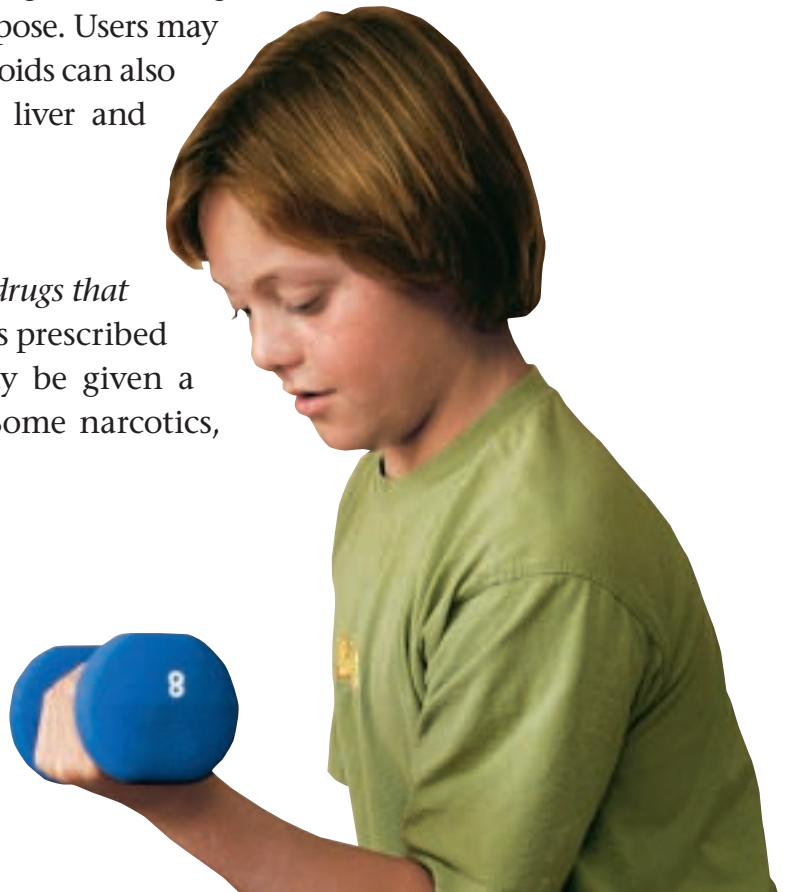
## Anabolic Steroids

Some drugs mimic the behavior of chemicals made by the body. One example is **anabolic steroids** (a·nuh·BAH·lik STEHR·oydz), *synthetic drugs based on a male hormone*. Doctors sometimes prescribe steroids to treat certain medical conditions. Some athletes use steroids to increase their body weight and strength. Steroids should never be used for this purpose. Users may become violent and deeply depressed. Steroids can also cause problems in sexual development, liver and brain cancer, and heart attacks.

## Narcotics

**Narcotics** (nar·KAH·tics) are *strong drugs that relieve pain*. Some narcotics are medicines prescribed by doctors. For example, a patient may be given a narcotic after surgery to relieve pain. Some narcotics, however, are illegal.

- ▶ Responsible teens strengthen their muscles in healthy ways. They steer clear of anabolic steroids. **What are some other physical activities that will build muscle strength?**



### Fairness

Some professional athletes have used steroids to help them play better. Use of these drugs is against the rules because it gives these athletes an unfair advantage over their opponents. When playing sports or other physical activities, it is important to follow the rules and play fair.

**What are some other ways you can demonstrate fairness in your life?**



The most commonly used illegal narcotic is heroin. Heroin comes from a substance taken from the Asian poppy plant. It usually appears as a white or brown powder. Its street names include *smack*, *H*, *skag*, and *junk*. People who use heroin risk unconsciousness and death. Since it is usually injected, heroin users can also become infected with HIV and hepatitis from shared needles.

## Hallucinogens

**Hallucinogens** (huh·LOO·suhn·uh·jenz) are *illegal drugs that cause the user's brain to create or distort images and to see and hear things that aren't real*. As the name suggests, users experience hallucinations. PCP (*angel dust*) and LSD (*acid*) are two very dangerous hallucinogens. Another hallucinogen, called MDMA or Ecstasy, is also a stimulant. Use of these drugs can lead to strange and/or violent behaviors. Users may also become confused or depressed. Long-term use can lead to brain damage.

 Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

### Reading Check

**Identify** What are some risks of using hallucinogens?

## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *inhalant*. Use the word in a sentence.
2. **Recall** What is a street name for crack cocaine? Describe this illegal drug.
3. **List** What are some of the health risks associated with heroin use?

#### Thinking Critically

4. **Apply** Suppose a friend told you steroids were safe because they are sometimes used as a medicine. How would you respond? Is this valid health information?

5. **Analyze** One day, as Wesley is leaving baseball practice, an older teen offers him some pills. "These will help you hit the ball a mile," the teen says. What advice would you give Wesley?

#### Applying Health Skills

6. **Practicing Healthful Behaviors** Make a list of ways you can have fun and stay active without using drugs. Share your list with classmates.

# Drug Abuse

## Guide to Reading

### Building Vocabulary

Copy the terms below into your notebook. Put a checkmark next to the terms you know. Put an X next to those you don't know.

- drug abuse (p. 253)
- overdose (p. 253)
- recovery (p. 254)
- withdrawal (p. 254)
- drug rehabilitation (p. 255)

### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** the harmful effects of drug abuse.
- **explain** recovery and withdrawal.
- **describe** treatments for drug addicts.

### Reading Strategy

**Drawing Conclusions** Based on this lesson, list three different ways drug abuse affects your health. Give one example for each of the three sides of your health triangle.

## What is Drug Abuse?

**Drug abuse** is the use of any drug in a way that is unhealthy or illegal. Using illegal drugs is a form of drug abuse. Purposely using medicines in ways they were not intended to be used is another form of drug abuse. One medicine that is sometimes abused by teens is a stimulant drug prescribed to treat attention deficit/hyperactivity disorder, or ADHD. Using this drug for any other reason than to treat ADHD is illegal and dangerous. Abuse of this medicine can lead to increased heart rate, high blood pressure, and nervousness. Other possible effects include stroke and seizure.

### Quick Write

Write about an experience you have had recovering from something, such as a bad cold.

## Harmful Effects of Drug Abuse

People who abuse drugs risk damaging their health and their relationships. Drug abuse can affect all three sides of your health triangle in the following ways.

- **Physical health:** The physical effects of drug abuse can range from sleeplessness and irritability to damage to the body organs. Drug abuse can also cause heart failure and stroke. An **overdose** of drugs—*taking a fatal amount of a drug*—can cause death. It is impossible to tell how much is too much for any given user.



- **Mental/emotional health:** Stimulant drugs kill brain cells. These cells continue to die off even after the abuse stops. The brain damage that results can interfere with the user's ability to think. Other drugs cause depression. For teens with low self-esteem, drug-related depression can cause them to think about or commit suicide.
- **Social health:** Teens who abuse drugs may lose interest in school. They may also withdraw from family and friends. Some teens who abuse drugs fall in with a rough crowd. They become members of gangs, which puts them at risk of being injured in gang-related violence.

▲ Drug use of any kind is very dangerous. **Why is it risky to try illegal drugs even once?**



**List** Name a mental/emotional and a social effect of drug abuse.

## Addiction

People who abuse drugs are also at risk of developing an addiction. As noted earlier, addiction is a physical and/or mental need for a drug. There is no telling how many times a person can use a drug before becoming addicted. People with an addiction to a drug can no longer function without it. The drug becomes central to their day-to-day life. The addict needs more and more of the drug to feel better.

## The Road to Recovery

Recovery begins when a person stops using a drug so the body can cleanse and repair itself. **Recovery** means *to overcome an addiction and return to a mostly normal life*. At the beginning of recovery, the addict may go through withdrawal. **Withdrawal** is *a series of physical and mental symptoms that occur when a person stops using an addictive substance*. Vomiting, hallucinations, and severe anxiety are common withdrawal symptoms. Anyone going through withdrawal needs help from a doctor.

## Help for Drug Abusers and Their Families


Drug addiction is a disease much like diabetes or heart disease. Like these diseases, treatment for drug addiction requires that sufferers make permanent changes to their behavior. They may also have to change the kinds of medications they take.

Treatment usually includes counseling to help addicts deal with their mental and emotional dependency on drugs. In some cases, **drug rehabilitation** is needed. This is *a process in which a person relearns how to live without the abused drug*. The person is sent to live at a facility for recovering addicts and usually stays from 6 to 12 months.

Because an abuser's family is affected by his or her addiction, they need help, too. Community organizations exist to help families of drug abusers. You will learn more about these in the next lesson.



**Define** What is recovery?



Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 4.

## Lesson 4 Review



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

### What I Learned

1. **Describe** Discuss two forms of drug abuse.
2. **Vocabulary** What is an *overdose*? Why are overdoses dangerous?
3. **Explain** What is one form of treatment for drug abuse?

### Thinking Critically

4. **Predict** How could drug abuse affect a teen's future?

5. **Analyze** When Alan broke his arm, the doctor prescribed a painkiller. Even after the pain stopped, Alan continued to take the medication. Is he abusing the drug? Why or why not?

### Applying Health Skills

6. **Communication Skills** Create a poster that communicates the dangers of drug abuse. You may refer to any of the health problems or other difficulties mentioned in the lesson.

## Avoiding Alcohol and Drugs

### Guide to Reading

#### Building Vocabulary

Write the definition of the terms below in your notebook.

- substance abuse (p. 256)
- alternative (p. 258)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **demonstrate** the skill of advocacy to explore ways to communicate the dangers of substance abuse.
- **explain** ways to stay substance-free.
- **identify** alternatives to substance abuse.

#### Reading Strategy

**Finding the Main Idea** Copy the major and minor headings onto a sheet of paper. Leave a space after each heading. Write a sentence after each heading that summarizes its main idea.

### Quick Write

Write a brief statement of your long-term goals. Then add another sentence or two explaining how drug use could affect those goals.

## Avoiding Substance Abuse

Positive health behaviors include saying no to **substance abuse**. This is *using illegal or harmful drugs, including any use of alcohol while under the legal drinking age*. Being substance-free shows self-control. It means you have taken charge of your life and your health. In this lesson, you will learn healthy ways to avoid using alcohol or other illegal drugs.

- ▶ Positive peer pressure can help you avoid substance abuse. **What are some other examples of positive peer pressure?**





# Health Skills Activity

## Advocacy

### Getting SADD About Substance Abuse

Spreading the word about the dangers of substance abuse can save lives. That is why Students Against Destructive Decisions (SADD) was created. SADD is a worldwide organization. It helps students make positive decisions about challenges in their lives.

Members of SADD speak out against the use of alcohol, drugs, or other harmful substances. You can take a stand against substance abuse, too.

### With a Group

Explore ways of communicating the dangers of abusing substances. What are some of the different methods organizations such as SADD use to communicate their information to students?

## Ways to Stay Substance-Free

Teens can be influenced to use alcohol and drugs in several ways. The media often show people enjoying alcohol. You may also see adults around you using alcohol. Your friends or peers may pressure you to use alcohol or other illegal substances.

The best way to avoid being pressured to use illegal substances is to use refusal skills. State your decision clearly and assertively. When you speak assertively, you are letting people know you are serious. If outside pressure is strong, walk away. If it continues, seek help from a parent or other trusted adult. Making friends with people who have also chosen not to use drugs will help. They will support your decision and help you avoid situations where drugs and alcohol may be present.

Some teens choose to use alcohol or other drugs to cope with problems. However, alcohol and other drugs will often make problems worse. Instead, talk to a parent, guardian, or other trusted adult. They can help you find positive ways to deal with problems.



### Reading Check

**Check** What are two ways teens can be influenced to use alcohol or other drugs?

**Topic: Avoiding Alcohol**

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to learn ways to say no to peers who want you to drink.

**Activity:** Using the information provided at the link above, create an alcohol fact sheet that includes tips for saying no to peer pressure.

## Alternatives to Drug and Alcohol Use

When someone offers you drugs or alcohol and you refuse, it is a good idea to suggest a positive alternative. An **alternative** (ahl-TER-nuh-tihv) is *another way of thinking or acting*. Offering a positive alternative allows you to change the subject, redirecting the conversation to another topic. This can help relieve some of the pressure you may be feeling. It also gives you the opportunity to be a positive influence on your friends or other peers. If you are with someone who suggests drinking alcohol, think of something else you both can do. You might suggest getting something to eat or playing a video game instead. **Figure 10.3** shows some other healthful alternatives.



Reading Check

**Define** What is an alternative?

▶ **FIGURE 10.3**

### ALTERNATIVES TO SUBSTANCE ABUSE

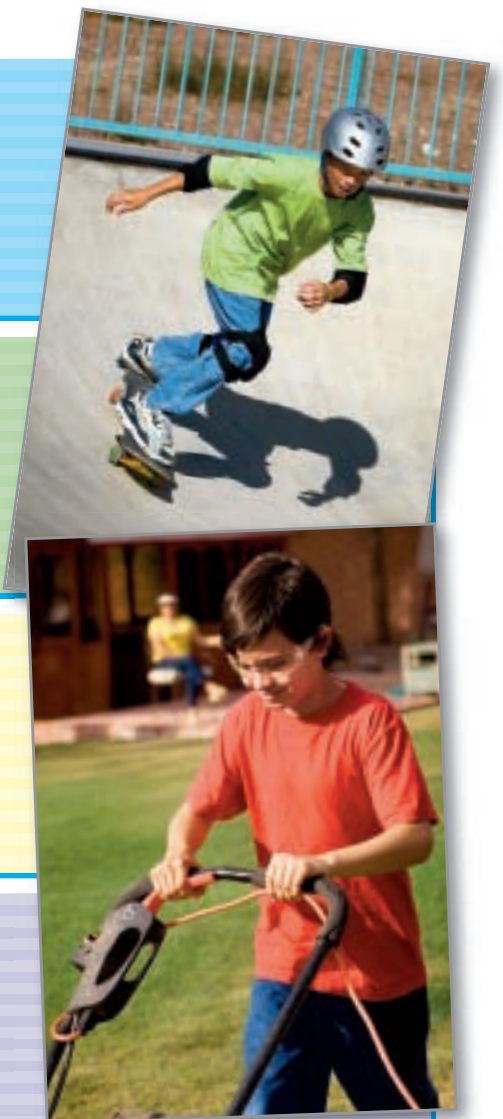
These are some activities you can enjoy without using alcohol or other drugs. **Can you think of any other positive alternatives to substance abuse?**

- **Have fun at drug-free and alcohol-free events.** Avoid environments where alcohol or other drugs are present. Use positive peer pressure to help others avoid these environments.

- **Improve your talents or skills.** Choose an activity you like, and practice it until you become an expert. Become a great skateboarder, a computer whiz, or the best artist at school.

- **Be part of a group.** Join a sports team, a club, or a community group.

- **Start your own business.** Make yourself available for babysitting, yard work, or other odd jobs. Let friends and neighbors know.



## Help for Families of Substance Abusers

In Lesson 2, you learned about the kinds of support that are available for alcoholics and their families. Similar community resources exist for people with substance abuse problems. They are designed to help a person get his or her life back on track. One organization for families of drug addicts is Nar-Anon. Like Al-Anon, Nar-Anon holds meetings that teach family members how to handle the problems associated with living with an addict.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com)  
and complete the Interactive  
Study Guide for Lesson 5.

### Reading Check

**Give Examples** Name one organization that helps families affected by substance abuse.

- ▶ Support from friends can help you stay substance-free. **What resources are available in your community for teens with substance abuse problems?**



## Lesson 5 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *substance abuse*. Use it in a sentence.
2. **Identify** Name two alternatives to drug abuse.
3. **Recall** What are two ways to stay substance-free?

#### Thinking Critically

4. **Apply** Tell how choosing to be substance-free can build character.

5. **Evaluate** How can suggesting a positive alternative to alcohol or drug use help you stay substance-free?

#### Applying Health Skills

6. **Refusal Skills** Think about ways to say no to harmful behaviors. Team up with a classmate. Role-play a situation where you use these strategies to say no to illegal drugs.



# Building Health Skills

## DECISION MAKING

### Avoiding Drug Abuse

#### DIRECTIONS

Decision making involves taking steps to make healthy and responsible choices. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

Jason was at his friend Ryan's house where several teens were gathering to watch a movie. One of the teens suggested that everyone go to his house to drink some beer.

Jason did not feel good about the situation. He knew if he went with his friends, he would feel pressured to try the beer. Jason used the decision-making process to help him decide what to do.

1. **State the situation.** I am being pressured to drink beer. I really don't want to do that.
2. **List the options.** I could go ahead and try the beer this one time. I could just leave. I could also say that I would rather stay and watch the movie.
3. **Weigh the possible outcomes.** I would be breaking my promise to myself that I wouldn't experiment with alcohol or other drugs. Also, we could get caught drinking, which would upset my parents. If I just go home, I'll feel left out. If I say I don't want to drink beer, maybe Ryan will back me up.
4. **Consider your values.** Keeping my promise to myself is important. I also don't want to upset my parents.
5. **Make a decision and act.** Jason decided to stay and watch the movie. Ryan decided to stay as well.



## 2 Practice

The decision-making process worked well for Jason. He used it again to help him decide whether to go to a party at another teen's house. A friend told Jason that someone was bringing marijuana to the party and they could try it.

On your own paper, show the steps Jason should use to make a decision about whether or not to go to the party. If Jason wanted to spend time with his friends, what are some positive alternatives he could suggest?

### Skill Summary DECISION MAKING

- State the situation.
- List the options.
- Weigh the possible outcomes.
- Consider your values.
- Make a decision and act.

## 3 Apply

With a small group, brainstorm ways a teen might be affected by someone else's use of drugs. Choose one of these ideas and write a short story about a teen who is in this situation. Show how the teen uses the decision-making process to make a healthy choice.

### Self-Check

- Did our story tell how a teen might be affected by someone else's drug use?
- Did the teen use all the decision-making steps?
- Did we show a healthy choice?



## “Say No to Drugs” Skit

Refusal skills are useful for keeping drugs out of your life. It takes good communication skills to say no in a firm way without offending others. In the activity below, you and your classmates will have a chance to practice refusal skills by creating and acting out a skit.

### What You Will Need

- pencil and paper

### What You Will Do

- 1 Work with a group of classmates. Think of one-liners teens might use to try to persuade their peers to use drugs. For example, “Just give it a try,” or “One time won’t hurt.”
- 2 Fold a sheet of paper in half lengthwise to form two columns. In the first column, write your one-liners. Now try to think of ways teens could respond that would allow them to refuse the drug. Write these in the second column.
- 3 Review your lists. Select the three most persuasive one-liners and the three best refusals. Use these to create a skit to perform for your classmates.
- 4 After you have finished your performance, pass around a short questionnaire. The questionnaire should ask classmates to tell you what they felt was good and what they thought could be improved in your skit. The questionnaire should conclude by asking them for suggestions on how to improve your refusal strategies.

### Wrapping It Up

- 1 Did your classmates find your refusal statements convincing?
- 2 If not, what suggestions did they offer for strengthening them?

# Reading Review

## FOLDABLES™ Study Organizer

**Foldables™ and Other Study Aids After You Read** 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 The Dangers of Alcohol

#### Key Ideas

- Alcohol use speeds the heart rate, harms the liver, and slows the body's functions and reaction time.
- Among reasons teens give for drinking are fitting in with friends or family members who drink, feeling more grown-up, or escaping problems.

#### Vocabulary

- alcohol (p. 242)
- blood alcohol content (BAC) (p. 243)
- cirrhosis (p. 243)

### Lesson 2 Alcoholism and Addiction

#### Key Ideas

- The cycle of addiction to alcohol starts with an occasional drink, then becomes a habit, then he or she develops a tolerance, followed finally by an addiction.
- Drinking during pregnancy places the developing baby at risk for fetal alcohol syndrome, or FAS.

#### Vocabulary

- tolerance (p. 247)
- alcoholism (p. 247)
- fetal alcohol syndrome (FAS) (p. 248)

### Lesson 3 What Are Illegal Drugs?

#### Key Ideas

- The risks of marijuana use include hallucinations and panic attacks. Inhalants can damage brain cells.
- Stimulants can cause accelerated heart and breathing rates. Narcotics can lead to unconsciousness and death. Anabolic steroids can cause depression. Hallucinogens can lead to violent behavior.

#### Vocabulary

- illegal drugs (p. 249)
- anabolic steroids (p. 251)
- marijuana (p. 249)
- narcotics (p. 251)
- inhalants (p. 250)
- hallucinogens (p. 252)
- stimulants (p. 250)

### Lesson 4 Drug Abuse

#### Key Ideas

- Drug abuse affects your physical, mental/emotional, and social health.
- People who are recovering from a drug addiction may go through withdrawal.

#### Vocabulary

- drug abuse (p. 253)
- withdrawal (p. 254)
- overdose (p. 253)
- drug rehabilitation (p. 255)
- recovery (p. 254)

### Lesson 5 Staying Alcohol- and Drug-Free

#### Key Ideas

- Use refusal skills to help you stay substance-free.
- When someone offers you drugs or alcohol, offer a positive alternative.

#### Vocabulary

- substance abuse (p. 256)
- alternative (p. 258)

## After You Read

## IM Express

Now that you have read the chapter, review your answer to the I.M. Express 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 1–5. After each number, write the term from the list that best completes each sentence.

- alcohol
- alcoholism
- blood alcohol content (BAC)
- cirrhosis
- drug
- fetal alcohol syndrome (FAS)
- inhalants
- tolerance

### Lesson 1 The Dangers of Alcohol Abuse

1. \_\_\_\_\_, destruction and scarring of the liver tissue, is a disease that can lead to death.
2. A substance produced by a chemical reaction in carbohydrates is called \_\_\_\_\_.
3. A(n) \_\_\_\_\_ is a substance that affects the structure or function of the body or mind.

### Lesson 2 Alcoholism and Addiction

4. A need for increasing amounts of a substance to achieve the same effect is called \_\_\_\_\_.
5. \_\_\_\_\_ is a disease in which alcohol becomes a force in the drinker's life.

On a sheet of paper, write the numbers 6–14. Write **True** or **False** for each statement. If the statement is false, change the underlined word or phrase to make it true.

### Lesson 3 What Are Illegal Drugs?

6. Many toxic inhalants are household products.
7. Cocaine and crack are two examples of hallucinogens.
8. Heroin is a commonly used illegal anabolic steroid.
9. People who use inhalants such as PCP or LSD often show strange and/or violent behavior.

### Lesson 4 Drug Abuse

10. The use of any drug in a way that is unhealthy or illegal is an example of drug abuse.
11. Overcoming an addiction and returning to a mostly normal life is called withdrawal.
12. People who need drug rehabilitation are often sent to live at a special facility for recovering addicts.

### Lesson 5 Avoiding Alcohol and Drugs

13. Another way of thinking or acting that takes the place of substance abuse is known as tolerance.
14. Al-Anon is an organization that helps families of drug addicts.



## Thinking Critically

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

- 15. **Apply** How might a person under the influence of drugs or alcohol put other people at risk?
- 16. **Synthesize** A friend tells you he plans to use an illegal substance. When you warn him of the dangers, the friend replies, "Lots of kids our age do it." How do you respond?

## Write About It

- 17. **Accessing Information** Write a paragraph describing why you think it is important for family members of alcoholics to attend support groups such as Al-Anon and Alateen.

**Substance Abuse Counselor** Do you have a desire to help people? Are you a good listener? If you are, you might consider a career as a substance abuse counselor. People in this profession help those who are addicted to alcohol and other drugs cope with their problems. Most substance counselors have four-year college degrees. Their specialty may be in counseling, psychology, or social work. To learn more about the requirements for a career as an alcohol abuse counselor, visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com).

- 18. **Refusal Skills** Write a short story about a teen who is being pressured to use drugs or alcohol. Identify the skills the teen uses to say no.

## Standardized Test Practice

### Math

Use the graph to answer the questions.



### TEST-TAKING TIP

Estimation will help you eliminate choices in a math problem that are clearly wrong. This will give you more time to find the true answer.

1. Rounding to the nearest thousand, for which 3-year period did deaths total about 50,000?
  - A. 1996-1998
  - B. 1997-1999
  - C. 1998-2000
  - D. None of the above.
2. In 2003, there were a total 42,643 traffic deaths from all causes. Estimate what percentage of these deaths resulted from drunk driving?
  - A. 30
  - B. 35
  - C. 40
  - D. 45

## Preventing Diseases

## Chapter Preview

Lesson 1 What Causes Disease? .... 268	Building Health Skills ..... 288
Lesson 2 Communicable Diseases..272	TIME Health News ..... 290
Lesson 3 Understanding STDs.....277	Chapter Reading Review.....291
Lesson 4 Noncommunicable and Hereditary Diseases .....282	Chapter Assessment .....292

## ▲ Working With the Photo

Disease-causing germs are so tiny they require an electron microscope to be seen. **Why is it important for scientists to identify germs that cause disease?**

# Start-Up Activities



## Before You Read

Do you know what causes some diseases? Do you know how to prevent them? Take the short quiz on this page. Answer *true* or *false* for each of the following questions. Keep a record of your answers.

## HEALTH QUIZ

1. Every disease is caused by a germ.
2. Washing your hands thoroughly helps prevent some diseases from being spread.
3. You can get HIV, the virus that causes AIDS, from shaking hands.
4. Some illnesses, such as heart disease, can result from poor health choices.

ANSWERS: 1. false; 2. true; 3. false; 4. true

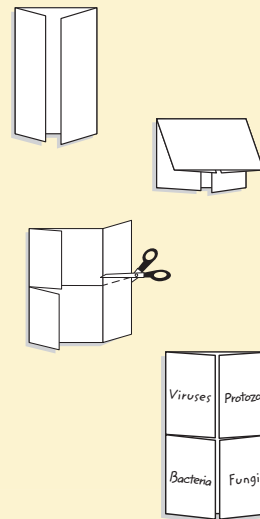
## FOLDABLES™ Study Organizer



## As You Read

Make this Foldable™ to help you organize the information in Lesson 1 about the four types of disease-causing germs. Begin with a plain sheet of 11" × 17" paper.

- 1 Fold the short sides of a sheet of paper inward so that they meet in the middle.
- 2 Fold the top to the bottom.
- 3 Open and cut along the inside fold lines to form four tabs.
- 4 Label tabs as shown.



Write down facts about viruses, bacteria, protozoa, and fungi. Give examples of each under the appropriate tab.

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Chapter 11 crossword puzzle.



## What Causes Disease?

### Guide to Reading

#### Building Vocabulary

Arrange the terms below into two lists. One list should be labeled *Causes*, the other *Effects*.

- disease (p. 268)
- communicable diseases (p. 268)
- noncommunicable diseases (p. 269)
- pathogen (p. 269)
- viruses (p. 269)
- bacteria (p. 270)
- protozoa (p. 270)
- fungi (p. 270)

#### Focusing on the Main Ideas

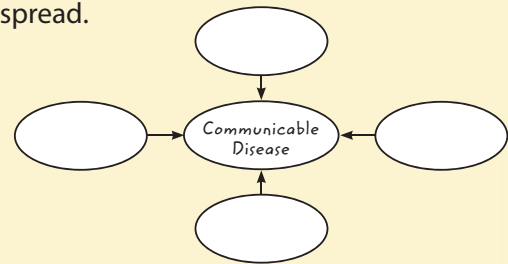
In this lesson, you will be able to

- **identify** the two main types of disease.
- **recognize** four common disease-causing organisms.
- **describe** how germs are spread.

#### Reading Strategy

##### Analyzing a Graphic

Create a concept map that shows causes of communicable diseases. Use the diagram to the right as a guide.



**FOLDABLES** Study Organizer Use the Foldable™ on p. 267 as you read this lesson.

### Quick Write

Write a letter to the editor of a school paper. Discuss ways students can avoid spreading germs.

## What Is a Disease?

Angela came home from soccer practice with a cough and sore throat. She was also running a slight fever. Angela's mother gave her some medicine to help relieve her symptoms and told her to rest. A couple of days later, Angela was back on her feet.

Recovering from an illness or disease has not always been so simple. A **disease** (dih·ZEEZ) is *a condition that affects the proper functioning of the body or mind*. The science of fighting disease has come a long way in the past hundred years. Science has made important strides in treating some diseases and preventing others. In this chapter, you'll learn about common diseases and ways to prevent them.

## Types of Diseases

There are two basic categories of disease. **Communicable** (kuh·MYOO·nih·kuh·buhl) **diseases** are *diseases that can be spread*, such as colds. You can get a communicable disease



from another person, an animal, or an object. In contrast, **noncommunicable diseases** are *diseases that do not spread*. Diabetes and cancer are two noncommunicable diseases. You can't catch these diseases from another person.

▲ Taking care of your body can help you recover from a cold quickly. **Which of the two major types of disease is a cold?**



### Reading Check

**Define** What is a noncommunicable disease? What is an example?

## Germes That Cause Disease

Where do communicable diseases come from in the first place? They start with organisms so tiny they can only be seen with a microscope. The popular name for these organisms is *germs*. The scientific name is *pathogens*. A **pathogen** is a *microscopic organism that causes communicable diseases*. Pathogens can be grouped into four main classes: bacteria, viruses, fungi, and protozoa. Within each class are many different *strains*, or subtypes.

### Viruses

**Viruses** (VY·ruh·suhz) are *tiny, nonliving particles that invade and take over healthy cells*. Viruses are so tiny they require a special microscope to be seen. Like bacteria, some strains of viruses are harmless. Some, however, cause serious diseases. For example, AIDS—an immune disorder and hepatitis—a serious disease of the liver—are caused by viruses. So are the common cold, the flu, and measles.

### Helpful Bacteria

Some bacteria are essential to good health. One helpful strain of bacteria lives inside your body, in your intestines. These bacteria play an important role in breaking down food during digestion. Other helpful bacteria live on your skin and eat dead skin cells.

**How can you help maintain the health of your skin and digestive system?**

### Bacteria

**Bacteria** (bak·TIR·ee·uh) are *extremely small single-celled organisms with no cell nucleus*. A nucleus is a cell's control center. Bacteria are everywhere. Some of the diseases they can cause include strep throat and Lyme disease. They can also cause tooth decay. It is important to note that not all bacteria are harmful to humans. Some are even helpful. In fact, we could not live without bacteria.

### Protozoa

**Protozoa** (proh·tuh·ZOH·uh) are *single-celled organisms that have a nucleus*. Some protozoa, called *parasites*, attach themselves to healthy cells. They rob the cell of its nutrients without killing it. Although most protozoa are harmless to humans, some strains can cause disease. One of the most famous and deadliest diseases caused by a protozoan is malaria. Malaria is found in tropical regions and spread by a certain kind of mosquito.

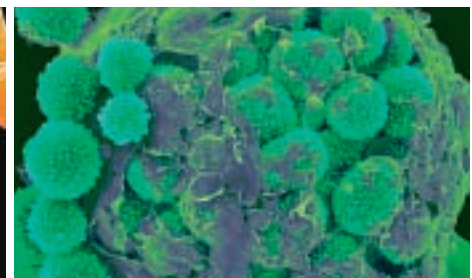
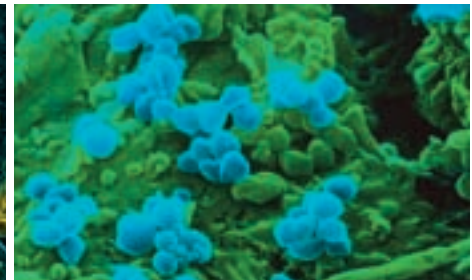
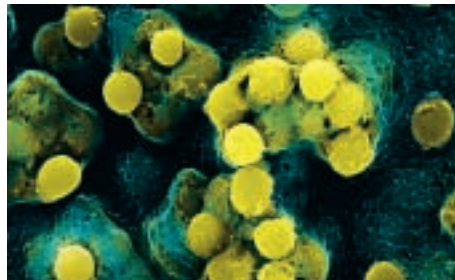
### Fungi

**Fungi** (FUHN·jy) are *primitive single- or many-celled organisms that cannot make their own food*. Fungi survive by breaking down other living organisms and absorbing their nutrients. Most fungi are harmless to humans. For example, mushrooms are a fungus and certain kinds are safe to eat. Some strains of fungi such as molds and yeasts cause disease, including athlete's foot and ringworm.

### Reading Check

**Compare** Identify two similarities and two differences between bacteria and viruses.

- ▶ These are close-ups of four common pathogens. **What are some examples of diseases caused by these organisms?**



## How Germs Are Spread

Because germs are so tiny, they can easily be spread. There are four common ways germs are spread. One is by *direct* physical contact with others. Simply shaking hands with someone can pass along germs that are on the skin. Another way is through *indirect* contact. You can pick up germs that travel through the air when people sneeze or cough. Germs can also be spread indirectly by sharing cups, utensils, or other personal items.

A third way germs are spread is by eating or drinking contaminated food or water. Bacteria that cause food poisoning are spread this way. The fourth most common way germs are spread is through contact with animals or insects. Germs can enter your body if you are bitten by a sick animal or disease-carrying insect.

**Health Online**

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

### Reading Check

**List** Name four ways germs are spread.



◀ The West Nile virus is spread by infected mosquitoes. **What are some ways you can protect yourself against mosquito bites?**

## Lesson 1 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** Define *pathogen*. Use the word in a sentence.
2. **Recall** Name a disease caused by a fungus.
3. **Identify** Name four common disease-causing organisms.

#### Thinking Critically

4. **Explain** What is the difference between a communicable disease and a non-communicable disease?

5. **Apply** At lunchtime, Maria offers Victoria a bite of her sandwich. Victoria remembers that Maria was coughing and sneezing earlier in class. Should Victoria accept the bite of sandwich? Explain your answer.

#### Applying Health Skills

6. **Decision Making** Imagine you are in school when you begin to feel like you are coming down with a cold. What are your options? What healthy decisions could you make?

## Communicable Diseases

### Guide to Reading

#### Building Vocabulary

List the terms below in your notebook. Put an X next to those terms that can cause you harm. Put a checkmark next to those that help you.

- contagious (p. 272)
- infection (p. 274)
- immune system (p. 274)
- lymphocyte (p. 274)
- antibodies (p. 274)
- immunity (p. 274)
- vaccine (p. 275)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **recognize** ways pathogens are spread.
- **identify** common communicable diseases.
- **demonstrate** healthful behaviors that limit the spread of pathogens.

#### Reading Strategy

**Sequencing** Describe the sequence of events that occur when a pathogen enters the body.

### Quick Write

Think about the last time you missed school because of an illness. Describe the illness and the steps you took to get better.

### Common Communicable Diseases

Can you guess the name of the most common communicable disease? You've probably had it several times. It is the common cold. Colds are responsible for more school absences than any other illness. There are more than 200 different viruses that cause colds. Symptoms include runny nose, sneezing, coughing, sore throat, headache, and mild fever. When these symptoms first appear, you are contagious (kuhn·TA·juhs). **Contagious** means *you can spread the virus to others by direct or indirect contact*. To help prevent this from happening, be sure to cover your mouth and nose when you sneeze or cough.



- ◀ Sneezing without covering your mouth and nose spreads thousands of pathogens. **What are some other ways pathogens are spread?**

**Keep It to Yourself**

When you have a cold, take action to prevent spreading your cold to others. Be careful to cover your mouth and nose when you cough or sneeze. Keep as much distance between yourself and others as you can. Avoid sharing cups, utensils, or other personal items. **What character traits are you demonstrating when you take steps to prevent spreading communicable diseases?**

There is no cure for the common cold. To help your body recover, you should rest in bed and drink plenty of fluids. Your parent or guardian may also give you over-the-counter (OTC) medicines that will help with the symptoms. If you have a sore throat for several days, you should see a doctor.

Another communicable disease you are familiar with is influenza (in·floo·EN·zuh). You probably know it as “the flu.” Flu symptoms include high fever and joint and muscle aches. Resting and drinking fluids can help you recover faster. Some strains of the flu are serious and can require a doctor’s care.

Some other common communicable diseases are listed in **Figure 11.1**. All except hepatitis A are spread through direct or indirect contact. A person gets hepatitis A from food or water containing the virus.

**Reading Check**

**Define** What does *contagious* mean? Use the word in a sentence.

## Your Body’s Defenses

In a typical day, your body is exposed to millions of germs, so why aren’t you sick all the time? The answer is that your body is protected by its own defense system. This system is like a well-designed fort. It actively protects your health around the clock.

▼ **FIGURE 11.1**

### COMMON COMMUNICABLE DISEASES

This table lists several common communicable diseases.

**What are the symptoms of strep throat?**

Disease	Symptoms	Treatment
<b>Mononucleosis</b>	Swollen lymph glands (in neck, underarms, groin), headaches, sore muscles, sore throat, fever, fatigue	Pain relievers, rest, liquids
<b>Hepatitis A, B, and C</b>	Weakness, fatigue, nausea, vomiting, fever, yellowing of eyes, abdominal pain, dark urine	Rest, healthful food choices (medication for Types B and C)
<b>Tuberculosis (TB)</b>	Cough, fatigue, persistent fever, night sweats, weight loss	Antibiotics taken over a long period of time
<b>Strep throat</b>	Sore throat, fever, chills, body aches, loss of appetite, nausea, vomiting, swollen tonsils or glands	Antibiotics, soft food, liquids, gargling with salt water



- ▲ To prevent the spread of germs, stay home and rest when you are sick. **What are some other ways to prevent the spread of communicable diseases?**

## Your Body's First Line of Defense

Your body's defense system has several barriers that work to prevent germs from entering your body. One of these barriers is your skin. The skin, your body's largest organ, acts like a wall around the inner organs. Another barrier is formed by body fluids such as tears and saliva. These contain chemicals that kill certain organisms. Your *mucous membranes* also act as barriers. These are tissues that line the insides of your mouth, throat, nose, and eyes. They are coated with a sticky fluid that traps and destroys germs.

Sometimes, despite these barriers, germs find a way into your body. They might reach your bloodstream, for example, through a cut or scrape. When this happens, you can develop an **infection**. This is *the result of pathogens or germs invading the body, multiplying, and harming some of your body's cells*. Fortunately, your body is equipped with agents that can fight infection. Among them is a chemical called *pyrogen* (PY·ruh·juhn). The release of this chemical triggers a rise in body temperature, or *fever*. The increase in body temperature makes it hard for germs to survive.

## Your Immune System

Most of the time, the body's first line of defense is successful in fighting off infections. When it is not, your second line of defense swings into action. This is your **immune system**, *a group of cells, tissues, and organs that fight disease*. One key part of the immune system is lymphocytes (LIM·fuh·syts). A **lymphocyte** is *a white blood cell that attacks pathogens or harmful germs*. Some lymphocytes attack pathogens directly. Others produce **antibodies**. These are *chemicals produced specifically to fight a particular invading substance*. Antibodies recognize germs that reenter the body and will attack and destroy them. This *resistance to infection* is called **immunity**.



**Identify** Identify two barriers that protect your body against germs.

## Preventing Communicable Diseases

You can help your body prevent disease by avoiding germs. First, steer clear of people who you know are sick. Second, get in the habit of washing your hands regularly. Your hands are constantly picking up germs from objects in your environment. When you put your hands to your mouth or nose, these germs can enter your body. Keep a supply of pre-moistened wipes handy for when you need to wash your hands but soap and water are not available. You can also help your body fight germs by practicing healthy behaviors. Get enough rest, eat healthy foods, and exercise regularly.

Some communicable diseases can be prevented with vaccines. A **vaccine** (vak·SEEN) is *a dead or weakened pathogen introduced into your body*. This triggers the immune system to make antibodies to fight the pathogen. However, because the pathogen is dead or weakened, you don't become ill. **Figure 11.2** lists some common vaccines and when they should be taken.



### Reading Check

**List** Name two actions you can take to help your body's defenses.

**Health Online**

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

**FIGURE 11.2**

## VACCINES GIVEN AT DIFFERENT AGES

This table lists the vaccines that help protect against developing certain diseases. **At what ages is the vaccine for measles given?**

Vaccine and the Diseases It Protects Against	Typical Vaccination Schedule
Hep B: hepatitis B	Birth, 2 months, 15–18 months
DTaP: diphtheria, tetanus, pertussis (whooping cough)	2, 4, 6, and 15–18 months; 4–6 years; Td (tetanus and diphtheria toxoid) boosters at 11–12 years; and every 10 years thereafter
Hib: diseases caused by <i>Hemophilus influenzae</i> type B (Hib) bacteria	2, 4, 6, and 12–15 months
IPV: poliomyelitis	2, 4, and 12–15 months; 4–6 years
PCV: diseases caused by <i>Streptococcus pneumoniae</i> bacteria	2, 4, 6, and 12–15 months
MMR: measles, mumps, rubella	12–15 months; 4–6 years
Varicella: chicken pox	15 months; can be given any time after 12 months
Hep A: hepatitis A	2 doses at least 6 months apart, anytime between 2 and 18 years; used only in high-risk areas or for high-risk groups

**Source:** Table based on immunization schedule recommended by the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the American Academy of Family Physicians





# Health Skills Activity

## Practicing Healthful Behaviors

### Handwashing for Health

One behavior that can help limit the spread of germs is washing your hands thoroughly. Thorough handwashing includes rubbing your hands together for at least 15 seconds using soap and warm water. Be sure to wash the creases in your skin and fingernails where germs can collect. Rinse and dry your hands completely since germs can thrive in moist environments.

Wash your hands after using the restroom and before eating or handling food. Also avoid touching your mouth and eyes with your hands. This can allow germs to enter your body and make you sick.



### On Your Own

Practice this handwashing technique. In the future, remember to use this technique to help your body stay healthy.

## Lesson 2 Review

### After You Read

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

### What I Learned

1. **Describe** What is the most common communicable disease? Name other common communicable diseases.
2. **Vocabulary** Define *antibodies*, and use it in a sentence.
3. **List** Name a disease that can be prevented with a vaccine.

### Thinking Critically

4. **Apply** Why should you avoid sharing an ice cream cone with a friend who has a cold?

5. **Analyze** How does handwashing help protect the health of your school and community?

### Applying Health Skills

6. **Advocacy** As a group, create a brochure or flyer informing students of ways they can protect themselves against the spread of communicable diseases. Include a list of common communicable diseases.

## Understanding STDs

### Guide to Reading

#### Building Vocabulary

Copy the terms below into your notebook. As you come across them in your reading, write the definition for each term beside it.

- sexually transmitted diseases (STDs) (p. 277)
- HIV (p. 278)
- AIDS (p. 278)
- abstinence (p. 280)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** common STDs.
- **describe** how HIV and other STDs are spread.
- **access** current information on HIV and AIDS.
- **explain** how to protect yourself from STDs.

#### Reading Strategy

**Organizing Information** There are many myths and facts about the spread of HIV. As you read, keep a list of both in your notebook.

## Sexually Transmitted Diseases

**Sexually transmitted diseases (STDs)** are *communicable diseases spread from one person to another through sexual activity*. They are also known as *sexually transmitted infections (STIs)*. Anyone who is sexually active can get an STD.

You can't tell if someone has an STD just by looking at him or her. It is possible to have an STD but have no visible symptoms or symptoms that come and go. Whether or not symptoms are visible, the person is still contagious and could spread the STD to another person.

STDs can cause serious health problems. They can affect menstrual health and damage the reproductive system. If left untreated, some STDs can prevent a person from being able to have children. Some can even cause death. A person with an STD needs to see a doctor for treatment right away.

- ▶ Knowing how HIV is and is *not* spread is important. **Why is it important to recognize myths about the spread of this illness?**

### Quick Write

You probably know that HIV, the virus that causes AIDS, is contagious. Make a list of ways you think HIV is spread.



**Figure 11.3** lists five common STDs. Be aware that getting one of these diseases does not make a person immune to it. Any time there is contact with a pathogen that causes an STD, the disease can return. It is also important to note that most of these diseases have no vaccines. The only one that does is Hepatitis B.



**Explain** Why does a person with an STD need to see a doctor?

## HIV and AIDS

**HIV**, which stands for *h*uman *i*mmunodeficiency *v*irus, is *the virus that causes AIDS*. HIV attacks a specific type of lymphocyte called a *T-cell*. (See **Figure 11.4**.) The virus replaces the cell's genetic information with its own and then multiplies. The more T-cells that are taken over by HIV, the harder it becomes for the body to fight pathogens.

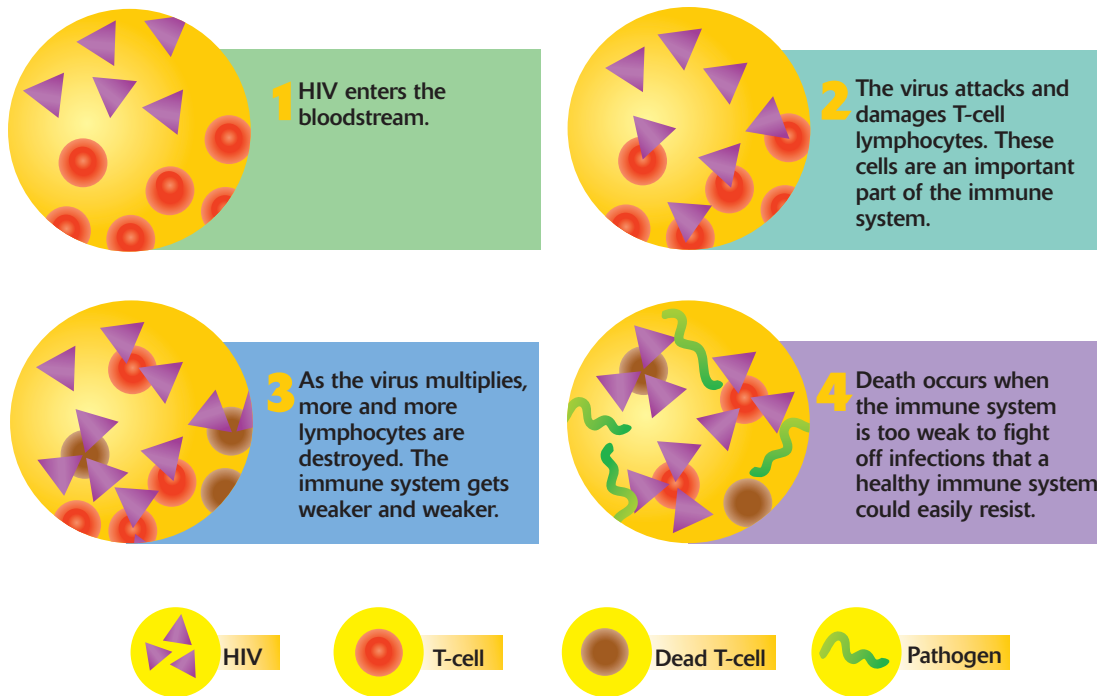
Eventually, the T-cell count drops so low that the immune system can no longer protect the body. When this happens, AIDS, or *a*cquired *i*mmunodeficiency *s*ndrome develops. **AIDS** is a condition characterized by life-ending infections and a T-cell count under 200.

**FIGURE 11.3**

### COMMON STDs

This table identifies common sexually-transmitted diseases. Which STDs cannot be cured with antibiotics?

STD	Common Symptoms	Treatment
<b>Chlamydia</b> (kluh·MIH·dee·uh)	Pain or burning feeling during urination; unusual discharge from penis or vagina; often has no symptoms (especially in females) but can still be spread	Cured with antibiotics
<b>Gonorrhea</b> (gah·nuh·REE·uh)	Pain or burning during urination; unusual discharge from penis or vagina; abdominal pain; sometimes has no symptoms (especially in females) but can still be spread	Cured with antibiotics
<b>Syphilis</b> (SI·fuh·lis)	Red, wet, painless sores at place where virus enters body, followed by rash and flu-like symptoms; can lead to brain damage and other serious health problems, especially in infants	Cured with antibiotics
<b>Genital warts</b>	Small pink or red bumps in genital area; can increase risk of certain cancers in women	Warts can be removed by a doctor but may return because virus remains in body
<b>Genital herpes</b> (HER·pee·z)	Itching or pain followed by painful, itchy sores in genital area; symptoms come and go, but virus is still present and able to be spread	Antiviral medication relieves symptoms when sores appear; no cure
<b>Hepatitis B</b>	Weakness, fatigue, nausea, vomiting, fever, yellowing of eyes, abdominal pain, dark urine	Rest, healthful food choices, antiviral medication



When AIDS weakens the immune system, the body cannot fight off other infections or diseases. Symptoms can include fatigue, frequent long-lasting fevers or cough, and sweating heavily at night. Drugs can delay the onset of AIDS, but there is no cure. People with AIDS will eventually die from diseases that a healthy immune system could have resisted.

### How HIV Spreads

HIV is spread through specific body fluids. These include semen, fluid from the vagina, blood, and breast milk. Semen is the fluid that carries sperm.

There are several ways these fluids spread from one person to another. One is by sexual contact. Another is by sharing needles. Drug users can get HIV from a needle already used by an infected person. A pregnant woman with HIV can pass the virus to her developing baby. An infected mother can also spread HIV to her baby when breast-feeding.

HIV spreads *only* through contact with infected body fluids. You cannot get the virus from the air or from mosquito bites. It is not carried in sweat or tears or passed by touching objects such as toilet seats. You will not get HIV by shaking hands or hugging a person with the virus. At one time, the virus was spread when blood donated by people infected with HIV was used for transfusions. Since 1985, all donated blood in the United States is tested for HIV. Therefore, the risk of getting the virus from a blood transfusion is extremely low.

**▲ FIGURE 11.4**  
**HIV IN THE IMMUNE SYSTEM**

HIV prevents the immune system from doing its job. **What is the function of the immune system?**

### New Strains of HIV

Since HIV first appeared, medical researchers have been developing medications to fight it. At the same time, the virus has been *mutating*. This means it changes itself in ways that make these medications powerless against it. Researchers continue to try to keep up with these new strains of the virus.

Using the Internet or print resources, learn about what steps are currently being taken to fight HIV.

## Treatment for People with HIV and AIDS

In recent years, medical technology has slowed down the effects of HIV. New medicines are allowing infected people to live longer. A search for an effective HIV vaccine is ongoing. At present, however, there is no cure for HIV or AIDS. Anyone who becomes infected with HIV is at risk of developing AIDS.

### Detecting HIV

People infected with HIV often show no symptoms for a long time. On the outside, they may look perfectly healthy. However, they can still pass on the virus. Laboratory tests are the only way of knowing if a person has HIV. These tests show whether antibodies to the virus are present. If a test shows no antibodies, it should be repeated in six months. A person recently infected may not have had time to develop antibodies.



#### Reading Check

**List** Name two ways HIV is spread and two ways it is *not* spread.

## Preventing HIV and STDs

HIV infection, AIDS, and other STDs can be prevented. The following are some ways to avoid getting these diseases.

- Choose abstinence. **Abstinence** is *not participating in high-risk behaviors*. These include avoiding sexual contact with another person.
- Avoid sharing needles. This includes the kind of needles used for body piercing. These needles can carry infection into your bloodstream.
- Say no to alcohol and drugs. People who use alcohol or drugs often lose the ability to make wise decisions. They are more likely to engage in risky behaviors.

## Getting Help

Teens who think they may have an STD need to take action. They must find out if they are infected. If they are, they need to be treated. The first step in getting help is to talk to a parent or trusted adult. This step is difficult for many teens. They may feel embarrassed or worry that a parent will be angry or disappointed. However, if left untreated, STDs can permanently damage the reproductive system and cause other serious health problems.



#### Reading Check

**Define** What is abstinence?

### Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.



# Health Skills Activity

## Accessing Information

### Accurate Information on HIV and AIDS

Research on HIV and AIDS is ongoing. New information is being discovered all the time. Knowing where to find it is important. Everyone needs to have up-to-date information on how to prevent an HIV infection. Here are some sources you can trust for accurate information.

- **The Center for Disease Control and Prevention (CDC).** The CDC is the leading federal health information agency.
- **The National Institutes of Health (NIH).** Like the CDC, the NIH is part of the U.S. Department of Health and Human Services. The NIH awards research grants to hospitals and health professionals.
- **National Health Council.** Based in Washington, D.C., this organization is a leader in health advocacy.

### With a Group

Locate and contact one of these organizations. Find out what kinds of HIV and AIDS information it offers to teens.

## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** What do the letters *STD* stand for?
2. **List** What are some ways in which HIV and other STDs are spread?
3. **Recall** Explain the relationship between HIV and AIDS.

#### Thinking Critically

4. **Evaluate** Why might drinking alcohol increase your risk of getting an STD?

5. **Apply** A teen fears he or she has an STD. Why is it important for this teen to see a health care provider?

#### Applying Health Skills

6. **Communication Skills** Review the steps in the S.T.O.P. strategy discussed in Chapter 3. Then develop a list of responses to peer pressure to engage in sexual activity.

# Noncommunicable and Hereditary Diseases

## Guide to Reading

### Building Vocabulary

Explain how the terms below are related. Write the definitions as you come across the terms in the lesson.

- chronic (p. 283)
- cancer (p. 284)
- tumor (p. 284)
- allergy (p. 285)
- asthma (p. 285)
- diabetes (p. 286)
- insulin (p. 286)

### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** causes of various noncommunicable diseases.
- **develop** behaviors to keep your heart healthy.
- **identify** ways to help prevent diseases like cancer and diabetes.

### Reading Strategy

**Comparing and Contrasting** Create a chart that shows the cause, symptoms, and treatment of four noncommunicable diseases.

## Quick Write

Some diseases are not spread from person to person. Name some diseases you know about that you don't catch from someone else. List some reasons why these diseases might develop.

## What Causes Noncommunicable Diseases?

Noncommunicable diseases are caused by several different things. One cause is poor health habits. For example, lack of physical activity, being overweight, or eating foods high in fat can lead to heart disease and diabetes. Another cause of noncommunicable disease is a person's environment. Living in a city with heavy smog, for example, can lead to lung disease. A third cause is heredity. Diseases, such as allergies or muscular dystrophy can be passed from a parent to a child. Sometimes noncommunicable diseases result from harm done by a communicable disease. An infection from measles, for example, can spread to the brain and cause brain damage.

Some noncommunicable diseases are present at birth. Others develop later in life. One disease that shows up at birth is Down syndrome. This is a disease caused by an abnormal arrangement of chromosomes. Another noncommunicable disease a person is born with is congenital heart disease. This is a defect in a heart valve or one of the big blood vessels leading out of the heart.

## Reading Check

**Give Examples** Identify two noncommunicable diseases that can be present at birth.

## Heart Disease

Heart disease is the number one cause of death in the United States. Heart disease and many other non-communicable diseases are **chronic** (KRAH-nik), or *long-lasting*. A common cause of heart disease is the narrowing or blockage of blood vessels. When this happens, the heart has a hard time doing its job and becomes weak. The result can be a heart attack or stroke. Stroke is a destruction of brain tissue caused when the heart can't pump enough blood to the brain.

Heart disease is also caused by high blood pressure. This is a condition in which the heart is forced to work unusually hard. High blood pressure can be inherited. It can also be caused by stress, kidney problems, or eating too many foods high in fat or cholesterol.

### Heart-Healthy Habits

You can lessen the risk of developing heart disease by practicing some of the following positive health behaviors:

- Stay physically active. Aerobic activity can strengthen your heart and blood vessels. It can also lower blood pressure.
- Maintain a healthy weight. Having less body fat reduces the strain on the heart and blood vessels.
- Eat foods high in fiber and low in salt, fat, and cholesterol.
- Learn to manage stress. Reducing or managing stress can help lower blood pressure.
- Avoid tobacco products. This can lower your risk of stroke, heart attack, and other diseases.

### Treating Heart Disease

Heart disease can be treated with medication. There are medicines that widen blood vessels, lower blood pressure, and control a person's heartbeat. When the problem is too serious to be corrected by medication, surgery is recommended. Operations can be done to open blocked arteries or insert devices that regulate the heartbeat. In severe cases, a heart transplant may be considered.



- ▲ Some noncommunicable diseases are passed on through heredity. **What are some other causes of noncommunicable diseases?**

#### Health Online

#### Topic: Keeping Your Heart Healthy

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to learn more about how you can keep your heart strong and healthy.

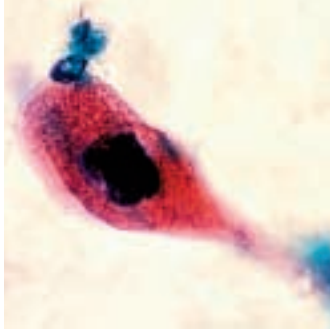
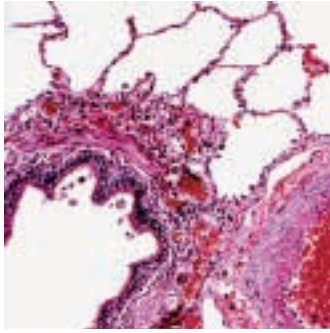
**Activity:** Using the information provided at the link above, create a heart health quiz that will help other teens figure out if they are at risk for heart problems.



Reading Check

**List** Name two positive health behaviors that can reduce the risk of heart disease.





▲ As old cells die, new ones take over. **What happens in the case of cancer?**

## Cancer

Sometimes a healthy cell in your body is replaced with one or more abnormal cells. When these cells multiply and destroy the healthy tissue around them, the result is cancer. **Cancer** is a disease caused by abnormal cells that grow out of control. Cancer is the second leading cause of death in the United States.

Many cancers start out as a **tumor**. This is a mass of abnormal cells. Some tumors are noncancerous, or benign (bih·NYN). This means they do not spread. Tumors that are cancerous, or malignant (muh·LIG·nuhnt), spread to surrounding tissue. Eventually, cancerous cells from the tumor may spread throughout the body.

Cancer is caused by heredity, exposure to cancer-causing substances, or poor health choices. For example, the chemicals found in tobacco have been proven to cause cancer. In fact, cigarette smoking accounts for at least 30% of all cancer deaths.

You can lower your risk of getting cancer by taking care of your body. Eat well, stay active, protect your skin with sunscreen, and avoid exposing your body to dangerous substances like tobacco and drugs.

## Treating Cancer

When cancer is discovered early, there is a greater chance that the person can be treated successfully. There are seven cancer warning signs. People who notice any of these should see a doctor right away.

- **C**hanges in bowel or bladder habits
- **A** sore that does not heal
- **U**nusual bleeding or discharge
- **T**hickening or lump in the breast or elsewhere
- **I**ndigestion or difficulty swallowing
- **O**bvious changes in a wart or mole
- **N**agging cough or hoarseness

There are four main ways cancer is usually treated: surgery, radiation, chemotherapy, and biologic therapies. Surgery is used to remove tumors. Radiation (ray·dee·AY·shuhn) is used to destroy cancer cells in a specific location. Both of these treatments are most effective when the cancer has not spread. If the cancer has spread, chemotherapy (kee·moh·THEHR·uh·pee) is

often used because it travels throughout the body to destroy cancer cells wherever they occur. Biologic treatments work with the body's immune system, stimulating it to fight cancer.

## Allergies

When Mike is around cats, he sneezes and his eyes itch. Mike is allergic to cats. An **allergy** is *the body's sensitivity to certain substances*. A substance that causes an allergic reaction is called an *allergen* (AL·er·juhn). Common allergens include the dander in animal hair or fur, dust, pollen, grass, and some molds. People can also have allergies to certain foods, such as peanuts.

Allergies are caused by an overreaction of the immune system. The system reacts to allergens as if they were pathogens entering your body.

Simple medical tests can determine if a person has allergies and what he or she is allergic to. Although there is no cure for an allergy, certain medicines can ease the symptoms and even prevent allergic reactions. You can also try to avoid the allergen.



**Recall** What seven-letter word forms the warning signs for cancer?

## Asthma

A health problem related to allergies is **asthma** (AZ·muh). This is *a chronic disease in which the airways become irritated and swollen*. During an asthma attack, the small airways of the lungs become coated with a thick mucous. It becomes difficult to breathe. If the attack is severe, the person may experience a feeling of suffocation and begin to panic.

Asthma attacks can be triggered by a number of factors. These include allergens, physical activity, and cold or damp air. Smoke from cigarettes and other forms of air pollution can also cause asthma attacks.

Treatment for minor asthma attacks includes inhaling medication that relaxes the airways, making it easier to breathe. Severe attacks may require a visit to the hospital for additional treatment. Most asthmatics regularly take medicine that helps prevent attacks. Avoiding known triggers can also help prevent attacks. Untreated, asthma can lead to permanent lung damage or in some cases death.

▼ Animal dander can sometimes trigger an asthma attack. **What other factors can trigger an asthma attack?**



## Diabetes

**Diabetes** (dy·uh·BEE·teez) is a disease that prevents the body from using the sugars and starches in food for energy. Diabetes is caused when the body doesn't make or can't use insulin. **Insulin** is a hormone produced by the pancreas, that normally moves sugars into cells.

Depending on the specific problem, diabetes is categorized as type 1 or type 2. In type 1 diabetes, the body does not produce insulin at all. In type 2, the body makes insulin but is unable to use it efficiently.

Some symptoms of diabetes are increased thirst, frequent urine production, lack of energy, and blurred vision.

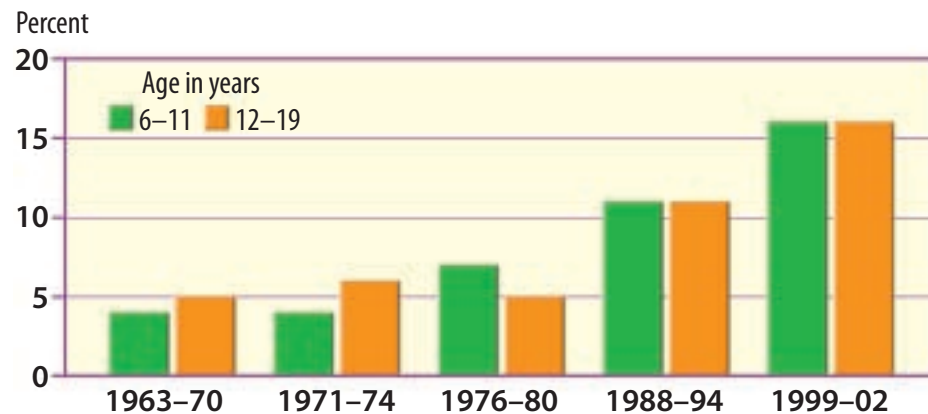
### Type 2 Diabetes in Young People

At one time, type 2 diabetes occurred mainly in adults. That has changed. Today, half of all new cases of type 2 diabetes involve young people. This increase is related to the increase in obesity among children and teens. The bar graph in **Figure 11.5** shows a steady increase over a forty-year period. How many percentage points has the obesity rate risen among people your age?

**FIGURE 11.5**

### PERCENTAGE OF OBESE CHILDREN AND TEENS OVER A 40-YEAR TIME PERIOD

The number of obese young people is rising. **What steps can be taken to correct this problem?**



NOTE: Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70. Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years. SOURCE: CDC/NCHS, NHES and NHANES

## Treatment for Diabetes

People who have diabetes must be careful to monitor the amount of sugar in their blood. They also need to follow a treatment plan that helps their bodies cope with the disease. Taking insulin, exercising regularly, and watching their weight are all part of a successful treatment plan. Eating foods that help keep an even level of sugar in the blood is also important. Physical exercise lowers blood sugar and pressure, improves the body's ability to use insulin, and helps prevent complications like heart disease. Staying at a healthy weight makes it easier for the body to use the food it takes in.

Developing a good meal plan can help a diabetic decide how much and what kinds of foods to eat. There are several meal plans that have been used successfully to help diabetics manage their blood sugar. They include the Diabetes Food Pyramid, Rate Your Plate, Exchange Lists, and Carbohydrate Counting. Each diabetic must decide which is best with the help of his or her doctor or dietician.

Health Online

Visit [health.glencoe.com](http://health.glencoe.com)  
and complete the Interactive  
Study Guide for Lesson 4.

### Reading Check

**Compare** How are type 1 and type 2 diabetes similar?

## Lesson 4 Review

### After You Read

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

### What I Learned

1. **Vocabulary** What is a *chronic* disease?
2. **Identify** Name a noncommunicable disease triggered by an allergen.
3. **Describe** What are some ways of preventing cancer?

### Thinking Critically

4. **Synthesize** Name some ways to keep your heart healthy and lessen the risks of heart disease.

5. **Compare** How are allergies and asthma similar? How are they different?

### Applying Health Skills

6. **Communication Skills** Some diseases have similar symptoms. How can good communication skills help someone get the right treatment? Make a list of information you think is important to communicate to the doctor when you are sick.

# Building Health Skills

## GOAL SETTING

### Protecting Your Health

#### DIRECTIONS

Goal Setting involves setting positive goals and taking steps to achieve them. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

Carly set a goal to try out for the school softball team. By increasing her physical activity, Carly hopes to build up her lung endurance to help her better manage her asthma. Here are the steps Carly is taking to reach her goal.

**1. Set a specific goal.**

I plan to try out for the school softball team.

**2. List the steps to reach your goal.**

I will start practicing for 30 minutes at a time. Then gradually build up to 60 minutes as my lungs get stronger.

**3. Get help from others.**

I will see my doctor to keep my asthma under control. I will ask a friend to practice with me after school.

**4. Evaluate your progress.**

I will create an activity calendar to keep track of how often I am practicing.



## 2 Practice

Carly and Megan get hungry while doing homework at Carly's house after school. Read their conversation. Use what you know about disease prevention to answer the questions below.

Megan: I'm starving! Do you have any potato chips to snack on?

Carly: I do, but I would rather eat some fruit. I'm trying to develop good habits to help my body stay healthy.

Megan: That makes sense. What kind of fruit do you have?

1. What is Carly's new goal?
2. What is one step she is taking to reach this goal?
3. How does Megan's support help Carly with her goal?

### Skill Summary

#### GOAL SETTING

- Set a specific goal.
- List the steps to reach your goal.
- Get help from others.
- Evaluate your progress.
- Reward yourself.

## 3 Apply

Choose one of the diseases discussed in this chapter. Write a short story about a teen who sets a goal to prevent or manage the disease. Include details about the disease. List the steps the teen will take to reach the goal. Share your story with other classmates.

### Self-Check

- Did the teen in my story set a clear, realistic goal?
- Does my story include details about my chosen disease?
- Does my story show how the teen will reach his or her goal?

# Don't PANIC!

Ever get a splitting headache or super-bad stomachache and feel convinced you have a deadly disease? Chances are those symptoms aren't life-threatening! So don't worry for no reason. Read this so you don't panic.



## POUNDING HEADACHE

### WORST NIGHTMARE

Brain tumor!

### MORE LIKELY STORY

A migraine or a tension headache—up to 20 percent of all teens experience them regularly.

**WHAT TO DO** Take acetaminophen or ibuprofen. If headaches occur frequently (once a week), see your doctor, who can evaluate you. Your doctor might prescribe medicine or suggest relaxation methods.

**WHEN TO WORRY** Get to the emergency room if your headache is severe or accompanied by vomiting, vision changes, high fever, or numbness or tingling in your arms or legs.



## HEART FLUTTERS

### WORST NIGHTMARE

Heart attack!

### MORE LIKELY STORY

Anxiety. When you're tense, stress hormones rise, which may cause your heart to race.

**WHAT TO DO** If it happens once or twice, don't worry. If it occurs more regularly, get it checked out. The cause could be anything from cold medicine to a thyroid problem.

**WHEN TO WORRY** See a doctor as soon as possible if your symptoms include shortness of breath or dizziness—that may mean a heart condition.



## BELLY PAIN

### WORST NIGHTMARE

Appendicitis!

### MORE LIKELY STORY

Constipation. This can cause some teens to double over in pain.

**WHAT TO DO** Drink water (eight glasses a day) and eat fiber-rich foods, such as whole wheat bread.

**WHEN TO WORRY** Call your doctor right away if the pain is severe or accompanied by fever or vomiting. It could signal anything from food poisoning or a urinary-tract infection to—yes—appendicitis.



# Reading Review

## 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 1–4. Find a partner, and quiz each other using these study aids.

### Lesson 1 What Causes Disease?

#### Key Ideas

- The two main types of disease are communicable and noncommunicable.
- The four common disease-causing organism groups are bacteria, viruses, protozoa, and fungi.

#### Vocabulary

- disease (p. 268)
- communicable diseases (p. 268)
- noncommunicable diseases (p. 269)
- pathogen (p. 269)
- viruses (p. 269)
- bacteria (p. 270)
- protozoa (p. 270)
- fungi (p. 270)

### Lesson 2 Communicable Diseases

#### Key Ideas

- Pathogens are spread through direct contact, indirect contact, through impure food or unclean water, and contact with animals or insects.
- Barriers, such as the skin, tears, and the immune system help prevent your body from getting sick.

#### Vocabulary

- contagious (p. 272)
- infection (p. 274)
- immune system (p. 274)
- lymphocyte (p. 274)
- antibody (p. 274)
- immunity (p. 274)
- vaccine (p. 275)

### Lesson 3 Understanding STDs

#### Key Ideas

- Sexually transmitted diseases are communicable diseases spread by sexual contact.
- HIV infection is spread through specific body fluids, including semen, fluid from the vagina, blood, and breast milk.
- You can protect yourself from STDs by choosing abstinence from high-risk behaviors.

#### Vocabulary

- sexually transmitted diseases (STDs) (p. 277)
- HIV (p. 278)
- AIDS (p. 278)
- abstinence (p. 280)

### Lesson 4 Noncommunicable and Hereditary Diseases

#### Key Ideas

- Causes of various noncommunicable diseases include poor health habits, environment, heredity, and harm done by a communicable disease.
- You can keep your heart healthy by being physically active, maintaining a healthy weight, and managing stress.
- To avoid diseases like cancer and diabetes, you should avoid tobacco, protect yourself from the sun's UV rays, and maintain an active, healthful lifestyle.

#### Vocabulary

- chronic (p. 283)
- cancer (p. 284)
- tumor (p. 284)
- allergy (p. 285)
- asthma (p. 285)
- diabetes (p. 286)
- insulin (p. 286)



## After You Read

## HEALTH QUIZ

Now that you have read the chapter, look back at your answers to the Health Quiz in 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 1–7. After each number, write the term from the list that best completes each sentence.

- antibodies
- bacteria
- communicable diseases
- contagious
- immune system
- infection
- noncommunicable diseases
- vaccine
- viruses

### Lesson 1 What Causes Disease?

1. \_\_\_\_\_ are diseases that can be spread, such as colds.
2. Extremely small single-celled organisms with no cell nucleus are called \_\_\_\_\_.
3. Tiny, nonliving particles that invade and take over healthy cells are known as \_\_\_\_\_.

### Lesson 2 Communicable Diseases

4. A condition in which pathogens invade the body, multiply, and harm some of your body's cells is known as \_\_\_\_\_.
5. Your \_\_\_\_\_ is a group of cells and organs that fight disease.

6. Chemicals designed to fight a specific invading substance are called \_\_\_\_\_.

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

### Lesson 3 Understanding STDs

7. Another name for STDs is STIs.
8. STDs can damage the circulatory system, making it impossible ever to have children.
9. When a person's T-cell count drops below 200, she or he likely has hepatitis B.

### Lesson 4 Noncommunicable and Hereditary Diseases

10. A disease that is chronic continues for a long time.
11. Many cancers start out as masses of abnormal cells called allergens.
12. People with diabetes sometimes need shots of insulin, a hormone produced by the pancreas.

## Thinking Critically

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

13. **Compare and Contrast** In what way are communicable and noncommunicable diseases alike? How are they different?



- 14. Evaluate** Explain how a person's environment can contribute to disease.

### Write About It

- 15. Practicing Healthful Behaviors** Write a journal entry describing the last time you were sick with a cold or flu. List some positive health behaviors you can practice to help prevent illness in the future.
- 16. Analyzing Influences** Imagine that you are writing an article about a noncommunicable disease. Identify different factors that can cause this disease. Explain how to reduce the risk of developing a noncommunicable disease.

**Medical Technologist** Do you like looking at things under a microscope? Do you enjoy doing science experiments? If so, you might think about a career as a medical technologist. These professionals work in hospitals and laboratories. Their job is to test patients' blood and other tissues. This helps doctors diagnose and treat diseases. To do this job, you will need a four-year degree in medical technology or life sciences. Visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com) to learn more about this and other careers.

## Standardized Test Practice

### Reading

Read the passage and then answer the questions.

#### Edward Jenner (1749–1823)

Edward Jenner was a keen observer of nature from an early age. This would come in handy in guiding his life's work.

Jenner was born in England in 1749. He studied medicine and became a respected surgeon. During Jenner's time, a disease called smallpox was a leading cause of death. Scientists understood this was caused by a virus; however, no one knew how to prevent it from spreading.

Jenner noticed a similarity between symptoms of smallpox and another disease called cowpox. However, cowpox did not hurt humans. Jenner gave his gardener's son a shot containing a small amount of cowpox virus. Six weeks later, he gave the same person a shot containing smallpox virus. The person did not become sick. The first vaccine had been discovered!

### TEST-TAKING TIP

Read the passage carefully once to find out what information it contains. After you read each question, look back at the passage to find the answer.

- The main idea of this passage is that
  - Diseases can be deadly.
  - Smallpox and cowpox are related.
  - Edward Jenner discovered the first vaccine.
  - Even the deadliest disease is eventually cured.
- What trait helped Edward Jenner succeed in his most important life's work?
  - His refusal to quit when the going got rough
  - His stubbornness
  - His powers of observation
  - His dedication to his wife and family

# Safety and the Environment



## Chapter Preview

Lesson 1 Personal Safety Habits .....	296	Building Health Skills .....	322
Lesson 2 Safety at Home and Away .....	300	Hands-on Health .....	324
Lesson 3 Safety Outdoors .....	305	Chapter Reading Review .....	325
Lesson 4 Safety in Severe Weather .....	308	Chapter Assessment .....	326
Lesson 5 First Aid for Emergencies .....	312		
Lesson 6 Protecting Your Environment .....	318		

### ▲ Working With the Photo

Observing rules of safety is important. **What is the role of a lifeguard?**

# Start-Up Activities

## Before You Read

Do you practice good safety habits?

Take the short Health Inventory below. Keep a record of your answers.

## HEALTH INVENTORY

1. I wear a safety belt when riding in a car.  
(a) always (b) sometimes (c) never
2. I look both ways before crossing the street.  
(a) always (b) sometimes (c) never
3. I use the proper safety gear when playing sports or other physical activities.  
(a) always (b) sometimes (c) never

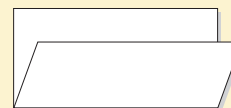
## FOLDABLES™ Study Organizer

### As You Read

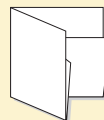
Make this Foldable™ to help you organize what you

learn in Lesson 1 about personal safety. Begin with a plain sheet of 8½" x 11" paper.

**1** Fold a sheet of paper from bottom to top, leaving a 2" tab at the top.



**2** Fold in half from side to side.

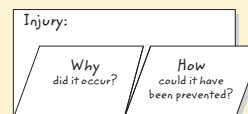


**3** Unfold and cut along the center fold line of the top layer only. This will make two tabs.



**4** Label as shown.

Think about an injury that you or someone else had. Briefly describe the injury on the top tab of your Foldable™. Then, under the appropriate tab, explain why the injury occurred and what could have been done to prevent it.



**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com) and use the e-flashcards to preview Chapter 12 vocabulary terms.

## Personal Safety Habits

### Guide to Reading

#### Building Vocabulary

Describe how the terms below are related. Write the correct definitions as you read them in the lesson.

- accident (p. 296)
- accidental injuries (p. 296)
- accident chain (p. 297)

#### Focusing on the Main Ideas

In this lesson, you will be able to:

- **identify** the parts of the accident chain.
- **describe** ways of preventing accidental injuries.
- **practice** healthful behaviors to develop good safety habits.

#### Reading Strategy

**Identifying Cause-and-Effect** List three events that can result in your accidental injury.

**FOLDABLES™ Study Organizer** Use the Foldable™ on p. 295 as you read the lesson.

### Quick Write

Describe some good safety habits you practice at home.

### Staying Safe

We all begin learning about safety when we are very young. A toddler who goes near a stove will be warned, “Don’t touch! Hot!” Older children are told to look both ways before crossing the street. Learning about safety and practicing behaviors that will keep you safe can help prevent accidents from occurring. An **accident** is *an unexpected event that results in damage or harm*. Every day, thousands of people suffer **accidental injuries**. These are *injuries caused by unexpected events*.

Many accidents happen at or near home. Many involve ordinary, everyday activities, such as riding a bike. Why do accidents happen? How can you reduce your risk of accidental injury? How can you help others stay safe? In the pages ahead, you will find answers to these questions.

### Reading Check

**Define** What are accidents?

- ◀ Some safety information is learned at an early age. **Why is it important to keep safety in mind as we grow older?**



## The Accident Chain

Many accidents can be prevented. They often occur because of an **accident chain**, a sequence of events that often leads to an accidental injury. **Figure 12.1** illustrates the links in the accident chain. For any accident to occur, three elements must be present. These are *the situation, the unsafe habit, and the unsafe act*. To understand the role each of these elements plays, consider Greg's accident:

- **The Situation.** Greg and Maria are throwing a football in their driveway. The ball lands on the garage roof.
- **The Unsafe Habit.** Maria suggests getting a ladder. Greg says he will save time by climbing the tree next to the garage.
- **The Unsafe Act.** To reach the ball, Greg must lean out on a high, narrow branch. The branch snaps under Greg's weight and he falls.

The three elements leading to Greg's fall and the resulting injury form the accident chain.

▼ **FIGURE 12.1**

### THE ACCIDENT CHAIN

Unsafe habits and acts can lead to accidental injury.  
How could Greg have avoided getting hurt?



- Wearing the right gear can prevent accidental injury.  
**What sport or activity do you like? What kind of protective gear is worn in this sport or activity?**



## How to Prevent Accidental Injuries

You can reduce the risk of accidental injury by practicing positive health behaviors. Many accidents can be prevented by simply breaking the accident chain. By removing or changing any one link, you can stop an accident from happening. Look back at Greg’s accident chain.

Greg could have changed the situation. He and his brother could have played ball in a more open area. Greg could have also broken the second link—the unsafe habit. Instead of climbing the tree, he should have waited for the ladder. Finally, Greg could have changed the unsafe action. When he saw he could not reach the ball, he should have stopped trying. He should have climbed back down and gone for the ladder or asked an adult for help.

**Health Online**

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



**Give Examples** Give an example of how to prevent an injury by breaking the accident chain.



# Health Skills Activity

## Practicing Healthful Behaviors

### Building Safe Habits

As teens become more independent, it is important to develop good safety habits. This includes being careful, thinking ahead, and taking precautions. The following are some additional good safety habits.

- Stay away from risky behaviors. Choose not to participate in unsafe activities.
- Resist negative peer pressure. Do not give in to friends who want you to take careless chances.
- Know your limits. Do not attempt to do more than you can do safely. If you just learned how to snowboard, for example, don't go down a hill more difficult than you can handle.
- Wear proper protective gear when playing sports or other physical activities. Before beginning a new sport or activity, find out what protective gear you will need.

### On Your Own

Make a list of other safety habits. Explain how these safety habits can prevent accidental injury. Share your list with the class.

## Lesson 1 Review

### After You Read

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

#### What I Learned

1. **Vocabulary** What are *accidental injuries*?
2. **List** What three elements must be present for an accident to occur?
3. **Recall** How can many accidents be prevented?

#### Thinking Critically

4. **Apply** Grant's friend dared him to walk across a narrow 12-foot-high fence. What should Grant do, and why?

5. **Evaluate** Why is it important to know your limitations?

#### Applying Health Skills

6. **Decision Making** Tina wants to go bike riding with a friend, but she left her helmet in her Dad's truck. What are Tina's options? Use the decision-making process to help Tina make a safe decision.



## Safety at Home and Away

### Guide to Reading

#### Building Vocabulary

Copy the terms below into your notebook. Circle those terms that help you maintain personal safety.

- hazards (p. 300)
- smoke alarm (p. 302)
- fire extinguisher (p. 302)
- pedestrians (p. 303)
- Neighborhood Watch program (p. 304)

#### Focusing on the Main Ideas

In this lesson, you will be able to:

- **explain** how to prevent accidental injuries in your home.
- **practice** the skill of advocacy to help family members develop a fire escape plan.
- **identify** safety tips and rules of the road.
- **describe** how to be safe in your school and community.

#### Reading Strategy

**Compare** Preview the lesson. Explain ways in which the various safety procedures described are similar. How are they different?

### Quick Write

List two or three safety rules you follow on your way to and from school.

### Safety at Home

Home is a place where everyone should feel safe and comfortable. Yet, homes can contain **hazards**, possible sources of harm. Stairways, for example, can lead to falls. Appliances can cause shocks. Following safety rules can reduce the risks of home hazards.

- ▶ Use a step ladder to reach an item on a high shelf. **How does this safety habit help prevent injury?**



- ▶ Picking up toys that are left on the stairs can help prevent falls. **What other ways can you help prevent accidents in the home?**



## Kitchen Safety

More accidents happen in the kitchen than any other room in the house. Here are some ways to reduce the risk of injury. To avoid cutting yourself, learn to handle knives correctly. Keep your fingers clear of the blade. Don't leave food cooking on the stove unattended. Turn pot handles inward, away from the edge. Keep small children away from the stove. Wipe up any spills right away.

## Preventing Falls

To prevent falls, keep stairways well lighted and free of clutter. Keep loose objects off the floor, where they might be tripped over. Rugs should be fastened down firmly. When reaching for items on high shelves, use a sturdy ladder or step stool. Never stand on a chair. Avoid running on wet or waxed floors.

## Electrical Safety

In order to avoid electrical hazards, always pull plugs out by the plug itself. Never tug on the cord, which can damage it. If a cord does become frayed, don't use the appliance until it is repaired. Unused outlets should be covered in homes where there are small children. Keep electrical appliances away from water, and never use them if your skin is wet or if you are in a bathtub.

## Gun Safety

If guns are kept in the home, they should always be stored in locked cabinets. Store ammunition separately. Never handle a gun without an adult present. Never point a gun at a live target.

DEVELOPING

Good Character

### Safety and Personal Responsibility

Being responsible includes looking out for the well-being of others. You can start doing this at home right now. Pick up an object you see lying on the floor where someone might trip over it. This can prevent someone you care about from being injured. **What other actions can you take to show responsibility for your safety or the safety of others?**



# Health Skills Activity

## Advocacy

### Fire Escape Plan

Having an escape plan can help your family prevent injuries or death in the event of a fire. Choose the nearest exit from your home. This may be a first-floor window, as well as a door. Have a back-up exit in case the first is blocked. All family members should know the route to exits from their bedroom. Make to sure to have an outdoor meeting place. This is where everyone is to gather upon getting out safely. That way, you will know if a member is trapped inside. If this is the case, let the fire department rescue the person. Never go back inside a burning building for any reason.

### On Your Own

With your family, create an escape plan for your home. Practice your escape plan until every family member knows what to do in the event of a fire.

## Fire Safety

To prevent fires, always make sure matches are out before disposing of them. Keep these and cigarette lighters out of reach of small children. Never leave candles burning unattended. In addition, each level of your house should have a **smoke alarm**, *a device that makes a warning noise when it senses smoke*. Replace the batteries in your smoke alarms twice a year to keep them working properly.

It is also a good idea to keep a **fire extinguisher** in the kitchen. This is *a device which releases chemicals that smother flames*. Smother grease fires with a pot lid or baking soda if there is no fire extinguisher. Never use water. Water will cause the burning grease to explode, creating more fire or burning you.

In the event of a major fire, leave the building immediately. Never try to put it out yourself or stop to gather possessions. Every second counts. Make sure your family has an escape route. If your clothes catch fire, remember to *stop, drop, and roll*. First, *stop* moving. If you run, the rush of air will fan the flames. Then *drop* to the floor and *roll* to smother the flames.



### Reading Check

**Give Examples** Give two examples of hazards in the home.

## ▼ FIGURE 12.2

### RULES OF ROAD SAFETY

Eighty-three percent of all traffic accidents occur within 20 miles of home. **How can you help prevent accidents while riding your bike on the road?**

#### Rules of the Road

- Ride your bike with the traffic flow, and obey traffic rules and signals.
- Never weave in and out of traffic.
- When riding with a friend, ride in single file, not abreast.
- Be aware of others. Always watch for cars and pedestrians.
- Be visible to others. Wear bright, reflective clothes. Make sure your bike has lights and reflectors.



#### Tips for Personal Safety

- When riding in a motor vehicle, use your safety belt.
- When riding a bike, skating, or riding a scooter, use safety gear. These include a helmet, pads, and gloves.
- Don't skate or ride a scooter after dark.
- Avoid riding or skating on wet, dirty, or uneven surfaces.
- Wear pants that won't catch in a bicycle chain.
- Keep your speed under control. When skating, know how to stop and fall properly.

### Safety on the Road

Safety on the road applies to drivers, passengers, and **pedestrians**. These are *people traveling on foot*. **Figure 12.2** highlights some “rules of the road” and other safety practices.



**Give Examples** Name one *do* and one *don't* safety road tip.

- ▼ Some schools now have metal detectors to make sure weapons are not brought in. **Does your school have these safety procedures? Do you agree that they should be in place?**

### Safety at School

Schools should be places for students to learn and develop physical, mental/emotional, and social skills. Sometimes, though, violence can occur at school. Knowing strategies to prevent violence can help you maintain your personal health and stay safe in school.

#### Preventing School Violence

Many schools are taking action to prevent violence. Some are using peer mediation and crisis prevention programs. Others are conducting programs that teach students to respect others. Health education classes that teach conflict resolution are helping curb school violence. Many schools





▲ Neighborhood Watch programs are one measure for keeping communities safe.

**What are some other anti-crime measures?**

now have police or security officers present. Some schools have metal detectors, to detect weapons brought to school. You can help too. One way is by never carrying a weapon. Alert school officials if you know, or suspect, someone has a weapon.

## Safety in the Community

Schools are not alone in facing crime and violence. Many communities are struggling with the same problems. Some have passed laws against guns. They have also made the punishments for violent crimes stricter. In many areas, people have formed **Neighborhood Watch programs**. These are *programs in which residents are trained to identify and report suspicious activity*. Communities may also try to protect teens by setting curfews. Drug-free zones and after-school and summer programs have also been enacted.

You can help protect yourself against dangerous situations. Walk with purpose to and from your home. Travel with another person or in a group, whenever possible. Avoid taking shortcuts through unfamiliar or unsafe areas.

**Health Online**  
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**Compare** How are the actions being taken to make schools safer similar to those that make communities safer.

## Lesson 2 Review



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

### What I Learned

1. **Recall** Where should smoke alarms be placed in the home?
2. **Describe** What are two ways of making yourself safe when riding your bike?
3. **Vocabulary** What is a *Neighborhood Watch program*?

### Thinking Critically

4. **Explain** In what ways is a cluttered room a hazard?

5. **Analyze** Why do you think there is debate on whether metal detectors should be in schools?

### Applying Health Skills

6. **Conflict Resolution** Using the T.A.L.K. strategy, write a dialogue between two teens who are trying to resolve a conflict without using violence.

## Safety Outdoors

### Guide to Reading

#### Building Vocabulary

In your notebook, write the term below. See if you can guess its meaning based on the root *therm-*, which means temperature.

- hypothermia (p. 306)

#### Focusing on the Main Ideas

In this lesson, you will be able to:

- **describe** what you need to know for water safety.
- **explain** safety when hiking or camping.
- **practice** decision-making skills to make safe choices.

#### Reading Strategy

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

### Staying Safe Outdoors

Do you enjoy swimming or boating? How about hiking or camping? These and other outdoor activities are more fun when you “play it safe.”

Factors in your environment can affect your personal health. Before scheduling any outing, plan ahead. Check the weather forecast and make sure you have the proper safety gear for each activity. Be aware of your skills and abilities. Remember to wear sunscreen and bug protection.

### Water Safety

Water activities can be a lot of fun. To avoid injury, you should learn and follow water safety rules. Know how to swim well. Good swimmers are less likely to panic in an emergency. Even good swimmers, however, should never swim alone. They should always use the “buddy system.” Agree with one or more people to know each other’s whereabouts. Go to beaches or pools that have lifeguards. Always know the water depth before entering—especially diving. Never dive into shallow water.

### Quick Write

Write a short paragraph about your favorite outdoor activity. Include two or three sentences on how to be safe when doing this activity.

- ▼ Water activities and sports can be fun. **What can you do to make them safe as well?**



▼ FIGURE 12.3

## DROWNING PREVENTION

The technique shown here can help you stay afloat in warm water. In cold water, tread water slowly or float on your back to save energy. **Why is it important to conserve energy while waiting for help?**

- 1 Stay calm.** Allow your arms, legs, and neck to go limp. Take a deep breath, and hold it as you sink vertically into the water. Only the top part of your head should remain above the surface.
- 2 Get ready.** Raise your arms gently and cross them. At the same time, place one leg forward and the other one back.
- 3 Raise your head.** Keeping your arms and legs in the same position as in Step 2, raise your head quickly but smoothly above the water. Exhale through your nose.
- 4 Take a breath.** To keep your head above the surface, gently sweep your arms down and out while you step downward with both feet. Take a fresh breath through your mouth.
- 5 Go below the surface.** While holding your breath, put your head down. As you drop below the surface, press downward with your arms and hands to keep yourself from going down too far.
- 6 Rest.** Stay under water and rest for six to ten seconds. Then repeat steps 2 through 5. Continue this technique until help arrives.

When boating or waterskiing, wear a life jacket at all times. If the water is cold, wear a wetsuit. This will protect you against developing **hypothermia** (hy·poh·THER·mee·uh). This is *a sudden and dangerous drop in body temperature*. If you ever feel you are in danger of drowning, stay calm. Call for help and use the technique shown in **Figure 12.3**.



### Reading Check

**Explain** What are some ways to stay safe in the water?

## Safety on the Trail

Whether you hike or camp, having the right gear and equipment will help you prevent illness or injury. For hiking, gear should include sturdy, well-cushioned shoes. If shoes are new, break them in a few days before using them to hike. Wearing two pairs of socks can help prevent blisters. Bring enough fresh water and food to last through your trip. Be sure to bring food that won't spoil. You should also wear clothing appropriate for the weather and the season.



◀ Planning out your trip can make it safer and more fun. **What are some specific things you should take on a hike?**

When you go hiking or camping, make sure someone knows your destination and expected date and time of return. Bring a cell phone or walkie-talkie in case of emergency. Other necessary items include a compass and a flashlight to prevent you from getting lost. Bring along extra flashlight batteries too. Also, bring a first-aid kit in case of minor injuries on the trail.

### Reading Check

**Identify** What safety items should you bring with you on a hike or camping trip?

Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 3.

## Lesson 3 Review

### After You Read

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

#### What I Learned

1. **Recall** What is the buddy system? Why is it important?
2. **Vocabulary** What is *hypothermia*?
3. **List** Name two ways of staying safe during water activities.

#### Thinking Critically

4. **Apply** Larissa is going for a short hike by herself. What safety precautions should she take before she leaves?

5. **Analyze** Suppose you are swimming in the ocean when you realize you have gone farther than you should. You don't feel you have enough energy left to swim back. What should you do?

#### Applying Health Skills

6. **Decision Making** You are looking forward to going out on a friend's boat. The weather forecast is for thunderstorms. Use the decision-making process to help you decide what to do.



## Safety in Severe Weather

### Guide to Reading

#### Building Vocabulary

In your notebook, write what you know about each term below. Correct any definitions as you read the lesson.

- natural disasters (p. 308)
- hurricane (p. 309)
- frostbite (p. 310)
- tornado (p. 310)
- earthquake (p. 311)

#### Focusing on the Main Ideas

In this lesson, you will be able to

- **identify** types of weather emergencies and natural disasters.
- **recognize** how to prepare for weather emergencies and natural disasters.

#### Reading Strategy

**Compare and Contrast** As you read, keep notes on the differences between weather emergencies and natural disasters.

### Quick Write

Name weather emergencies common in your area. List two or three things your family does to prepare for these emergencies.

## Weather Emergencies and Natural Disasters

Different parts of the country are more likely to experience different kinds of weather emergencies. These include thunderstorms, flooding from rains, hurricanes, tornadoes, and earthquakes. Some of these weather emergencies can cause **natural disasters**. These are *events caused by nature that result in widespread damage, destruction, and loss*.

Being prepared for either type of event will reduce the risk of injury. Make sure your family has an emergency kit. **Figure 12.4** shows some items that belong in such a kit. There should be enough supplies to last a family three days.

► **FIGURE 12.4**

### EMERGENCY SUPPLY KIT

An emergency supply kit should contain the items shown here. **Does your family maintain a supply kit?**



In some emergencies, you may be instructed to leave your home. If this happens, you should take your supplies with you. You should also bring money and any prescription medicines family members need.

## Thunderstorms

Thunderstorms can be frightening sometimes. A *thunderstorm* is a heavy rainstorm accompanied by strong winds, lightning, and thunder. They can occur during any season, though they are more common during warm weather. Lightning is the most dangerous part of a thunderstorm. It is caused by clouds releasing stored-up electrical energy.

Danger from lightning is greatest when you are in or near water. Whenever you see lightning or hear thunder, seek shelter.

If you are indoors, stay there. Do not use the telephone, unless it is a cordless or cell phone. If you are outdoors, look for the nearest building. An alternative is an enclosed metal vehicle with the windows completely shut. If you are in an open field with no shelter nearby, lie down. Wait for the storm to pass. Avoid all metal objects including electric wires, fences, machinery, motors, and power tools. Unsafe places include underneath canopies, small picnic or rain shelters, or near trees.



**Explain** What causes lightning?

## Hurricanes

A **hurricane** (HER·uh·kayn) is *a strong tropical windstorm with driving rain*. Hurricanes occur in coastal regions. They can cause high waves, which in turn can produce flooding. Wind speeds during a hurricane can reach or exceed 100 miles per hour. Hurricane-force winds can turn over cars and knock down buildings.

When a hurricane is forecast, windows should be boarded. Outdoor objects should be brought in. Staying alert to TV or radio reports is important. Sometimes residents will be instructed to leave their homes and head inland. It is necessary to follow these safety instructions.

## Floods

The most common natural disasters are *floods*, the rising of a body of water and its overflowing onto normally dry land. These can occur almost anywhere. As noted previously, hurricanes can cause floods. Another cause of flooding is heavy rainfall.



▲ Lightning carries a deadly electrical charge. **What are some safety rules to follow during an electrical storm?**



Flooding can be especially serious in regions near large bodies of water. Stay tuned to local radio or television stations for reports of rising water. Sometimes there is little or no warning. This is called a *flash flood*. Never walk or ride in a car through floodwater. There is a risk of being swept away. Watch out for downed power lines, which can cause deadly shocks. Floodwaters often pollute tap water. Drink bottled water just in case.

Once the flood waters go down, make sure that everything that came in contact with the floodwater is cleaned and disinfected. Wear rubber or latex gloves during the cleanup. Throw out all contaminated food. Make sure the water supply is safe before drinking any.

- ▲ Lowland areas or regions with rivers often experience floods. **What actions can you take in the event of a flood?**



### Reading Check

**Identify** What other weather emergencies can lead to flooding?

## Blizzards

Do you live in an area hit by snow in the winter? If you do, you may experience blizzards. A *blizzard* is a heavy snow-storm accompanied by strong winds. Blizzards make travel difficult, often shutting down roads. Blizzards also make it hard for food and other daily needs to reach consumers. Be careful of downed power lines, which can be dangerous to people on foot.

Blizzards can also lead to “whiteout” conditions. A white-out is a state where snow falls so rapidly, visibility is significantly reduced. People can become lost or confused. Health risks from being lost in a blizzard include hypothermia, described in Lesson 3. Another health risk is **frostbite**, *freezing of the skin*. Frostbite can cause severe injury to the skin and sometimes to deeper tissues.

## Tornadoes

A **tornado** (tor·NAY·doh) is a *whirling, funnel-shaped wind-storm that drops from the sky to the ground*. Most tornadoes occur in the flat central regions of the country. These disasters can strike anywhere if the weather conditions are right. If a tornado warning is issued for your area, head to a storm cellar or basement. If you don’t have a basement or storm cellar, go

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and complete the Interactive  
Study Guide for Lesson 4.

to a hallway, bathroom, or other inside area without windows. Don't stay in cars or mobile homes. If you are outdoors, look for a ditch and lie down.



### Reading Check

**Define** What is a tornado?

## Earthquakes

An **earthquake** is the shaking of the ground as rock below the surface moves. If you are inside when an earthquake hits, stay there. Brace yourself in a doorway. If there is a piece of sturdy furniture, such as a large desk, crawl under. Move away from objects that could fall or shatter. If you are outside during an earthquake, stand in the open. Keep away from buildings, trees, and power lines. After an earthquake, report any odor of gas. An odor might indicate a leak.



- ▲ What are tornadoes?  
**What should you do if a tornado is headed your way?**

## Lesson 4 Review



### After You Read

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

### What I Learned

1. **Compare** What is the difference between a weather emergency and natural disaster?
2. **Vocabulary** What is a hurricane? Where do hurricanes occur?
3. **Identify** Which type of weather emergency can lead to whiteout conditions?

### Thinking Critically

4. **Evaluate** How does the media influence community health during a natural disaster or weather emergency?

5. **Analyze** Suppose you are swimming when the sky turns dark. You hear a distant rumble. What should you do to take responsibility for your personal health?

### Applying Health Skills

6. **Accessing Information** Research online or at the library on how to prepare an emergency supply kit. Write a list of all important supplies that you would need in a severe weather emergency or natural disaster.

## First Aid for Emergencies

### Guide to Reading

#### Building Vocabulary

Make two lists. One should be emergency terms, the other first-aid techniques.

- first aid (p. 312)
- rescue breathing (p. 313)
- cardiopulmonary resuscitation (CPR) (p. 314)
- abdominal thrusts (p. 314)
- poison control center (p. 316)
- first-degree burn (p. 316)
- second-degree burn (p. 316)
- third-degree burn (p. 317)

#### Focusing on the Main Ideas

In this lesson, you will be able to:

- **name** strategies for responding to injuries.
- **describe** how you can help someone who is bleeding.
- **identify** the universal sign for choking.
- **explain** how to help a burn victim.

#### Reading Strategy

**Sequencing** Choose two of the emergencies described in the lesson. For each, make a flow chart showing the steps in treating the emergency.

### Quick Write

List three or four items you would put in a home first-aid kit. Explain why each item is important.

### Giving First Aid

Some emergencies are minor. You cut your fingertip and it bleeds. A friend falls while skateboarding and injures his or her knee. Other emergencies can be life-threatening. Taking immediate action can mean the difference between life and death. Often that includes giving **first aid**. This is *the care first given to an injured or ill person until regular medical care can be supplied*.

Helping an injured person can prevent further injury but proper training is needed to give first aid. In an emergency, the American Red Cross suggests the following strategy: CHECK-CALL-CARE.

- **Check the scene and the victim.** Make sure the area is safe for you and the victim. Move the victim only if he or she is in danger.



- ◀ When reacting to emergencies, first check to see whether you or the victim is in danger. **What should you do next?**

- **Call for help.** Call 911 or the local EMS number. *EMS* stands for “emergency medical service.”
- **Care for the person until help arrives.** Use the first-aid techniques discussed in this lesson to treat the victim’s injuries until help arrives.

## Life-Threatening Emergencies

How can you tell if an emergency is life-threatening? A victim’s life is considered in danger if the person: (1) has stopped breathing, (2) has no heartbeat (3) is bleeding severely, (4) is choking, (5) has swallowed poison, or (6) has been severely burned. People in these situations need help immediately. Call for help and then begin to treat the victim.

## Rescue Breathing and CPR

If you suspect a person has stopped breathing, put your ear and cheek close to the victim’s nose and mouth. Listen and feel for air exhaled. Look to see if the chest is rising and falling. If the victim is not breathing, perform **rescue breathing**. This is a substitute for normal breathing in which someone forces air into the victim’s lungs. **Figure 12.5** shows how to perform rescue breathing on an adult or older child. Special rescue breathing techniques are used for infants and children. If you are planning to begin babysitting, contact the American Red Cross for training on infant and child rescue breathing.

▼ **FIGURE 12.5**

### RESCUE BREATHING TECHNIQUE

When a victim is not breathing, first call 911. Then begin rescue breathing if the person has a pulse. **How can you determine if a victim has stopped breathing?**



- 1** Point the victim’s chin upward by gently lifting it up with your fingers and tilting the head back. The airway will now be open.



- 2** Pinch the victim’s nostrils shut. Cover the victim’s mouth with your own, forming a tight seal. Give two slow breaths each about two seconds long. Make sure the victim’s chest rises during each breath.



- 3** Watch for the victim’s chest to fall, and listen for air flowing from the lungs. If the victim begins breathing normally, stop. Otherwise, give one rescue breath every five seconds until help arrives.

A life-saving technique for victims whose hearts have stopped beating is **cardiopulmonary resuscitation (CPR)**. This is a rescue measure that attempts to restore heartbeat and breathing. Only people who have been trained should perform CPR.



Reading Check

Define What is CPR?

## First Aid for Severe Bleeding

Severe bleeding from an injury can be a serious problem. When treating a victim with severe bleeding, take precautions to limit touching another person's blood. Wear gloves if possible and always wash your hands afterward.

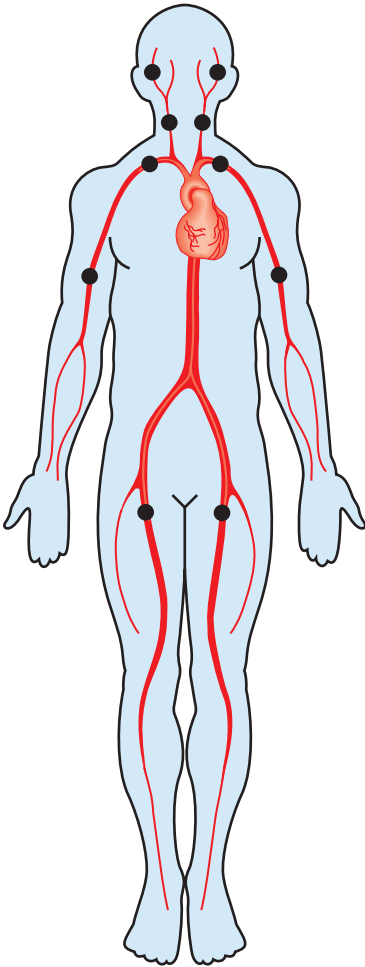
First aid for severe bleeding begins with lying the victim down. Try to elevate his or her legs to reduce the risk of shock. If possible, raise the wounded body part above the victim's heart. Elevating the wound slows the blood coming from the heart to the wound. Do this only if the body part has no broken bones. Apply direct, steady pressure to the wound. Press down firmly with a clean cloth. If necessary, add more cloth without removing the first cloth. At the same time, apply pressure to the main artery supplying blood to the wound. **Figure 12.6** shows several pressure points that can be used to stop bleeding. Push on the pressure point until you feel the bone. Hold the pressure. Do not push so hard that you cut off circulation, however.

Once the bleeding has stopped, cover the wound with a clean cloth. This helps prevent infection. If the victim needs professional medical treatment, leave the bandages in place. Get the person medical help quickly.

## First Aid for Choking

Choking is a life-and-death emergency. It is a condition that occurs when a person's airway becomes blocked. A choking victim can die in minutes because air cannot get to the lungs. The universal sign for choking is grabbing the throat between the thumb and forefinger. Knowing this gesture can help you identify a choking victim. It can also help you alert someone in the event you are choking. A person who is choking may gasp for breath. He or she may be unable to speak. The person's face may turn red, then bluish.

For an older child or adult, first aid for choking begins with a question. Ask "Are you choking?" If the victim nods or does not respond, begin using **abdominal thrusts**. These are quick



**▲ FIGURE 12.6**

### LOCATION OF PRESSURE POINTS

The dots in this illustration are pressure points.

Why is it important to know the location of pressure points on the body?

upward pulls into the diaphragm to force out the object blocking the airway. This technique is illustrated in **Figure 12.7**.

If an infant is choking, position the infant on his or her abdomen along your forearm. Brace your arm against your thigh. Support the infant's head with your hand and point the head down. Using the heel of your hand, give the infant up to five blows between the shoulder blades. If the object is still stuck, turn the victim on his or her back. Support the shoulders and neck with one hand. With the other hand, place two fingers in the middle of the child's breastbone. Press quickly up to five times. Alternate five back blows and five chest thrusts until the object comes out. If the child becomes unconscious, call 911. For more detailed instructions on helping a choking infant, consult a first-aid manual.

Suppose you are choking and no one is around to help. If this happens, don't panic. Instead, make a fist and thrust it quickly into your upper abdomen. This will force out the object blocking your airway. You can also try pushing your abdomen against the back or arm of a chair.

 **Reading Check**

**Explain** Describe first aid for a choking infant.

 **FIGURE 12.7**

## ABDOMINAL THRUSTS

Use these steps to help a victim who is choking. If the person can talk or cough or you can hear breathing, don't do anything. **Why might it be dangerous to perform abdominal thrusts on a person who is not choking?**



**1** Stand behind the victim. Wrap your arms around his or her waist, and bend the victim slightly forward. Place your fist slightly above the person's navel.

**2** Hold your fist with your other hand, and press it hard into the abdomen with an upward thrust. Repeat until the object is coughed up.



## First Aid for Poisoning

If you think someone has swallowed poison, get professional help. Call 911, EMS, or your local **poison control center**. This is *a community agency that helps people deal with poisoning emergencies*. The inside cover of your telephone book usually lists the phone number of the center. When you call, you will be given directions on how to treat the victim.

While waiting for help to arrive, keep the person warm and breathing. Look for extra traces of poison around the victim's mouth. Remove these with a damp, clean cloth wrapped around your finger. Make sure to save the container of poison. Show it to the ambulance team. Tell them all you know about what happened.

Some cases of poisoning are caused by contact with a poisonous plant. Poison ivy, poison oak, and poison sumac are three such plants. Contact with these plants can cause redness, itching, and swelling. Most of these injuries can be easily treated at home using soap and water, rubbing alcohol, and over-the-counter creams. For severe cases, see a doctor for treatment.



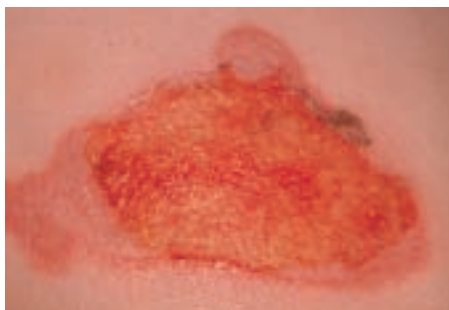
### Reading Check

**List** Give two ways poisons can enter the body.

## First Aid for Burns

Different kinds of burns require different treatments. A **first-degree burn** is *a burn in which only the outer part of the skin is burned and turns red*. Cool the burned area with cold water (not ice) for at least 15 minutes. Wrap the burned area loosely in a clean, dry dressing.

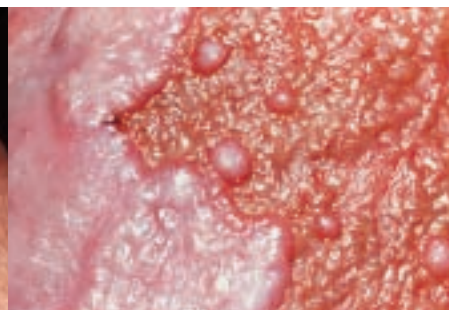
Second-degree burns are more serious. A **second-degree burn** is *a serious type of burn in which the damaged area blisters or peels*. Cool the burn in cold water (not ice) and elevate the burned area. Wrap loosely with a clean, dry dressing. Do not pop blisters, or peel loose skin. Call your doctor.



**First-degree burn**



**Second-degree burn**



**Third-degree burn**

A **third-degree burn** is a very serious burn in which deeper layers of skin and nerve endings are damaged. Cool the burn with cold water or by applying a wet cloth. Do not apply ice or ointments. Remove clothing that might be stuck to the burned area while you are applying cold water. Wrap the area loosely with a clean, dry dressing and call 911.

## First Aid for Breaks and Sprains

A break in a bone is called a *fracture*. If you suspect someone has a fracture, start by asking questions. Ask if the person heard a snap or whether touching the injured area hurts. If you're not sure, treat the person as though they have a broken bone. First, call 911 or EMS. If there is bleeding, apply pressure with a clean cloth. Do not attempt to straighten the injured part. Avoid moving the person.

A sprain occurs when a joint is stretched or twisted or has torn ligaments. Sprains are often sports-related. To treat a sprain use the *PRICE* formula outlined in Chapter 5 (see page 134).

**Health Online**

Visit [health.glencoe.com](http://health.glencoe.com)  
and complete the Interactive  
Study Guide for Lesson 5.

**Reading Check**

**Explain** How do you treat a fracture?

## Lesson 5 Review

**After You Read**

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

### What I Learned

1. **Recall** What is the universal sign for choking?
2. **List** Briefly give the steps in controlling severe bleeding.
3. **Vocabulary** What's the difference between a *first-* and *second-degree burn*?

### Thinking Critically

4. **Evaluate** What steps can be taken to reduce poisoning risks in homes with small children?

5. **Apply** Ken and Phil see an older adult collapse to the ground. Using the CHECK-CALL-CARE strategy, show how Ken and Phil should respond to this emergency.

### Applying Health Skills

6. **Stress Management** Emergency situations are often very stressful. With classmates, discuss strategies for reducing stress while dealing with a medical emergency.

## Protecting Your Environment

### Guide to Reading

#### Building Vocabulary

Write each term in your notebook. Add a definition for each as you come across the term in your reading.

- environment (p. 318)
- pollute (p. 318)
- fossil fuels (p. 319)
- ozone (p. 319)
- smog (p. 319)
- acid rain (p. 319)
- recycling (p. 320)
- conservation (p. 320)
- biodegradable (p. 321)

#### Focusing on the Main Ideas

In this lesson, you will be able to:

- **identify** the causes of air, water, and land pollution.
- **describe** what happens to garbage after it is thrown away.
- **explain** how you can help protect the environment.

#### Reading Strategy

**Organizing Information** Create a chart that shows the causes for the three types of pollution.

### Quick Write

Your school is part of your environment. Explain how you can help take care of your school environment.

## The Health of the Environment

The **environment** is the sum total of your surroundings. It includes living things such as people, plants, and animals. It also includes nonliving things such as homes, buildings, cars, and other things we use each day. All living things are affected by the health of the environment.

Unfortunately, the way people live can pollute the environment. **Pollute** (puh·LOOT) means *to make unfit or harmful for living things*. Pollution affects the air we breathe, the water we drink, and the land we live on.

### Air Pollution

Some air pollution is caused by natural events. For example, gases and ash from erupting volcanoes pollute the air. The main cause of air pollution, however, is the burning of

- ◀ People who care about nature want to protect it.  
**What can you do to help protect nature?**



**fossil** (FAH-suhl) **fuels**. These are *coal, oil, and natural gas*. They are used to power motor vehicles, run factories, and heat homes and buildings.

Air pollution can cause physical problems such as watery eyes, headaches, dizziness, and breathing difficulties. It also causes other environmental problems. One of these is damage to the ozone (OH-zohn) layer. **Ozone** is a *special form of oxygen*. It naturally occurs in the earth's upper atmosphere. The ozone layer is needed to shield the earth from the sun's harmful rays.

Another problem related to air pollution is **smog**. This is a *yellow-brown haze that forms when sunlight reacts with impurities in car exhaust*. Over long periods, breathing smog can cause serious damage to your lungs. Still another problem is **acid rain**. This is *rainfall that contains air pollution from the burning of fossil fuels*. Over time, acid rain can destroy large forests, wildlife, and plant life.



### Reading Check

**Identify** Name two environmental problems caused by air pollution.

## Water Pollution

Some water pollution is caused directly by the dumping of waste materials. Indirect causes include poisonous wastes buried in landfills and chemical fertilizers used in farming. Harmful substances from both can leak down through the soil and into the *ground water*. This is water that runs deep under the surface. Other causes of water pollution are accidental such as oil spills from tanker ships. This pollution damages beaches and harms wildlife.

No matter what the cause, the cost to the environment is great. Harm to the water supply endangers all living things. People can become sick when they drink polluted water. Eating fish that have absorbed wastes and chemicals can also lead to illness. In some parts of the world, unclean water spreads deadly diseases. Two of these are cholera (KAH-luh-ruh) and typhoid. These illnesses threaten whole communities.



▼ The damage to this sculpture was done by acid rain. **What causes acid rain?**

Connect To...  
Science

### Alternate Energy Sources

Scientists are busily working at developing alternate energy sources that can be used in place of fossil fuels. Two examples are solar energy—energy from the sun—and wind energy.

**Research how these alternate energy sources can improve the environment and your personal health.**



## Land Pollution

Communities produce large amounts of trash. What do they do with it? Most communities build landfills to bury their wastes. Special linings are designed to prevent pollution from leaking into ground water.

A more serious problem is disposing of hazardous wastes. These include paints, acids, and chemicals used to kill insects. All can cause serious illnesses and environmental damage. Nuclear wastes, the chemicals left over from nuclear power plants, are especially dangerous. They take tens of thousands of years to break down naturally and become harmless. Most communities have approved locations where you can safely dispose of hazardous wastes.

▲ This beach is closed to swimmers due to pollution. **How do our beaches become polluted?**



### Reading Check

**Explain** What happens to trash that is thrown away?

## Exhausting Natural Resources

Pollution is not the only environmental problem. Another is overuse of natural resources such as trees. Trees are cut down to make paper and lumber. Removing too many trees upsets the balance of nature. By upsetting this balance, the lives of all living things are endangered.

Another resource we are exhausting is some of our energy sources. The earth's fossil fuel supplies are not endless. Some day they will run out. Current usage rates are making that happen sooner rather than later.

## How Can You Help?

“What can one person do?” The answer is *plenty*—especially if you are willing to take positive action.

For starters, you can create less trash. One way is by reusing as many items as possible. Another is by **recycling**. This means *recovering and changing items so they can be used for other purposes*. Find out where there are recycling centers in your community.

Another solution is **conservation**, *the saving of resources*. When you buy new items, look for ones with the least packaging. This will conserve resources. At the same time, it will create

### Health Online

Visit [health.glencoe.com](http://health.glencoe.com) and complete the Interactive Study Guide for Lesson 6.

less trash to throw away. Also, consider whether you need an item at all. Maybe something you already have would do just as well.

Conserve energy at home by turning off electric lights and appliances when not in use. Keep windows closed while the heat or air conditioning is on. Towel dry or air dry dishes instead of heat drying them in a dishwasher.

Conserve water by using less of it. Turn the water off while you brush your teeth. Take shorter showers. Protect our water supply by using cleaning supplies that are biodegradable (by·oh·di·GRAY·duh·buhl). **Biodegradable** means *capable of breaking down naturally without causing pollution*. Don't dump detergents and cleaning supplies down the drain. They only end up in our rivers, lakes, and oceans.

### Advocacy

Set a positive example for others. Urge others to carpool to cut down the number of cars on the road. Carpooling means less exhaust in the air from motor vehicles. It also means less fuel consumption.



#### Reading Check

**Give Examples** Name two ways you personally can conserve resources.

## Lesson 6 Review



#### After You Read

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

#### What I Learned

1. **Vocabulary** What is *ozone*? Why is it important?
2. **Recall** How does burying wastes in landfills cause water pollution?
3. **List** What are two ways of conserving water?

#### Thinking Critically

4. **Analyze** How does properly disposing of hazardous waste affect your environment as well as your personal health?

5. **Synthesize** What role does conservation play in being a good consumer?

#### Applying Health Skills

6. **Advocacy** One way to help maintain the environment is to become an advocate. With a group, brainstorm different ways to spread the word about the importance of conserving. Which methods do you think would be most effective?

### Health Online

#### Topic: Protecting the Environment

Visit [health.glencoe.com](http://health.glencoe.com) for Student Web Activities to learn more about environmental issues and what you can do to help.

**Activity:** After studying the information provided at the link above, choose an environmental issue that is important to you. Create a brochure that explains the issue and how teens can help.

# Building Health Skills

## ADVOCACY

### Reduce Waste

#### DIRECTIONS

Advocacy involves taking a stand in support of a cause. This activity will give you the opportunity to develop and master this important health skill. Here's a guide to the different parts of this activity:

- 1 In the **Model** section, you will read about a teen who performs the health skill successfully. This "model" scenario will show you how the skill is done.
- 2 The **Practice** section will help guide you in practicing the skill.
- 3 In the **Apply** section, you will have a chance to perform the skill on your own. You can use the Self-Check to check your work.

To complete this activity, first read the scenario presented in the Model. Then move on to the Practice. Finally, go ahead and try the Apply.

#### 1 Model

As Justin learned about ways to protect the environment, he wanted to take action within his own family. He decided to speak with his mom. Read a part of their conversation below.

**Justin:** We've been studying the environment in school. I would like our family to do more to protect our world.

**Mom:** What do you have in mind?

**Justin:** Well, I've noticed things that could still be useful in our trash. We can look carefully at every item before throwing it away. If it is something that someone else might use, we can give it to charity. We can also do a better job of recycling and using fewer disposable items, like paper plates.

**Mom:** Those are great ideas! Let's tell the rest of the family.



## 2 Practice

Justin now wants to help his school learn to recycle and reuse items. He made a list of suggestions, which included using both sides of every piece of paper before it is thrown into the recycle bin. He also suggested starting a recycling program for printer cartridges and old computers.

1. With a group, write a letter to the school administrators. In your letter, convince them to adopt Justin's suggestions and two other suggestions from your group.
2. Share your letter with other groups in your class. How is your response similar to or different from theirs?

### Skill Summary ADVOCACY

The skill of advocacy asks you to

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

## 3 Apply

Develop a 30 second public service announcement to persuade other teens to reduce, reuse, or recycle. In your announcement, explain why environmental protection is important. Describe at least three actions students should take to ensure a healthier world.

### Self-Check

- Did I explain why environmental protection is important?
- Did I describe three actions students should take?
- Is my announcement persuasive to teens?



# HANDS-ON HEALTH



## Are You Earth-Friendly?

How do you rate as a friend of the environment? Take this conservation inventory to find out.

### What You Will Need

- pencil or pen
- paper

### What You Will Do

- 1 Write the letters *a.* through *j.* on your paper.
- 2 Write yes or no for each statement:
  - a. I take quick showers.
  - b. I turn off lights and appliances that are not in use.
  - c. I keep windows closed when the heat or air conditioning is on.
  - d. I don't let the water run when I'm brushing my teeth.
  - e. I recycle products whenever possible.

- f. I bring my own bags to the store.
- g. I find new ways to use old items.
- h. I put litter in trash containers.
- i. I encourage my family to carpool.
- j. I walk or ride my bicycle whenever possible instead of asking for a ride.

### Wrapping It Up

Give yourself 1 point for each yes answer. Add up your score to see how you rate.

- |             |                      |
|-------------|----------------------|
| 3 or fewer: | Energy Eater         |
| 4 to 7:     | Average Earth Friend |
| 8 or more:  | Conservation Star    |

List ways you can improve your rating.

# Reading Review

## 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 1–6. Find a partner and quiz each other using these study aids.

### Lesson 1 Safety and You

#### Key Ideas

- The parts of the accident chain are the situation, the unsafe habit, the unsafe act, and the resulting injury.

#### Vocabulary

- accident (p. 296)
- accidental injuries (p. 296)
- accident chain (p. 297)

### Lesson 2 Safety at Home and Away

#### Key Ideas

- Road safety includes obeying local traffic rules, being aware of others, being visible to others, and wearing safety gear.

#### Vocabulary

- hazards (p. 300)
- smoke alarm (p. 302)
- fire extinguisher (p. 302)
- pedestrians (p. 303)
- Neighborhood Watch program (p. 304)

### Lesson 3 Safety Outdoors

#### Key Ideas

- Water safety includes using the buddy system, knowing the water depth, and wearing a life jacket on a boat.

#### Vocabulary

- hypothermia (p. 306)

### Lesson 4 Safety in Severe Weather

#### Key Ideas

- Being prepared for weather emergencies and natural disasters includes having an emergency kit.

#### Vocabulary

- natural disasters (p. 308)
- frostbite (p. 310)
- tornado (p. 310)
- hurricane (p. 309)
- earthquake (p. 311)

### Lesson 5 First Aid for Emergencies

#### Key Ideas

- Strategies for responding to injuries include knowing proper first aid techniques for different types of injuries.

#### Vocabulary

- first aid (p. 312)
- rescue breathing (p. 313)
- cardiopulmonary resuscitation (CPR) (p. 314)
- abdominal thrusts (p. 314)
- poison control center (p. 316)
- first-degree burn (p. 316)
- second-degree burn (p. 316)
- third-degree burn (p. 317)

### Lesson 6 Protecting Your Environment

#### Key Ideas

- You can help protect the environment by reducing, reusing, and recycling.

#### Vocabulary

- environment (p. 318)
- pollute (p. 318)
- fossil fuels (p. 319)
- ozone (p. 319)
- smog (p. 319)
- acid rain (p. 319)
- recycling (p. 320)
- conservation (p. 320)
- biodegradable (p. 321)

## After You Read

**HEALTH INVENTORY**

Now that you have read the chapter, look back at your answer to the Health Inventory 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 1–5. After each number, write the term from the list that best completes each sentence.

- abdominal thrusts
- accident
- accident chain
- accidental injuries
- biodegradable
- hazard
- Neighborhood Watch program
- pedestrians

### Lesson 1 Safety and You

1. \_\_\_\_\_ are injuries caused by unexpected events.
2. A(n) \_\_\_\_\_ is an unexpected event that results in damage or harm.
3. The situation, the unsafe habit, and the unsafe act are all parts of the \_\_\_\_\_.

### Lesson 2 Safety at Home and Away

4. A loose floor rug that someone might trip on is an example of a \_\_\_\_\_ in the home.
5. Some communities try to protect teens by developing a \_\_\_\_\_.

On a sheet of paper, write the numbers 6–13. 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 Safety Outdoors

6. Knowing how to swim is an important part of water safety.
7. A first-aid kit comes in handy for treating minor injuries on the trail.

### Lesson 4 Safety in Severe Weather

8. Earthquakes, the most common natural disaster, can happen almost anywhere.
9. Whirling, funnel-shaped windstorms, or hurricanes, occur mostly in the flat central regions of the country.

### Lesson 5 First Aid for Emergencies

10. A life-saving technique for victims whose hearts have stopped beating is abdominal thrusts.
11. A first-degree burn is very serious because deeper layers of skin and nerve endings are damaged.

### Lesson 6 Protecting Your Environment

12. Recovering and changing items so they can be used for other purposes is called pollution.
13. Cleaning supplies that are biodegradable break down naturally without causing pollution.



### Thinking Critically

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

- 14. Analyze** Sara is skating with her friends. They decide to race. Sara notices a red flag on the ice in the distance. What safety tips might she give her friends?
- 15. Describe** ways in which the skill of advocacy can make your community safer.

### Write About It

- 16. Practicing Healthful Behaviors** Write a paragraph discussing some of the positive health behaviors you can practice to help protect the environment.

#### Occupational Safety and Health

**Specialist** Would you like to help keep people safe while they work? Are you good at solving problems? Then you might want to think about a career in occupational safety and health. In this career, you will look at hazards in the workplace and find ways to prevent or eliminate them. You'll need a four-year degree in occupational safety and health. Visit *Career Corner* at [health.glencoe.com](http://health.glencoe.com) to learn more about this and other health careers.

- 17. Accessing Information** Write a paragraph explaining why reliable information is important to the health of the environment.

## Standardized Test Practice

### Math

Use the following information to answer the questions about safety in the event of lightning.

Earth is struck by lightning approximately 100 times every second. A formula exists for estimating how close a lightning strike is.

1. When you see the flash, begin counting seconds. If no clock is available, count *one-one hundred, two one-hundred*, and so on.
2. When you hear the sound of thunder, stop counting.
3. Each 5 seconds you counted is equal to about 1 mile.

Whenever lightning is within 7 miles of your location, seek shelter. If it is within 10 miles, continue to monitor the track of the storm. To do this, repeat the process for the next lightning flash. If the number is smaller, the storm is headed your way. Take cover.

### TEST-TAKING TIP

To solve a math problem, be sure you understand the type of problem. Make sure you understand what you are being asked to do.

1. If you see lightning, count to 22, and then hear thunder,
  - A. the lightning is 22 miles away.
  - B. the lightning is 2.2 miles away.
  - C. the lightning is 5.4 miles away.
  - D. the lightning is 4.5 miles away.
2. A camper sees lightning and counts to 41, then hears thunder. Which statement is NOT true?
  - A. The lightning is more than 8 miles from the camper's location.
  - B. The camper should count again after the next flash.
  - C. The camper should seek shelter at once.
  - D. The camper is in no immediate danger but is not totally safe.

# Glossary

The Glossary contains all the important terms used throughout the text. It includes the **boldfaced** terms listed in the “Building Vocabulary” lists at the beginning of each lesson, which also appear in text and art.

The Glossary lists the term, the pronunciation (in the case of difficult terms), the definition, and the page on which the term is defined. The pronunciations here and in the text follow the system outlined below. The column headed “Symbol” shows the spelling used in this book to represent the appropriate method.

## Pronunciation Key

Sound	As In	Symbol	Example
a <sup>˘</sup>	hat, map	a	abscess (AB-ses)
a <sup>ˉ</sup>	age, face	ay	atrium (AY-tree-uhm)
a	care, their	eh	capillaries (KAP-uh-lehr-eez)
ä, o <sup>˘</sup>	father, hot	ah	biopsy (BY-ahp-See)
ar	far	ar	cardiac (KAR-dee-ak)
ch	child, much	ch	barbiturate (bar-BI-chuh-ruht)
e <sup>˘</sup>	let, best	e	vessel (VE-suhl)
e <sup>ˉ</sup>	beat, <i>See</i> , city	ee	acne (AK-nee)
er	term, stir, purr	er	nuclear (NOO-kee-er)
g	grow	g	malignant (muh-LIG-nuhnt)
i <sup>˘</sup>	it, hymn	i	bacteria (bak-TIR-ee-uh)
i <sup>ˉ</sup>	ice, five	y	benign (bi-NYN)
		eye	iris (EYE-ris)
j	page, fungi	j	cartilage (KAR-tuhl-ij)
k	coat, look, chorus	k	defect (DEE-fekt)
o <sup>˘</sup>	open, coat, grow	oh	aerobic (ehr-OH-bik)
ô	order	or	organ (OR-guhn)
o <sup>˙</sup>	flaw, all	aw	palsy (PAWL-zee)
oi	voice	oy	goiter (GOY-ter)
ou	out	ow	fountain (FOWN-tuhn)
s	say, rice	s	dermis (DER-mis)
sh	she, attention	sh	conservation (kahn-ser-VAY-shuhn)
u <sup>˘</sup>	cup, flood	uh	bunion (BUHN-yuhn)
u	put, wood, could	u	pulmonary (PUL-muh-nehr-ee)
ü	rule, move, you	oo	attitudes (AT-i-toodz)
w	win	w	warranty (WAWR-uhn-tee)
y	your	yu	urethra (yu-REE-thruh)
z	says	z	hormones (HOR-mohnz)
zh	pleasure	zh	transfusion (trans-FYOO-zhuhn)
ə	about, collide	uh	addiction (uh-DIK-shuhn)

**A**

- Abdominal thrusts** Quick upward pulls into the diaphragm to force out the object blocking the airway. (page 314)
- Abstinence** (AB-stuh-nuhns) Not participating in high-risk behaviors. (page 44)
- Abuse** (uh·BYOOS) A pattern of mistreatment of another person. (page 71)
- Accident** An unexpected event that results in damage or harm. (page 296)
- Accident chain** A sequence of events that often leads to an accidental injury. (page 297)
- Accidental injury** An injury caused by an unexpected event. (page 296)
- Acid rain** Rainfall that contains air pollution from the burning of fossil fuels. (page 319)
- Acne** (AK-nee) A skin condition caused by overly active oil glands. (page 148)
- Addiction** The body's physical or mental need for a drug or other substance. (page 223)
- Adolescence** (a-duhl-EH-suhns) The period between childhood and adulthood. (page 202)
- Adrenaline** (uh-DRE-nuhl-in) A hormone that prepares the body to respond to stress. (page 47)
- Advocacy** Taking a stand to make a difference. (page 38)
- Advocate** Encourage other people to live healthy lives. (page 15)
- AIDS** A condition characterized by life-ending infections and a T-cell count under 200. (page 278)
- Alcohol** (AL-kuh-hawl) A substance produced by a chemical reaction in carbohydrates. (page 242)
- Alcoholism** A disease in which a person has a physical and mental need for alcohol. (page 247)
- Allergen** A substance that causes an allergic reaction. (page 285)
- Allergy** The body's sensitivity to certain substances. (page 285)
- Alternative** (ahl-TER-nuh-tihv) Another way of thinking or acting. (page 258)

**Anabolic steroids** (a-nuh-BAH-lik-STEHR-oydz) Synthetic drugs based on a male hormone. (page 251)

**Antibiotics** (an-tih-by-AH-tik) Kill or stop the growth of bacteria and other specific germs. (page 160)

**Antibodies** Chemicals produced specifically to fight a particular invading substance. (page 274)

**Anxiety** Feelings of uncertainty or worry over what may happen. (page 46)

**Anxiety disorder** A serious emotional problem that keeps a person from functioning normally. (page 51)

**Assertive** Making your wants and needs known in a positive, active manner. (page 66)

**Asthma** (AZ-muh) A chronic disease in which the airways become irritated and swollen. (page 285)

**Astigmatism** (ah-STIG-muh-tizm) A misshaped cornea or lens causing objects to look wavy or blurred. (page 152)

**Attitude** (AT-ih-toodz) What you believe or feel about someone or something. (page 11)

**B**

**Bacteria** (bak-TIR-ee-uh) Extremely small single-celled organisms with no cell nucleus. (page 270)

**Behavior** The way you act in the many different situations and events in your life. (page 11)

**Biodegradable** (by-oh-di-GRAY-duh-buhl) Capable of breaking down naturally without causing pollution. (page 321)

**Blood alcohol content (BAC)** A measure of the amount of alcohol present in a person's blood. (page 243)

**Blood pressure** The force of blood pushing against the blood vessel walls. (page 189)

**Body image** How you view your body. (page 109)

**Body language** Facial expressions, eye contact, gestures, and posture. (page 63)

**Body system** A group of organs that perform a body function. (page 177)

**C**

- Calorie** A unit of heat that measures the energy available in foods. (page 100)
- Cancer** A disease caused by abnormal cells that grow out of control. (page 284)
- Carbohydrates** (kar·boh·HY·drayts) Sugars and starches contained in foods. (page 95)
- Carbon monoxide** (KAR·buhn muh·NAHK·syd) A poisonous, odorless gas produced when tobacco burns. (page 222)
- Cardiopulmonary resuscitation (CPR)**  
A rescue measure that attempts to restore heartbeat and breathing. (page 314)
- Cells** The basic building blocks of life. (page 177)
- Character** The way you think, feel, and act. (page 36)
- Cholesterol** (kuh·LES·tuh·rawl) A waxy chemical our bodies produce and need in small amounts. (page 106)
- Chromosomes** (KROH·muh·sohmz) Tiny strands of matter that carry the codes for inherited traits. (page 210)
- Chronic** (KRAH·nik) Long-lasting. (page 283)
- Circulatory system** Allows the body to move blood to and from tissues. (page 188)
- Cirrhosis** (suh·ROH·sis) Destruction and scarring of the liver tissue. (page 243)
- Communicable disease** (kuh·MYOO·nih·kuh·buhl) A disease that can be spread. (page 268)
- Communication** The clear exchange of ideas and information. (page 15)
- Compromise** A skill in which each side gives up something in order to reach an agreeable solution. (page 83)
- Conflicts** Disagreements in ideas, beliefs, or interests. (page 87)
- Consequence** A result. (page 16)
- Conservation** The saving of resources. (page 320)
- Consumer** Someone who buys products or services. (page 155)
- Contagious** (kuhn·TA·juhs) You can spread the virus to others by direct or indirect contact. (page 272)

- Cool-down** Gentle activity to slow down after exercise. (page 131)
- Cooperation** Working together for the common good. (page 75)
- Coupons** Slips of paper that save you money on certain brands. (page 158)
- Culture** The collected beliefs, customs, and behaviors of a group. (page 9)
- Cumulative risk** (KYOO·myuh·luh·tiv) The addition of one risk factor to another, increasing the chance of harm or loss. (page 17)
- Cuticle** (KYOO·ti·kuhl) A nonliving band of outer skin. (page 150)

**D**

- Dandruff** Flaking of the outer layer of dead skin cells. (page 149)
- Decision** A choice that you make. (page 16)
- Dehydration** A condition caused by too much water loss. (page 134)
- Depression** An emotional problem marked by long periods of hopelessness and despair. (page 51)
- Dermis** The thicker inner layer of the skin. (page 147)
- Diabetes** (dy·uh·BEE·teez) A disease that prevents the body from using the sugars and starches in food for energy. (page 191)
- Diaphragm** (Dy·uh·fram) A large muscle at the bottom of the chest. (page 185)
- Digestion** The process by which your body breaks down food into small nutrient particles. (page 185)
- Digestive system** (dy·JES·tiv) The body system that controls the digestion process. (page 185)
- Disease** (dih·ZEEZ) A condition that affects the proper functioning of the body or mind. (page 268)
- Drug** A substance that changes the structure or function of the body or mind. (page 242)
- Drug abuse** The use of any drug in a way that is unhealthy or illegal. (page 253)
- Drug misuse** Taking medicine in a way that is not intended. (page 162)

**Drug rehabilitation** A process in which a the person relearns how to live without the abused drug. (page 255)

## E

**Earthquake** The shaking of the ground as rock below the surface moves. (page 311)

**Eating disorder** Extreme eating behavior that can seriously damage the body. (page 110)

**Egg cell** The female reproductive cell. (page 206)

**Emotions** Feelings such as joy, love, or fear. (page 41)

**Empathy** The ability to identify and share another person's feelings. (page 74)

**Emphysema** (em-fuh-See-muh) A disease that occurs when tiny air sacs in the lungs lose their elasticity, or ability to stretch. (page 223)

**Endocrine system** A body system containing glands that regulate growth and other important activities. (page 203)

**Endurance** (en-DER-uhns) The ability to keep up a physical activity without becoming overly tired. (page 123)

**Environment** (en-VY-ruhn-muhnt) The sum total of your surroundings. (page 9)

**Epidermis** The thinner outer layer of the skin. (page 147)

**Excretory system** Gets rid of some of the wastes your body produces and also maintains fluid balance. (page 186)

**Exercise** Planned, structured, repetitive physical activity that improves or maintains physical fitness. (page 125)

## F

**Family** The basic unit of society. (page 67)

**Farsightedness** The ability to see objects at a distance while close objects look blurry. (page 152)

**Fats** A nutrient found in fatty animal tissue and plant oils. (page 95)

**Fertilization** The joining of a female egg cell with a male reproductive cell. (page 207)

**Fetal alcohol syndrome (FAS)**

A group of permanent physical and mental problems caused by alcohol use during pregnancy. (page 248)

**Fetus** A developing, unborn baby from the eighth week until birth. (page 212)

**Fiber** Tough, stringy part of raw fruits, raw vegetables, whole wheat, and other whole grains. (page 95)

**Fire extinguisher** A device which releases chemicals that smother flames. (page 302)

**First aid** The care given to an injured or ill person until regular medical care can be supplied. (page 312)

**First-degree burn** A burn in which only the outer part of the skin is burned and turns red. (page 316)

**FITT principle** A method for safely increasing aspects of your workout without injuring yourself. (page 128)

**Flexibility** The ability to move body joints through a full range of motion. (page 124)

**Fluoride** A substance that fights tooth decay. (page 146)

**Fossil fuel** Coal, oil, and natural gas. (page 319)

**Fraud** Deliberately trying to trick consumers into buying a product or service. (page 158)

**Friendship** A special type of relationship between people who enjoy being together. (page 73)

**Frostbite** Freezing of the skin. (page 135)

**Fungi** (FUHN-jy) Primitive single- or many-celled organisms that cannot make their own food. (page 270)

## G

**Gang** A group whose members often uses violence or takes part in criminal activity. (page 84)

**Generic** (juh-NEHR-ik) Products that imitate name-brand products but are sold in plain packages. (page 158)

**Genes** (JEENZ) The basic units of heredity. (page 210)

**Goals** Something you hope to accomplish. (page 20)



**Guarantee** A promise to refund your money if the product does not work as claimed. (page 157)

## H

**Habit** A pattern of behavior that you follow almost without thinking. (page 7)

**Hallucinogen** (huh·LOO·suhn·uh·jenz) An illegal drug that causes the user's brain to distort images and to see and hear images that are not real. (page 252)

**Hazard** A possible source of harm. (page 300)

**Health** A combination of physical, mental/emotional, and social well-being. (page 4)

**Health care** Any services provided to individuals or communities that promote, maintain, or restore health. (page 163)

**Health insurance** An insurance policy that covers most health-care costs. (page 166)

**Health skills** Skills that help you become and stay healthy. (page 12)

**Heart** The muscle that acts as the pump for the circulatory system. (page 189)

**Heat exhaustion** An overheating of the body that can result from dehydration. (page 134)

**Heredity** The process by which biological parents pass traits to their children. (page 8)

**HIV** The virus that causes AIDS. (page 278)

**Hormones** (HOR·mohnz) Powerful chemicals, produced by glands, which regulate many body functions. (page 41)

**Hurricane** (HER·uh·kayn) A strong tropical windstorm with driving rain. (page 309)

**Hygiene** (HY·jeen) Actions you take to improve or maintain your health. (page 309)

**Hypothermia** (hy·poh·THER·mee·uh) A sudden and dangerous drop in body temperature. (page 306)

## I

**Illegal drugs** Drugs that are made and used purely for their effects. (page 249)

**Immune system** (ih·MYOON) A group of cells, tissues and organs that fight disease. (page 274)

**Immunity** Resistance to infection. (page 274)

**Infection** The result of pathogens or germs invading the body, multiplying, and harming some of your body's cells. (page 274)

**Inhalant** (in·HAY·luhnts) A substance whose fumes or vapors are inhaled or breathed in. (page 250)

**Insulin** A hormone produced by the pancreas. (page 286)

## J

**Joints** Places where one bone meets another. (page 182)

## L

**Lifestyle activities** Physical activities that are part of your day-to-day routine or recreation. (page 121)

**Long-term goal** A goal that you hope to achieve within a period of months or years. (page 21)

**Loyal** Faithful. (page 74)

**Lungs** The main organs of the respiratory system. (page 191)

**Lymphocyte** (LIM·fuh·syt) A white blood cell that attacks pathogens or harmful germs. (page 274)

## M

**Managed care** A health insurance plan that saves money by limiting people's choice of doctors. (page 167)

**Marijuana** (mar·uh·WAHN·uh) An illegal drug that comes from the hemp plant. (page 249)

**Media** The various methods of communicating information, including newspapers, magazines, radio, television, and the Internet. (page 10)

**Medicines** Drugs used to treat, cure, or prevent diseases or other medical conditions. (page 159)

**Menstruation** (men·stroo·AY·shuhn) Blood, tissue, and the unfertilized egg flow out of the body. (page 207)

**Minerals** (MIN-uh-ruhls) Elements in foods that help your body work properly. (page 96)

**Mood disorder** A serious emotional problem where a person's mood goes from one extreme to another. (page 51)

**Muscular system** All the muscles in your body. (page 183)

**MyPyramid food guidance system** A system designed to help Americans make healthful food choices. (page 98)

## N

**Narcotics** (nar-KAH-tics) Strong drugs that relieve pain. (page 251)

**Natural disaster** An event caused by nature that results in widespread damage, destruction, and loss. (page 308)

**Nearsightedness** The ability to see objects close to you while distant objects look blurry. (page 152)

**Negative peer pressure** Pressure you feel to go along with harmful behaviors or beliefs of your peers. (page 228)

**Neglect** The failure of parents to provide their children with basic physical and emotional care and protection. (page 71)

**Negotiation** (neh-GOH-shee-AY-shuhn) The process of talking about a conflict and deciding how to reach a compromise. (page 83)

**Neighborhood Watch programs** Programs in which residents are trained to identify and report suspicious activity. (page 304)

**Nervous system** The control and communication system of the body. (page 192)

**Neuron** (NOO-rahnz) A cell that carries electrical messages. (page 192)

**Nicotine** (NIH-kuh-teen) A drug found in tobacco that speeds up the heartbeat and affects the central nervous system. (page 222)

**Noncommunicable diseases** Diseases that do not spread. (page 269)

**Nurture** Fulfill physical, mental/emotional, and social needs. (page 69)

**Nutrients** (NOO-tree-ents) Substances in food that your body needs to carry out its normal functions. (page 94)

**Nutrition** (noo-TRIH-shun) The process of taking in food and using it for energy, growth, and good health. (page 94)

## O

**Obese** Significantly overweight. (page 108)

**Organ** A structure made up of different types of tissues that all work together. (page 177)

**Overdose** Taking a fatal amount of a drug. (page 253)

**Over-the-counter (OTC) medicine**

Medicine available without a written order from a doctor. (page 159)

**Ozone** (OH-zohn) A special form of oxygen. (page 319)

## P

**Passive smokers** Nonsmokers who breathe in secondhand smoke. (page 232)

**Pathogen** A microscopic organism that causes communicable diseases. (page 269)

**Pedestrian** A person traveling on foot. (page 303)

**Peer mediation** (mee-dee-AY-shuhn) A process in which a specially trained student listens to both sides of an argument to help the people reach a solution (page 83)

**Peer pressure** The influence that people your age may have on you. (page 76)

**Peers** Friends and other people in your age group. (page 9)

**Physical abuse** Involves the use of physical force. (page 71)

**Physical activity** Any kind of movement that causes your body to use energy. (page 120)

**Physical fitness** The ability to handle everyday physical work and play without becoming tired. (page 121)

**Plaque** (PLAK) A soft, colorless, sticky film containing bacteria that grows on your teeth. (page 145)

**Poison control center** A community agency that helps people deal with poisoning emergencies. (page 316)

**Pollute** (puh-LOOT) To make unfit or harmful for living things. (page 318)

**Prejudice** (PREH-juh-dis) An opinion or fear formed without having facts or firsthand knowledge. (page 82)

**Prenatal care** Special care to ensure that the mother and her baby remain healthy. (page 212)

**Prescription** (prih-SKRIP-shuhn) **medicine** Medicine sold only with a written order from a doctor. (page 159)

**Prevention** Practicing health and safety habits to remain free of disease and injury. (page 12)

**PRICE** Protect, rest, ice, compress, and elevate. (page 134)

**Proteins** (PROH-teens) Nutrients that provide the building blocks your body needs for growth. (page 95)

**Protozoa** (proh-tuh-ZOH-uh) Single-celled organisms that have a nucleus. (page 270)

**Puberty** (PYOO-bur-tee) The time when you start developing physical characteristics of adults of your gender. (page 203.)

## R

**Recovery** To overcome an addiction and return to a mostly normal life. (page 254)

**Recovery heart rate** How quickly your heart rate returns to normal right after exercise is stopped. (page 130)

**Recycling** Recovering and changing items so they can be used for other purposes. (page 320)

**Refusal skills** Ways of saying no. (page 78)

**Reinforce** Support. (page 33)

**Relationship** A connection you have with another person or group. (page 62)

**Reliable** Dependable. (page 74)

**Reproductive system** The body system that makes it possible to create offspring. (page 206)

**Rescue breathing** A substitute for normal breathing in which someone forces air into the victim's lungs. (page 313)

**Resilience** The ability to work through and recover from disappointment. (page 34)

**Respiratory system** Enables you to breathe. (page 191)

**Resting heart rate** The number of times your heart beats per minute when you are relaxing. (page 129)

**Risk** The chance of harm, injury, or loss. (page 16)

**Role model** A person whose success or behavior serves as a good example for others. (page 39)

## S

**Saturated** (SAT-chur-a-tuhd) **fats** Fats found in many animal products such as butter, meat, and cheese. (page 106)

**Second-degree burn** A serious type of burn in which the damaged area blisters or peels. (page 316)

**Secondhand smoke** A mixture of the smoke given off by the burning end of tobacco products and the smoke exhaled by smokers. (page 232)

**Self-concept** The view you have of yourself. (page 32)

**Self-esteem** A measure of how much you like and respect yourself. (page 34)

**Sexual abuse** Any mistreatment of a child or adult involving sexual activity. (page 71)

**Sexually transmitted diseases (STDs)** Communicable diseases spread from one person to another through sexual activity. (page 277)

**Short-term goal** A goal that you plan to accomplish in a short time. (page 21)

**Side effect** Any reaction to a medicine other than the one intended. (page 160)

**Skeletal system** A body system consisting of bones and the tissues connecting them. (page 181)

**Smog** A yellow-brown haze that forms when sunlight reacts with impurities in car exhaust. (page 319)

**Smoke alarm** A device that makes a warning noise when it senses smoke. (page 302)

**Snuff** Finely ground tobacco that is inhaled or held in the mouth or cheeks. (page 226)

**Sodium** A mineral that helps control the amount of fluid in your body. (page 106)

**Specialist** (SPEH-shuh·list) A doctor trained to handle particular health problems. (page 164)

**Sperm** The male reproductive cells. (page 208)

**Spinal cord** A tube of neurons that runs along the spine. (page 192)

**Sports gear** Sports clothing and safety equipment. (page 132)

**Stamina** (STA-mih-nuh) Your ability to stick with a task or activity for a long period of time. (page 123)

**Stimulant** (STIM-yuh-luhnts) A drug that speeds up the body's functions. (page 250)

**Strength** The ability of your muscles to exert a force. (page 123)

**Stress** Your body's response to changes around you. (page 45)

**Substance abuse** Using illegal or harmful drugs, including any use of alcohol while under the legal drinking age. (page 256)

**Suicide** The deliberate act of taking one's own life. (page 51)

**Sunscreen** A cream or lotion that filters out some UV rays. (page 148)

## T

**Tar** A thick, oily, dark liquid that forms when tobacco burns. (page 222)

**Target heart rate** The level at which your heart and lungs receive the most benefit from a workout. (page 130)

**Tartar** (TAR-tuhr) When plaque hardens into a shell on your teeth and can not be brushed away. (page 145)

**Technology** The use of scientific ideas to improve the quality of life. (page 10)

**Third-degree burn** A very serious burn in which deeper layers of skin and nerve endings are damaged. (page 317)

**Tissues** Groups of similar cells that do the same kind of work. (page 177)

**Tolerance** (TAHL-er-ence) The ability to accept other people as they are. (page 82)

**Tolerance** A need for increasing amounts of a substance to achieve the same effect. (page 160)

**Tornado** (tor-NAY-doh) Whirling, funnel-shaped windstorms that drops from the sky to the ground. (page 310)

**Trans fats** Fats that start off as oils and are made solid through processing. (page 106)

**Tumor** A mass of abnormal cells. (page 284)

## U

**Unit price** Cost per unit of weight or volume. (page 157)

## V

**Vaccine** (vak·SeeN) A dead or weakened pathogen introduced into your body. (page 275)

**Vaccines** (vak·SeeN) Medicines that protect you from getting certain diseases. (page 160)

**Values** Beliefs you feel strongly about that help guide the way you live. (page 18)

**Violence** The use of physical force to harm someone or something. (page 84)

**Viruses** (VY·ruh-suhz) Tiny, nonliving particles that invade and take over healthy cells. (page 269)

**Vitamins** (VY·tuh-muhns) Nutrients that help regulate body functions. (page 96)

**Voluntary health agencies** Organizations that work to treat and eliminate certain diseases. (page 165)

## W

**Warm-up** Gentle activity that prepares your body for exercise or sport. (page 130)

**Wellness** A state of well-being, or total health. (page 7)

**Withdrawal** A series of physical and mental symptoms that occur when a person stops using an addictive substance. (page 254)

## A

### **Abdominal thrusts/presiones**

**abdominales** Movimientos en los que se ejerce una presión hacia arriba sobre el diafragma, para desalojar un objeto que bloquea la vía respiratoria.

**Abstinence/abstinencia** No participar en conductas de riesgo para la salud.

**Abuse/abuso** Un patrón de maltrato a otra persona.

**Accident/accidente** Un evento inesperado que resulta en algún daño.

**Accident chain/accidente en cadena** Una secuencia de sucesos que muchas veces termina en un daño accidental.

**Accidental injury/herida accidental** Una herida causada por sucesos inesperados.

**Acid rain/lluvia ácida** Lluvia contaminada debido a la quema de combustibles fósiles.

**Acne/acné** Una afección de la piel causada por la actividad excesiva de las glándulas sebáceas.

**Addiction/adicción** La necesidad física o mental del cuerpo de consumir una droga u otra sustancia.

**Adolescence/adolescencia** El periodo de vida entre la niñez y la adultez.

**Adrenaline/adrenalina** Una hormona que prepara el cuerpo para responder el estrés.

**Advocacy/defensa** Tomar una posición para hacer una diferencia.

**AIDS/SIDA** Condición caracterizada por infecciones que terminan con la vida y cuenta de células T por debajo de 200.

**Alcohol/alcohol** Una sustancia producida por una reacción química en carbohidratos.

**Alcoholism/alcoholismo** Una enfermedad en la cual una persona tiene necesidad física y mental de alcohol.

**Allergen/alergeno** Una sustancia que causa una reacción alérgica.

**Allergy/alergia** La sensibilidad del cuerpo a ciertas sustancias.

**Alternative/alternativa** Un modo distinto de pensar o actuar.

**Anabolic steroids/esteroides anabólicos** Drogas sintéticas basadas en una hormona masculina.

**Antibiotics/antibióticos** Medicina que mata o para el crecimiento de bacterias y otros gérmenes específicos.

**Antibodies/anticuerpos** Sustancias químicas producidas específicamente para combatir a una sustancia invasora determinada.

**Anxiety/Ansiedad** Sentimiento de incertidumbre o preocupación sobre lo que pueda pasar.

**Anxiety disorder/Desorden de ansiedad** Un serio problema emocional que mantiene a una persona de funcionar normalmente.

**Assertive/firme** Dispuesto a defenderte de una manera positiva.

**Asthma/asma** Enfermedad crónica en la cual las vías respiratorias se irritan e hinchan.

**Astigmatism/astigmatismo** Una cornea o lente deformado que causa que objetos se vean ondulados o borrosos.

**Attitude/actitud** Lo que crees o sientes sobre alguien o algo.

## B

**Bacteria/bacteria** Organismo de una sola célula sin núcleo, extremadamente pequeño.

**Behavior/Comportamiento** La forma en la cual actúas en diferentes situaciones y eventos en tu vida.

**Biodegradable/biodegradable** Que se descompone naturalmente, sin causar contaminación.

**Blood alcohol content (BAC)/contenido de alcohol en la sangre** Una medida de la cantidad de alcohol presente en la sangre de una persona.

**Blood pressure/presión sanguínea** La fuerza que ejerce la sangre sobre las paredes de los vasos sanguíneos.

**Body image/imagen corporal** Como vez tu cuerpo.

**Body language/lenguaje corporal** Expresiones faciales, contacto visual, gestos y postura.

**Body system/sistema del cuerpo** Un grupo de órganos que ejecuta una función del cuerpo.

## C

**Calorie/caloría** Una unidad de calor que mide la energía disponible en los alimentos.

**Cancer/cáncer** Una enfermedad causada por células anormales cuyo crecimiento está fuera de control.

**Carbohydrates/carbohidratos** Azúcares y almidones contenidos en las comidas.

**Carbon monoxide/monóxido de carbono** Un gas tóxico e inodoro que produce el tabaco al quemarse.

**Cardiopulmonary resuscitation (CPR)/resucitación cardiopulmonar** Una medida de primeros auxilios que intenta restaurar el ritmo cardíaco y la respiración.

**Cells/células** Los bloques de estructura básica de la vida.

**Character/carácter** La manera en que piensas, sientes y actúas.

**Cholesterol/colesterol** Un químico ceroso que el cuerpo produce y necesita en pequeñas cantidades.

**Chromosomes/cromosomas** Filamentos minúsculos de materia que llevan los códigos de rasgos heredados.

**Chronic/crónico** De larga duración.

**Circulatory system/sistema circulatorio** El sistema del cuerpo que mueve la sangre desde y hacia los tejidos.

**Cirrhosis/cirrosis** La destrucción y cicatrización del tejido del hígado.

**Communicable disease/enfermedad contagiosa** Una enfermedad que se puede propagar.

**Communication/comunicación** El intercambio claro de ideas e información.

**Compromise/compromiso** Una habilidad en la cual cada lado deja algo para llegar a una solución conforme.

**Conflicts/conflictos** Desentendimientos en ideas, creencias o intereses.

**Consequence/consecuencia** Un resultado.

**Conservation/conservación** La protección de los recursos naturales.

**Consumer/consumidor** Una persona que compra productos o servicios.

**Contagious/contagioso** Capaz de propagarse a otros por contacto directo o indirecto.

**Cool-down/enfriamiento** actividad suave para desacelerarse después de hacer ejercicios.

**Cooperation/cooperación** Trabajar juntos por el bienestar común.

**Coupons/cupones** Boletas de papel que te permiten ahorrar dinero en ciertas marcas.

**Culture/cultura** La colección de creencias, costumbres y comportamientos de un grupo.

**Cumulative risk/riesgo acumulativo** La adición de un riesgo a otro aumentando la posibilidad de daño o pérdida.

**Cuticle/cutícula** Una banda de piel externa sin vida que rodea las uñas de las manos y los pies.

## D

**Dandruff/caspa** Descamado de la capa externa de las células muertas de la piel del cuero cabelludo.

**Decision/decisión** Las opciones que eliges.

**Dehydration/deshidratación** Condición causada por mucha pérdida de agua.

**Depression/depresión** Un problema emocional marcado por largos periodos de desesperación.

**Dermis/dermis** La capa más gruesa y profunda de la piel.

**Diabetes/diabetes** Una enfermedad que le impide al cuerpo utilizar los azúcares y almidones de los alimentos para crear energía.

**Diaphragm/diafragma** Un músculo grande ubicado en la parte inferior del pecho.

**Digestion/digestión** El proceso por el cual el cuerpo deshace la comida en pequeñas partículas nutrientes.

**Digestive system/sistema digestivo** El sistema del cuerpo que controla el proceso digestivo.

**Disease/enfermedad** Condición que afecta el funcionamiento propio del cuerpo o la mente.

**Drug/droga** Toda sustancia que altera la estructura o el funcionamiento del cuerpo o de la mente.

**Drug abuse/abuso de drogas** El uso de cualquier droga en una forma no saludable o ilegal.

**Drug misuse/uso indebido de las drogas** El tomar medicinas sin cumplir con las indicaciones.

**Drug rehabilitation/rehabilitacion de las drogas** Un proceso por el cual una persona vuelve a aprender como vivir sin el abuso de una droga.

## E

**Earthquake/terremoto** El sacudimiento de la tierra mientras la capa de roca por debajo de la superficie terrestre se mueve.

**Eating disorder/desorden alimenticio** Comportamiento alimenticio extremo que puede dañar seriamente el cuerpo.

**Egg cell/óvulo** La célula reproductora del cuerpo femenino.

**Emotions/emociones** Sentimientos.

**Empathy/empatía** La habilidad de identificar y compartir los sentimientos de otra persona.

**Emphysema/enfisema** Una enfermedad que ocurre cuando los pequeños sacos de aire en los pulmones pierden la elasticidad o la capacidad de estirarse.

**Endocrine system/sistema endocrino** Sistema del cuerpo que contiene glándulas que regulan el crecimiento.

**Endurance/resistencia** Habilidad de mantener una actividad física sin cansarte demasiado.

**Environment/ambiente** La suma total de tus alrededores.

**Epidermis/epidermis** La capa externa y más delgada de la piel.

**Excretory system/sistema excretor** Un sistema del cuerpo que elimina algunos de los desechos producidos en el cuerpo y que mantiene el equilibrio de los líquidos.

**Exercise/ejercicio** Actividad física planeada, estructurada y repetitiva que mejora o mantiene el buen estado físico.

## F

**Family/familia** La unidad básica de la familia.

**Farsightedness/hipermetropía** La capacidad de ver claramente los objetos a la distancia, mientras los objetos cercanos se ven borrosos.

**Fats/grasas** Un nutriente que se encuentra en tejido animal grasos y como aceites de plantas.

**Fertilization/fertilización** La unión de una célula reproductiva femenina con una célula reproductiva masculina.

**Fetal alcohol syndrome/síndrome de alcoholismo fetal** Un conjunto de problemas físicos y mentales permanentes causados por el consumo de alcohol de la madre durante el embarazo.

**Fetus/feto** El niño en desarrollo desde las ocho semanas hasta el nacimiento.

**Fiber/fibra** Parte dura y resistente de frutas crudas, vegetales crudos, trigo entero y otros granos.

**Fire extinguisher/extintor** Un dispositivo que suelta químicos que sofocan llamas de fuego.

**First aid/primeros auxilios** Los cuidados que se dan a una persona herida o enferma, durante una emergencia hasta que se obtiene asistencia médica regular.

**First-degree burn/quemadura de primer grado** Una quemadura en que sólo la capa exterior de la piel se quema y enrojece.

**FITT principle/principio FITT** Un método para aumento seguro de los aspectos de tu entrenamiento sin dañarte a ti mismo.

**Flexibility/flexibilidad** La habilidad de mover las articulaciones del cuerpo a través del arco completo de movimiento.

**Fluoride/fluoruro** Una sustancia que combate las caries.

**Fossil fuel/combustible fósil** Estos son carbón, aceite, y gas natural.

**Fraud/fraude** Engaño o estafa deliberada.

**Friendship/amistad** Un tipo especial de relación entre personas que disfrutan el estar juntas.

**Frostbite/congelación** Congelamiento de la piel.

**Fungi/hongos** Organismo primitivo de una o mas células que no puede producir su propio alimento.

## G

**Gang/cuadrilla** Un grupo en el cual los miembros, muchas veces, utilizan violencia para ser parte en actividad criminal.

**Generic/genérico** Productos que imitan productos de marca pero son vendidos en paquetes simples.

**Genes/genes** Las unidades básicas de la herencia.

**Goal/meta** Algo que esperas lograr.

**Guarantee/garantía** Una promesa de que en caso de que el producto no trabaje como dicho tu dinero será devuelto.

## H

**Habit/hábito** Un patrón de conducta que sigues casi sin pensarlo.

**Hallucinogen/alucinógeno** Una droga ilegal que causa que el cerebro de la persona que lo use cree imágenes distorsionadas.

**Hazard/peligro** Una posible fuente de daño.

**Health/salud** Una combinación de bienestar físico, mental, emocional y social.

**Health care/cuidado medico** Cualquier servicio proveído a individuos o comunidades que promueve, mantiene y recobra la salud.

**Health insurance/seguro medico** Póliza de seguro que cubre la mayor parte de los costos del cuidado de la salud.

**Health skills/habilidades de salud**

Habilidades que ayudan a ser y mantenerte saludable.

**Heart/corazón** El músculo que funciona como una bomba para el aparato circulatorio.

**Heat exhaustion/agotamiento por calor**

Un recalentamiento de el cuerpo que resulta en deshidratación.

**Heredity/herencia** Proceso por el cual los padres biológicos pasan rasgos a los hijos.

**HIV/VIH** El virus que causa el SIDA.

**Hormones/hormonas** Sustancias químicas potentes producidas por las glándulas que regulan muchas funciones del cuerpo.

**Hurricane/huracán** Una tormenta tropical fuerte con vientos y lluvia torrencial.

**Hygiene/higiene** Acciones tomadas para mejorar y mantener tu salud.

**Hypothermia/hipotermia** Un descenso repentino y peligroso de la temperatura del cuerpo.

## I

**Illegal drugs/drogas ilegales** Drogas que son hechas y usadas solo por sus efectos.

**Immune system/sistema inmunológico**

Un grupo de células, tejidos y órganos que combaten las enfermedades.



**Immunity/inmunidad** Una resistencia a un agente infeccioso.

**Infection/infección** El resultado de la invasión, multiplicación y daño celular de un agente patógeno en tu cuerpo.

**Inhalant/inhalante** Una sustancia cuyos vapores se inhalan para producir alucinaciones.

**Insulin/insulina** Una hormona producida por el páncreas.

## J

**Joints/articulación** Lugares donde huesos se unen con otros huesos.

## L

**Lifestyle activities/actividades de vida diaria** Actividades físicas que son parte de la rutina diaria o recreación.

**Long-term goal/meta a largo plazo** Una meta que esperas lograr en un periodo de meses o años.

**Loyal/leal** Fiel.

**Lungs/pulmones** Los órganos principales del aparato respiratorio.

**Lymphocyte/linfocito** Un glóbulo blanco que ataca a los agentes patógenos.

## M

**Managed care/asistencia médica regulada** Un plan de seguro médico que ahorra dinero al limitar la selección de doctores de las personas.

**Marijuana/marihuana** Una droga ilegal que proviene de la planta del cáñamo.

**Media/medios de difusión** Los diversos métodos de comunicación de información que comprenden los periódicos, revistas, radio, televisión e Internet.

**Medicine/medicina** Una droga que se usa para curar o prevenir enfermedades u otras afecciones.

**Menstruation/menstruación** Sangre, tejidos y óvulos no fertilizados son expulsados del cuerpo.

**Minerals/minerales** Elementos en comidas que ayudan al cuerpo a trabajar adecuadamente.

**Mood disorder/desorden de humor** Un serio problema emocional en el cual el humor de una persona cambia de un extremo al otro.

**Muscular system/aparato muscular** Todos los músculos de tu cuerpo.

**MyPyramid food guidance system/ pirámide alimenticia** Un sistema diseñada para ayudar a Americanos a tomar decisiones alimenticias saludables.

## N

**Narcotics/narcóticos** Drogas fuertes que calman el dolor y desaceleran las funciones del cuerpo.

**Natural disaster/desastre natural** Un evento causado por la naturaleza que resulta en danos extensos, destrucción y pérdida.

**Nearsightedness/miopía** La capacidad de ver claramente los objetos cercanos, mientras los objetos lejanos se ven borrosos.

**Negative peer pressure/presión negativa de compañeros** Presión que sientes de seguir comportamientos que causen daño o creencia de tus compañeros.

**Neglect/negligencia** La falla de los padres de proveer a sus niños con protección y cuidado físico y emocional básico.

**Negotiation/negociación** El proceso de hablar sobre un conflicto y decidir como llegar a un acuerdo.

**Neighborhood Watch program/programa de vigilancia vecina** Un programa en el cual los residentes están entrenados para identificar y reportar actividades sospechosas.

**Nervous system/sistema nervioso** El sistema de control y comunicación del cuerpo.

**Neuron/neurona** Una célula que transporta mensajes eléctricos.

**Nicotine/nicotina** Una droga que acelera el ritmo cardíaco y afecta al sistema nervioso central.

**Noncommunicable disease/enfermedad no contagiosa** Una enfermedad que no se propaga.

**Nurture/criar** Satisfacer las necesidades físicas, emocionales, mentales y sociales de una persona.

**Nutrients/nutrientes** Substancias en las comidas que tu cuerpo necesita para desarrollar las funciones normales.

**Nutrition/nutrición** El proceso de consumir comida y utilizarla como energía, crecimiento. Y buena salud.

## O

**Obese/obeso(a)** Sobrepeso excesivo.

**Organ/órgano** Una estructura formada por diferentes clases de tejidos que ejecutan una función específica.

**Overdose/sobredosis** Consumir una cantidad de droga fatal.

**Over-the-counter medicine/medicina sin receta** Una medicina que se puede adquirir sin receta de un médico.

**Ozone/ozono** Una forma especial del oxígeno.

## P

**Passive smokers/fumador pasivo** No fumadores que respiran el humo de segunda mano.

**Pathogen/patógeno** Un organismo microscópico que causa enfermedades comunicables.

**Pedestrian/peatón** Una persona que se traslada a pie.

**Peer mediation/meditación de compañeros** Un proceso en el cual un estudiante especialmente capacitado escucha los dos lados de un argumento para ayudar a personas a llegar a un acuerdo.

**Peer pressure/presión de compañeros** La influencia que personas de la misma edad tiene en ti.

**Peers/pares** Amigos y otras personas de tu grupo de edad.

**Physical abuse/abuso físico** Implica el uso de fuerza física.

**Physical activity/actividad física** Cualquier movimiento que cause que el cuerpo use energía.

**Physical fitness/buen estado físico** La capacidad de llevar a cabo trabajos físicos y juegos cotidianos sin sentirte cansado.

**Plaque/placa bacteriana** Una película blanda, incolora y pegajosa que contiene bacterias que se reproducen en los dientes.

**Poison control center/centro de control de veneno** Una agencia de la comunidad que ayuda a personas con emergencias relacionadas con venenos.

**Pollute/contaminar** Hacer lo impropio o dañoso para cosas vivientes.

**Prejudice/prejuicio** Una opinión o miedo formada sin tener hechos ni conocimiento de primera mano.

**Prenatal care/cuidado pre-natal** Cuidado especial para asegurar que el bebe y la madre se mantengan saludables.

**Prescription medicine/medicina bajo receta** Una medicina que puede venderse sólo con receta escrita por un médico.

**Prevention/prevención** Mantener hábitos de salud y seguridad para estar libre de enfermedades y lesiones.

**PRICE** Protege, descansa, híela, comprime, y eleva.

**Proteins/proteínas** Nutrientes que proveen los bloques de estructura que el cuerpo necesita para crecer.

**Protozoa/protozoos** Organismos de una sola célula con núcleo.

**Puberty/pubertad** El tiempo en el cual comienzas a desarrollar características físicas de adultos de tu género.

**R**

**Recovery/recuperación** Superar una adicción y regresar a tener una vida mayormente normal.

**Recovery heart rate/ritmo cardiaco de recuperación** Que tan rápido tu corazón tu corazón regresa a lo normal después de haber parado el ejercicio.

**Recycling/reciclaje** Recuperar y cambiar un objeto para usarlo con otro propósito.

**Refusal skills/habilidades de denegación** Formas de decir no.

**Reinforce/refuerza** Ayuda, soporte.

**Relationship/relación** Una conexión que tienes con otra persona o grupo.

**Reliable/confiable** De fiar.

**Reproductive system/sistema reproductivo** Sistema en el cuerpo que hace posible crear descendientes o bebés.

**Rescue breathing/respiración de rescate** Un método que reemplaza la respiración normal en el cual otra persona le llena los pulmones de aire a la víctima.

**Resilience/resistencia** La habilidad de sobrepasar y recuperarte de decepción.

**Respiratory system/aparato respiratorio** Un aparato del cuerpo que permite la respiración.

**Resting heart rate/ritmo cardiaco de descanso** número de veces que el corazón late por minuto cuando estas relajado.

**Risk/riesgo** La posibilidad de daño o pérdida.

**Role model/modelo ejemplo** Una persona que sus éxito o comportamiento sirve de buen ejemplo para otros.

**S**

**Saturated fats/grasas saturadas** Grasas que se encuentran en muchos productos animales como mantequilla, carnes, y queso.

**Second-degree burn/quemadura de segundo grado** Un tipo de quemadura grave en la que se forman ampollas o se despelleja la piel quemada.

**Secondhand smoke/humo de segunda mano**

Una mezcla del humo producido cuando productos de tabaco son quemados, y el humo exhalado por fumadores.

**Self-concept/autoimagen** La percepción que tienes de ti mismo.

**Self-esteem/autoestima** Una medida de cuanto te quieres y te respetas a ti mismo.

**Sexual abuse/abuso sexual** Cualquier maltrato de un niño o un adulto que implique actividad sexual.

**Sexually transmitted diseases (STDs)/enfermedades transmitidas sexualmente** Enfermedades comunicables pasadas de una persona a otra a través de actividad sexual.

**Short-term goal/meta a corto plazo** Una meta que planeas lograr en un corto periodo de tiempo.

**Side effect/efecto colateral** Toda reacción a una medicina diferente de la que se procura.

**Skeletal system/sistema esquelético** Un sistema del cuerpo que consiste de huesos y los tejidos que los conectan.

**Smog/smog** Una neblina de color amarillento-café que se forma cuando la luz solar reacciona con las impurezas en el gas de los escapes de los automóviles.

**Snuff/rape** Tabaco molido finamente que es inhalado o mantenido en la boca o las mejillas.

**Sodium/sodio** Un mineral que ayuda a controlar la cantidad de líquido en tu cuerpo.

**Specialist/especialista** Doctor entrenado para atender problemas de la salud específicos.

**Sperm/espermatozoides** Células reproductivas masculinas.

**Spinal cord/médula espinal** Un conducto de neuronas que se encuentra a lo largo de la columna vertebral.

**Sports gear/accesorios deportivos** Ropa para deportes y equipo de seguridad.

**Stamina/stamina** La habilidad de poder realizar y mantener una actividad por largos periodos de tiempo.

**Stimulant/estimulante** Una droga que acelera las funciones del cuerpo.

**Strength/fortaleza** La capacidad de tus músculos para ejercer una fuerza.

**Stress/estrés** La respuesta de tu cuerpo a los cambios que ocurren a tu alrededor.

**Substance abuse/abuso de sustancias** Consumo de drogas ilegales o nocivas, incluso el consumo del alcohol en cualquiera de sus formas antes de la edad legal para beber.

**Suicide/suicidio** El acto deliberado de quitarse la vida propia.

**Sunscreen/bloqueador solar** Crema o loción que filtra algunos rayos UV.

## T

**Tar/alquitrán** Un líquido espeso, aceitoso y oscuro que forma el tabaco al quemarse.

**Target heart rate/ritmo cardiaco deseado** el nivel en el cual tu corazón y tus pulmones reciben mayor beneficio de tu entrenamiento.

**Tartar/sarro** Una materia dura que se forma cuando la placa bacteriana se acumula en los dientes.

**Technology/tecnología** El uso de ideas científicas para mejorar la calidad de vida.

**Third-degree burn/quemadura de tercer grado** Una quemadura muy grave que daña las capas más profundas de la piel y las terminaciones nerviosas.

**Tissues/tejidos** Grupos de células similares que tienen la misma función.

**Tolerance/tolerancia** Un estado por el cual el cuerpo se acostumbra a los efectos de una medicina y necesita mayores dosis para producir el mismo efecto.

**Tolerance/tolerancia** Necesidad de aumentos de cantidades de una sustancia para conseguir el mismo efecto.

**Tornado/tornado** Una tormenta en forma de torbellino que gira en grandes círculos y que cae del cielo a la tierra.

**Trans fats/grasas de transporte** Grasas que empiezan como aceites y se convierten en sólidos a través de procesos.

**Tumor/tumor** Una masa de células anormales.

## U

**Unit price/precio por unidad** Costo por unidad de peso o volumen.

## V

**Vaccines/vacunas** Un patógeno débil o muerto introducido en el cuerpo.

**Values/valores** Creencias importantes para ti que te ayudan a guiar la forma en que vives.

**Violence/violencia** El uso de fuerza física para hacer daño a alguien o a algo.

**Viruses/virus** Pequeñas partículas sin vida que invaden y toman control de células saludables.

**Vitamins/vitaminas** Nutrientes que ayudan a regular las funciones del cuerpo.

**Voluntary health agencies/agencias de salud voluntaria** Organizaciones que trabaja para tratar y eliminar algunas enfermedades.

## W

**Warm-up/precalentamiento** Una actividad moderada que prepara a tu cuerpo para hacer ejercicio.

**Wellness/salud** Estado de bienestar total.

**Withdrawal/síntomas de abstinencia** Una serie de síntomas físicos y mentales que ocurren cuando una persona deja de consumir una sustancia adictiva.

- A**
- AA (Alcoholics Anonymous), 247
  - Abdominal muscles, 184
  - Abdominal thrusts, 314–315, 315
  - Abstinence, 44
    - choosing, 80
    - definition of, 44
    - and sexually transmitted diseases, 280
  - Abuse. *See also* Drug abuse
    - accessing information on, 72
    - definition of, 71
  - Accessing information
    - about HIV and AIDS, 281
    - before buying products, 168–169
    - on family abuse, 72
    - as health skill, 13, 13
    - and puberty, 214–215
  - Accident chain, 297, 297
  - Accidental injuries, 296, 297
  - Acid (drug), 252
  - Acid rain, 319
  - Acne, 148
  - Acquired immunodeficiency syndrome. *See* AIDS
  - Active listening, 65
  - Addiction
    - to alcohol, 246–248, 247
    - definition of, 223
    - to drugs, 254–255
    - to tobacco, 223
  - Adolescence, 202–205
    - definition of, 202
    - emotional changes during, 41
    - endocrine system during, 203, 203
    - mental/emotional development during, 204–205
    - physical development during, 203–204, 204
    - social development during, 205
  - Adoptive families, 68
  - Adrenal glands, 203
  - Adrenaline, 47, 203
  - Adulthood, 213, 216
  - Adults
    - choking by, 314–315
    - problem-solving help from, 79
    - rescue breathing for, 313, 313
  - Advertising, 155
    - analyzing influences of, 14, 157
    - of athletic shoes, 134
    - communicating messages in, 63
    - consumer skills and, 169
    - and healthy choices, 10
    - and tobacco, 229, 229
  - Advocacy
    - and citizenship, 38
    - and dangers of smoking, 233
    - definition of, 15, 38
    - fire escape plan, 302
    - as health skill, 13
    - for peace, 84
    - for safety and environment, 321
    - and Students Against Destructive Decisions, 257
    - volunteering, 166
    - for waste reduction, 322–323
  - Aerobic exercise, 125, 138
  - AIDS (acquired immunodeficiency syndrome), 277, 278, 281. *See also* HIV
  - Air, pollution of, 318–319
  - Airline flights, and smoking, 232
  - Al-Anon, 247, 258
  - Alateen, 247
  - Alcohol
    - and addiction, 246–247, 247
    - alternatives to using, 258, 258
    - avoiding, 256–259
    - and the body system, 180
    - chemical dependency on, 246–247
    - dangers of, 242–245
    - definition of, 242
    - in different drinks, 244
    - effects of, 242–244
    - and HIV, 280
    - and peer pressure, 77
    - pregnancy and, 248
    - and risk behavior, 246
    - and STDs, 280
    - and violence, 84
  - Alcohol poisoning, 243
  - Alcoholics Anonymous (AA), 247
  - Alcoholism, 71, 247
  - Allergens, 285
  - Allergies, 285
  - Alternate energy sources, 319
  - Alveoli, 191
  - American Red Cross, 313
  - Anabolic steroids, 251
  - Anaerobic exercise, 125
  - Analyzing influences
    - of advertising, 157
    - on decision making, 24–25
    - as health skill, 13, 14, 14
    - and media influence on self-concept, 34
  - Anatomy, puberty and changes in, 204, 204
  - Anesthesiologists, 239
  - Angel dust, 252
  - Anorexia nervosa, 110
  - Antibiotics, 160
  - Antibodies, 274
  - Anxiety, 46
  - Anxiety disorders, 51
  - Appendicitis, 290
  - Appreciation, 68, 69
  - Arteries, 189, 189
  - Assertiveness, 66, 257
  - Asthma, 232, 285
  - Astigmatism, 152
  - Athletic shoes, 134
  - Attitudes (positive), 11
  - Avoidance
    - of alcohol, 256–259
    - of conflict, 82
    - of drugs, 256–261
    - of gangs, 84
    - of harmful situations, 84–85
    - of harmful substances, 256–259
    - of violence, 84–85
    - of weapons, 84

**B**

BAC (Blood alcohol content), 243  
Bacteria, 270, 270  
Balance  
    and health, 4, 5  
    physical activity with eating, 105, 106  
Ball-and-socket joints, 182  
Beans, 101  
Behavior(s). *See also* Practicing healthful behaviors  
    assertive, 64, 66, 257  
    definition of, 11  
    to maintain a healthy body, 194–195  
    to reduce risks. *See* Risky behaviors  
    self-destructive, 34, 77  
    violent, 84  
Belly pain, 290  
Biceps, 184  
Binge eating, 110  
Biodegradable supplies, 321  
Biological clock, 196  
Bladder, 187, 224  
Bleeding, first aid for, 314  
Blended families, 67, 68  
Blizzards, 310  
Blood, 188–190, 190, 279  
Blood alcohol content (BAC), 243  
Blood cells, 190, 190  
Blood pressure, 189, 283  
Blood vessels, 189, 225  
Bodies  
    image of, 109  
    respect for others', 109  
Body language  
    in communication, 65  
    definition of, 63  
Body systems, 176–180. *See also* specific systems  
    caring for, 178–180  
    circulatory system, 178, 179, 188–190  
    digestive system, 178, 179, 185–186  
    endocrine system, 178, 203, 203  
    excretory system, 178, 179, 186–187  
    functions of, 178

    healthy behaviors related to, 194–195  
    immune system, 274, 279  
    interrelationship of, 178, 179  
    joints, 182  
    muscular system, 183, 184  
    nervous system, 192, 193  
    parts of the body, 176–177  
    reproductive system, 206–209, 207, 208, 209  
    respiratory system, 178, 179, 187, 191  
    skeletal system, 178, 179, 181–182, 182  
Bones, 181, 182, 183  
Braces, 147  
Brain, 192, 225  
Brain stem, 193  
Brainstorming, 83  
Breaks, 317  
Breathing, 191, 285, 314  
    rescue, 313, 313  
    for stress management, 48  
Bronchi, 191  
Brushing (teeth), 146, 146  
Bulimia, 110  
Bullies, 88  
Burns, 316–317  
Buying skills. *See* Consumer skills

**C**

Calcium, 181, 183  
Calories  
    burned during physical activity, 121  
    and daily values, 104  
    definition of, 100  
    paying attention to, 103  
Camping safety, 306–307  
Cancer, 226, 284–285  
Capillaries, 189  
Carpooling, 21  
Carbohydrates, 95  
Carbon dioxide, 189, 191  
Carbon monoxide, 221, 225  
Cardiac muscle, 183  
Cardiopulmonary resuscitation (CPR), 314  
Careers in health  
    anesthesiologist, 239  
    dental hygienist, 173  
    dietetic technician, 117

    family counselor, 91  
    health teacher, 29  
    medical technologist, 293  
    occupational safety and health specialist, 327  
    pediatrician, 219  
    physicians, 199  
    school counselor, 59  
    sports medicine, 141  
    substance abuse counselor, 265  
Caring, 38  
CDC (Center for Disease Control and Prevention), 281  
Cells, 177  
    blood, 190, 190  
    egg, 206, 207, 209  
    healthy vs. abnormal growth of, 284  
    neuron, 192  
    reproductive, 211  
Center for Disease Control and Prevention (CDC), 281  
Central nervous system, 192, 193  
Cerebellum, 193  
Cerebrum, 192, 193  
Cervix, 207  
Chain for goals, 21  
Character, 36–40  
    in action, 40  
    and caring, 38  
    and citizenship, 38, 39, 231, 243  
    and common colds, 273  
    definition of, 36  
    developing good, 56  
    development of, 38–39  
    and fairness, 38, 251  
    and family responsibility, 68  
    and goals, 22  
    and good influences, 9  
    and healthy home environment, 33  
    and medicines, 162  
    and prejudice, 82  
    and respect, 37, 109  
    and responsibility, 68, 162, 213  
    and role models, 39  
    traits of, 37–38, 56  
    in TV programs, 40  
Cheating, 19

- CHECK-CALL-CARE first aid strategy, 312–313
- Checkups  
dental, 147  
eye, 152  
health, 164
- Chemical dependency  
on alcohol, 247  
on drugs, 254  
on tobacco, 223
- Chemotherapy, 284
- Childhood, 212
- Children  
choking by, 314–315  
rescue breathing for, 313, 313
- Chlamydia, 278
- Choking, 314–315
- Cholera, 319
- Cholesterol, 106
- Chromosomes, 210–211
- Chronic diseases, 283
- Circulatory system, 178, 179, 188–190
- Cirrhosis, 243
- Citizenship, 38, 39, 231, 243
- Cocaine, 250–251
- Colds, common, 273, 273
- Colon, 186, 187, 224
- Color vision, 170
- Commercials  
Infomercials, 14  
messages in, 63
- Communicable diseases, 272–276  
definition of, 268  
prevention of, 275–276  
sexually transmitted diseases, 277–281
- Communication. *See also* Messages  
by abstinence, 44  
active listening in, 65  
definition of, 15, 62  
by e-mail, 63, 64  
by empathy, 74  
as health skill, 13  
and health skills, 13, 15  
and parents, 68  
skills for, 62–66. *See also* Communication skills
- Communication skills, 62–66, 65  
conflict resolution through, 83  
family meetings, 70  
and online safety, 64  
refusal skills as, 78–80  
styles of, 65, 66  
types of, 63, 64
- Communities, safety in, 304
- Community health, 163–167
- Community support groups, 231
- Comparison shopping, 156–157
- Complex carbohydrates, 95
- Compromise, 83
- Conflict resolution, 81–85  
communication in, 83  
as health skill, 13, 15  
and health skills, 13, 15  
negotiation for, 83  
T.A.L.K. strategy, 83  
working things out, 86–87
- Conflict(s), 81–85  
causes of, 82  
definition of, 81  
prevention of, 82  
violence resulting from, 84
- Connecting neurons, 192
- Consequences, definition of, 16
- Conservation, 320–321, 324
- Consumer, definition of, 155
- Consumer skills, 155–158, 168–169
- Contact lenses, 152
- Contagious diseases, 272
- Cool-down exercises, 131
- Cooperation, 75
- Cornea, 152, 152
- Counseling, 72
- Couples (family units), 68
- Coupons, 158
- CPR (Cardiopulmonary resuscitation), 314
- Crack, 250–251
- Crank (drug), 251
- Crisis centers, 72
- Critical thinking, for health/wellness, 29
- Culture, 9
- Cumulative risk, 17
- Cuticle, 150
- D**
- Daily Value, 104
- Dandruff, 149
- Deafness, 153, 153
- Death of family member, 70
- Decibels, 154
- Decision making  
analyzing influences on, 24–25  
and avoiding drug abuse, 260–261  
and choosing healthy foods, 112–113  
and eating disorders, 111  
as a health skill, 13, 19  
H.E.L.P. criteria for, 17  
and help for emotional problems, 53  
and peers, 19  
process of, 17–19  
steps in, 17–18, 19  
and television, 18
- Decisions, definition of, 16
- Dehydration, 134
- Deltoid, 184
- Dental checkups, 147
- Dental hygienist, 147, 173
- Dental insurance, 167
- Dentists, 147
- Depression, 51
- Dermatologists, 148
- Dermis, 147
- Development. *See* Growth and development
- Diabetes, 109, 286–287
- Diaphragm, 191
- Diary of foods, 114
- Dietary Guidelines for Americans* (USDA), 103, 105–107
- Dietary practices. *See* Nutrition
- Dietetic technicians, 117
- Digestion, 95, 185
- Digestive system, 178, 179, 185–186
- Direct physical contact, 271
- Discount stores, 158
- Disease prevention  
for cancer, 284  
for communicable diseases, 275–276  
for diabetes, 287  
for heart disease, 283  
for HIV and STDs, 280  
for noncommunicable and hereditary diseases, 283, 284, 287  
for sexually-transmitted diseases, 280

- Disease treatment
  - for asthma, 285
  - for cancer, 284
  - for diabetes, 287
  - for heart disease, 283
  - for HIV/AIDS, 280
- Diseases
  - causes of, 268–271
  - communicable, 272–276
  - defenses against, 274
  - definition of, 268
  - fetal alcohol syndrome, 248
  - germs causing, 271
  - hereditary, 282–287
  - and immune system, 274
  - noncommunicable, 282–287
  - from polluted water, 319
  - risk of inherited, 8
  - sexually transmitted, 277–281
- Divorce, 69
- Doctors, 162, 163, 219
- Domestic airline flights, 232
- Drinking. *See* Alcohol
- Driving, 243
- Drowning prevention, 306
- Drug abuse, 253–255
  - and addiction, 254–255
  - avoiding, 260–261
  - definition of, 253
  - help for abusers' families, 258
  - and rehabilitation, 255
- Drug misuse, 162
- Drug rehabilitation, 255
- Drug-free zones, 304
- Drugs
  - abuse of, 253–255
  - addiction to, 254–255
  - alcohol as a, 242–245, 244
  - alternatives to using, 258, 258
  - avoiding, 256–261
  - and the body system, 180
  - chemical dependency on, 254
  - definition of, 242
  - and help for abusers' families, 258
  - and HIV infection, 280
  - illegal, 249–252
  - medicines, 159–162
  - misuse of, 162
  - and peer pressure, 77
  - saying no to, 262
  - and STDs, 280
  - and violence, 84
  - withdrawal from, 254–255
- E**
  - Early adulthood, 213
  - Ears, 154–155
  - Earthquakes, 311
  - Eating. *See* Nutrition
  - Eating disorders, 110–111
  - Ecstasy, 252
  - Egg cells, 206, 207, 209, 211
  - Electrical safety, 301
  - E-mail, 63, 64
  - Emergencies
    - first aid for, 312–317
    - weather, 308–311
  - Emotional abuse, 71
  - Emotional health. *See* Mental/emotional health
  - Emotional neglect, 71
  - Emotional problems, 50–53
    - common types of, 51–52
    - help for, 52, 53
  - Emotional support, 69
  - Emotions, 41–44
    - and abstinence, 44
    - during adolescence, 205
    - causes of, 41
    - dealing with, 54–55
    - definition of, 41
    - expression of, 43
    - managing strong, 43
    - problems with, 50–53
    - types of, 42
    - understanding your, 42
  - Empathy, 74
  - Emphysema, 223
  - Endocrine system, 178, 203, 203
  - Endurance, 123–124, 138
  - Energy, redirection of, 49
  - Environment, 9
  - Environmental protection, 318–321
  - Enzymes, 185
  - Epidermis, 147
  - Esophagus, 186
  - Espelage, Dorothy, 88
  - Excretory system, 178, 179, 186–187
  - Exercise(s)
    - aerobic, 125
    - anaerobic, 125
    - appealing, 130
    - cool-down, 131
    - definition of, 125
    - fitness ratings for, 128
    - and FITT principle, 128
    - for flexibility, 124
    - and lifetime fitness, 138
    - for strength, 123
    - for stress relief, 49
    - warm-up, 130
  - Expiration date, 161
  - Extended family, 67, 68, 69
  - Eyeglasses, 152
  - Eyes, 151–152, 170
- F**
  - Facial expressions, 63, 64
  - Fairness, 38, 251
  - Fallopian tubes, 207
  - Falls, preventing, 301
  - False claims, 158
  - Family counselors, 91
  - Family meetings, 70
  - Family(-ies), 67–72
    - changes in, 69, 70
    - and character, 38–39, 68
    - definition of, 67
    - and family meetings, 70
    - as health influence, 9
    - informing, 85
    - roles of members in, 68
    - serious problems in, 71
    - sources of help for, 72
    - strong foundations for, 69
    - and tobacco use, 230
    - types of, 67, 68
  - Farsightedness, 152
  - FAS (fetal alcohol syndrome), 248
  - Fats, 95, 101, 106
  - FDA. *See* U.S. Food and Drug Administration
  - Feelings. *See* Emotions
  - Females
    - adolescent changes in, 204
    - reproductive system for, 206–208, 207
  - Fertilization, 207, 211
  - Fetal alcohol syndrome (FAS), 248
  - Fever, 274
  - Fiber, 95
  - Fight-or-flight response, 47
  - Fingernails, 150, 150
  - Fingers, 224
  - Fire extinguisher, 302
  - Fire safety, 302, 302



First aid, 312–317  
for bleeding, 314  
for breaks, 317  
for burns, 316–317  
CHECK-CALL-CARE strategy  
for, 312–313  
for choking, 314–315  
definition of, 312  
for poisoning, 316  
and pressure points, 314  
and rescue breathing, 313,  
313  
for sprains, 317  
First-degree burns, 316, 316  
Fitness. *See* Physical activity and  
fitness  
FITT principle for physical  
activity, 128  
Flash flood, 310  
Flexibility, 124, 138  
Floods, 309–310  
Flossing (teeth), 146, 146  
Flu, 273  
Fluoride, 146  
Foldables  
for alcohol and drugs, 241,  
263  
for body systems, 175, 197  
for disease prevention, 267,  
291  
for growth and development,  
201, 217  
for health/wellness, 3, 4, 27  
for healthy relationships, 61,  
89  
for mental/emotional health,  
31, 57  
for nutrition, 93, 115  
for personal health, 143, 171  
for physical activity, 119, 139  
for safety and environment,  
295, 325  
for tobacco/smoking, 221, 237  
Food choices, 9  
Food labels, 104  
Food(s). *See also* Nutrition  
and alcohol, 244  
balancing physical activity  
with, 105, 106  
and the body system, 179  
choosing, 112–113  
controlling amount of, 103  
and diabetes, 287

diary for, 114  
eating a variety of, 103  
and food groups, 100–101  
healthy choices of, 102–107  
safety, 105  
temperatures, 105  
Fossil fuels, 319  
Foster families, 68  
Fraud, 158  
Frequency of exercise, 128  
Friends, 73–77  
health influences of, 9  
pressure from, 76–77, 230  
qualities of good friends, 74  
reasons for choosing, 73  
tips for making, 74  
Friendship(s), 205  
being responsible in, 243  
building strong, 75  
and decision making, 19  
definition of, 73  
Frostbite, 135, 310  
Fruits, 100  
dried, 107  
eating more, 105  
Fungi, 270  
**G**  
Gallbladder, 186  
Gangs, 84  
Generic brands, 158  
Genes, 210  
Genital herpes, 278  
Genital warts, 278  
Germs, 271, 274  
Gestures, 63  
Glands, 186, 203, 203  
Goal setting, 20–22  
for fitness, 126–127  
as health skill, 13  
for increasing activity level,  
128  
and personal fitness plan,  
136–137  
and protecting your health,  
288–289  
Goals, 20–23  
chain for, 21  
definition of, 20  
and good character, 22  
tips for achieving, 22, 23  
Gonorrhea, 278  
Good example, setting a, 9

Government-provided health  
care, 165, 167  
Grains, 100, 105  
Grief, managing, 70  
Ground water, 319  
Groups, goal setting for, 22  
Growth and development  
during adolescence, 202–205  
of body systems, 176–180  
and heredity, 210–211  
hormones' role in, 203, 205  
and human reproduction,  
206–209  
and life cycle, 212–213  
prenatal, 211, 211, 212  
Growth pattern, 108  
Guarantee, product, 157  
Gums. *See* Teeth and gums  
Guns, 301

## H

Habit(s)  
creating healthy, 5  
definition of, 7  
eating, 102–103  
safe, 299  
Hair, 149  
Hallucinogens, 252  
Hand washing, 275, 276  
Hazardous wastes, 320  
Hazards, 300  
Head lice, 149  
Headaches, 290  
Health  
definition of, 4  
menstrual, 207–208  
Health care services, 163–167  
Health fraud, 158  
Health influences, 8–11  
behavior as, 11  
culture as a, 9  
environment as a, 9  
family as a, 9  
and good character, 9  
heredity as a, 8  
of the media, 10  
of peers, 9  
and personal attitudes, 11  
technology as a, 10  
Health insurance, 166–167  
Health inventories  
for the body system, 175, 198  
for health/wellness, 3, 26, 28

- for nutrition, 93, 116
  - for safety and environment, 295
  - Health online
    - for alcohol and drugs, 241, 244, 248, 252, 255, 258, 264
    - for the body system, 175, 180, 184, 187, 189, 193, 198
    - for disease prevention, 267, 271, 275, 283, 287, 292, 317
    - for emotional/mental health, 44
    - for growth and development, 201, 204, 205, 209, 213, 218
    - for health/wellness, 3, 5, 6, 7, 11, 14, 15, 18, 19, 23, 28
    - for healthy relationships, 61, 66, 69, 72, 77, 80, 85, 90
    - for mental/emotional health, 31, 35, 40, 43, 49, 52, 53, 58
    - for nutrition, 93, 96, 97, 100, 101, 107, 110, 111, 116
    - for personal health, 143, 148, 150, 154, 158, 162, 167, 172
    - for physical activity, 119, 123, 124, 125, 131, 135, 140
    - for safety and environment, 320
    - for safety and the environment, 295, 297, 299, 304, 307, 310, 311, 321, 326
    - for sexually transmitted diseases, 280, 281
    - taking your pulse, 189
    - for tobacco/smoking, 221, 226, 229, 232, 233, 238
  - Health quiz
    - for disease prevention, 267, 292
    - for healthy relationships, 61, 90
    - for physical activity, 119, 140
    - for tobacco/smoking, 221, 238
  - Health skills, 12–15. *See also* specific skills
    - and accessing information, 13
    - and advocacy, 13, 15
    - analyzing influences as a, 13, 14, 14
    - and communication, 13, 15
    - and conflict resolution, 13, 15
    - and decision making, 13, 19
    - definition of, 12
    - goal setting, 13
    - list of, 13
    - practicing healthful behaviors, 13
    - prevention as a, 12
    - refusal skills as a, 13, 15
    - and staying informed, 13
    - and stress management, 13, 13
  - Health teachers, 29
  - Health triangle, 4–6, 5
  - Hearing, 153, 153, 154. *See also* Ears
  - Heart, 184, 189, 189, 224
  - Heart and lung endurance, 123
  - Heart attacks, 283, 290
  - Heart disease, 109, 283
  - Heart flutters, 290
  - Heart rate, 129, 129–130, 130
  - Heat exhaustion, 134
  - Helmets, 132
  - H.E.L.P. decision criteria, 17
  - Hepatitis, 273, 273, 278
  - Hereditary diseases
    - allergies, 285
    - heart disease, 282, 283
    - types of, 282
  - Heredity, 8, 204, 210–211
  - Heroin, 252
  - High blood pressure, 283
  - Hiking safety, 306–307
  - Hinge joints, 182
  - Hitchhiking, 85
  - HIV (human immunodeficiency virus), 278–280, 280. *See also* AIDS
    - accessing information on, 281
    - detection of, 280
    - treatment for, 280
  - Home, safety in, 300–302
  - Home alone, 84
  - Home environment, 33
  - Honesty, 65
  - Hormones, 203, 203, 205
    - definition of, 41
    - in growth and development, 203, 205
  - Human immunodeficiency virus. *See* HIV
  - Human reproduction. *See* Reproductive system
  - Hurricanes, 309
  - Hygiene
    - definition of, 144
    - dental, 146, 147
    - hand washing and, 275, 276
    - menstrual, 208
  - Hypertension, 283
  - Hypothermia, 306
- I**
- “I” messages, 65
  - Identity. *See* Self-concept
  - Illegal drugs, 249–252
    - anabolic steroids, 251
    - definition of, 249
    - hallucinogens, 252
    - inhalants, 250
    - marijuana, 249
    - narcotics, 251–252
    - stimulants, 250, 253, 254
  - Illness, 12. *See also* Diseases
  - IM Express
    - for alcohol and drugs, 241, 264
    - for growth and development, 201, 218
    - for mental/emotional health, 31
    - for personal health, 143
    - for safety and environment, 326
  - IM (Instant messaging), 64
  - Immune system, 274, 279
  - Immunity, 274
  - Immunizations, 164
  - Indirect contact, 271
  - Infancy, 212
  - Infants, choking by, 315
  - Infections
    - definition of, 274
    - ear, 153
  - Influences, analyzing. *See* Analyzing influences
  - Influenza, 273
  - Infomercials, 14
  - Information, accessing. *See* Accessing information
  - Inhalants, 250
  - Injuries. *See also* Safety
    - accidental, 296, 297
    - definition of, 296
    - prevention of, 12, 84, 297
    - PRICE formula for, 134
    - weather-related, 134–135

- Inner ear, 153  
 Instant messaging (IM), 64  
 Insulin, 203, 286, 287  
 Insurance, health, 166, 167  
 Intensity of exercise, 128  
 Intestines, 186  
 Involuntary muscles, 183  
 Iris (eye), 152
- J**  
 Joint-custody families, 68  
 Joints, 182, 182
- K**  
 Kick Butts Day (KBD), 236  
 Kidneys, 187  
 Kitchen safety, 301
- L**  
 Labels  
   on alcohol, 248  
   medicine, 161, 161  
   on over-the-counter  
     medicines, 161, 161  
   product, 156  
 Land pollution, 320  
 Language arts connections  
   and character, 39  
   healthy sayings, 13  
   scientific word parts, 179  
 Late adulthood, 213  
 Laxatives, 110  
 Lens (eye), 152  
 Leukoplakia, 224  
 Lice, 149  
 Life cycle, human, 212–213  
 Lifestyle activities, 121  
 Listening skills, 83  
 Liver, 186  
 Log for fitness, 129, 129  
 Long-term goals, 21  
 Loudness of sounds, 154  
 Lower respiratory system, 191  
 Loyalty, 74  
 LSD (drug), 252  
 Lungs, 123, 189, 191, 191  
 Lymphocytes, 274
- M**  
 Males  
   adolescent changes in, 204  
   reproductive system in, 208,  
   208, 209  
 Managed care, 167  
 Managing stress. *See* Stress  
   management  
 Marijuana, 249  
 Math connections  
   finding heart rate, 130  
   smoking costs, 233  
 MDMA, 252  
 Meat, 101  
 Media, 18  
   and athletic shoes, 134  
   commercials, 63  
   definition of, 10  
   influence on self-concept of,  
   34  
   influences of the, 155  
   and role models, 40  
   and tobacco, 228, 228  
 Mediation, peer, 83  
 Medicaid, 167  
 Medical technologists, 293  
 Medicare, 167  
 Medicines, 159–162  
   definition of, 159  
   effect on body of, 160  
   and good character, 162  
   labels on, 161, 161  
   misuse/abuse of, 162  
   negative reactions to, 160  
   over-the-counter, 159, 161,  
   161  
   prescription, 159, 162  
   responsible use of, 159–162  
   safety with, 161  
   types of, 159  
 Melanin, 148  
 Menstruation, 207–208  
 Mental/emotional development,  
   204–205  
 Mental/emotional health, 4–6,  
   32–56  
   adolescence and emotional  
   changes, 41  
   benefits of physical activity  
   on, 121, 122  
   and coping with stress, 45–49  
   and drug abuse, 254  
   and eating disorders, 110–111  
   and emotional problems,  
   50–53  
   and expression of emotions,  
   43  
   and grief management, 70  
   inventory of, 26  
   and practice of abstinence, 44  
   and self-concept, 32–35  
   and types of emotions, 42  
 Messages  
   mixed, 63  
   and self-concept, 33  
   and tobacco, 228, 228  
 Methamphetamine, 251  
 Middle adulthood, 213  
 Middle ear, 153  
 Migraine headaches, 290  
 Milk, 101  
 Minerals, 96  
 Mirroring of thoughts/feelings,  
   65  
 Misleading claims, 158  
 Misuse, drug, 162  
 Mixed messages, 63  
 Mononucleosis, 273  
 Mood disorders, 51  
 Mood swings, 41, 41, 205  
 Motive in advertising, 14  
 Motor neurons, 192  
 Mouth, 224  
 MRI machines, 10  
 Mucous membranes, 274  
 Muscles, 123–125, 179, 184. *See*  
   also Physical activity and  
   fitness  
 Muscular endurance, 123  
 Muscular system, 178, 179, 183,  
   184  
 Music  
   hearing and, 154  
   and managing emotions, 43  
 MyPyramid Food Guidance  
   System, 98–101, 99, 103
- N**  
 Nails, 150  
 Nar-Anon, 258  
 Narcotics, 251–252  
 National Health Council, 281  
 National Institutes of Health  
   (NIH), 281  
 Natural disasters, 308–311  
 Nearsightedness, 152  
 Negative messages, 33  
 Negative peer pressure, 77  
   and abstinence, 80  
   and conflict, 84  
   and tobacco, 228  
 Negative stress, 47

- Neglect, 71
  - Negotiation, 83
  - Neighborhood Watch programs, 304
  - Nerve cells, 176, 177
  - Nervous system, 176, 178, 179, 192, 193
  - Neurons, 192
  - Nicotine, 221, 223, 224, 231
  - Nicotine patches, 230
  - NIH (National Institutes of Health), 281
  - Noise level, hearing and, 154
  - Noncommunicable diseases, 282–287
    - allergies, 285
    - asthma, 285
    - cancer, 284–285
    - causes of, 282
    - definition of, 269
    - diabetes, 286–287
    - heart disease, 283
  - Nonsmokers, 232
  - Nuclear families, 68
  - Nuclear wastes, 320
  - Nurture, definition of, 69
  - Nutrients, 94–97
    - carbohydrates, 95
    - definition of, 94
    - and digestion, 185
    - fats, 95
    - minerals, 96
    - proteins, 95
    - vitamins, 96, 96
    - water, 96, 97, 97
  - Nutrition
    - choosing healthy foods, 112–113
    - definition of, 94
    - and eating disorders, 110–111
    - and eating habits, 102–103
    - and food choices, 102–107
    - and food groups, 100–101
    - and food labels, 104
    - guidelines for, 103, 105–107
    - and keeping a food diary, 114
    - and MyPyramid food guidance system, 98–101, 99
    - and nutrient needs, 94–97
    - and serving sizes, 100–101
  - Nuts, 107
- O**
- Obesity, 108–109, 286
  - Obsessive-compulsive disorder (OCD), 51
  - Occupational safety and health specialists, 327
  - OCD (Obsessive-compulsive disorder), 51
  - Oil glands, 148
  - Online information. *See* Health online
  - Open mind (keeping a), 36
  - Optic nerve, 152
  - Organs, 177
  - Orthodontists, 147
  - OTC medicines. *See* Over-the-counter medicines
  - Outcomes, decision, 17
  - Outdoor safety, 305–307
    - for hiking and camping, 306–307, 307
    - for water and boating, 305–306
    - for weather emergencies, 308–311
  - Outer ear, 153
  - Ovaries, 203, 206, 207, 207
  - Overdose (drug), 254
  - Over-the-counter (OTC) medicines, 159
    - safety in using, 161
  - Oxygen
    - in the body system, 178, 179, 188, 189, 189, 191
    - ozone as form of, 319
    - and smoking, 221, 225
  - Ozone, 319
- P**
- Pain, 134, 160, 290
  - Pancreas, 186, 203
  - Parents
    - communication with, 68
    - and negative peer pressure, 77
    - separation of, 69
    - supervision by, 88
  - Passive smokers, 232
  - Pathogens, 269, 270, 274
  - PCP (angel dust), 252
  - Peanuts, 107
  - Pectoral muscle, 184
  - Pedestrians, 303
  - Pediatrician, 219
  - Peer mediation, 83
  - Peer pressure, 76–77, 77
    - negative, 77, 84, 228
    - positive, 76, 256
    - and refusal skills, 78–80
    - and tobacco, 228
  - Peers
    - and decision making, 19
    - definition of, 9, 76
  - Penis, 208
  - Period. *See* Menstruation
  - Peripheral nerves, 193
  - Peripheral nervous system, 192
  - Personal attitudes, 11
  - Personal eating plan, 100
  - Personal fitness plan, 126–131, 136–137
  - Personal health
    - choosing health products, 155–158
    - and consumer skills, 168–169
    - and ears, 151–154
    - and eyes, 151–154, 170
    - and health care, 163–167
    - inventory of, 26
    - and medicines, 159–162
    - and teeth, skin and hair, 144–150
  - Perspiration, 133
  - Pharmacists, 161, 162, 168
  - Phobia, 51
  - Phone, 64
  - Photographs, working with
    - for alcohol and drugs, 240
    - for the body system, 174
    - and disease prevention, 266
    - for growth and development, 200
    - for health/wellness, 2
    - for healthy relationships, 60
    - for mental/emotional health, 30
    - for nutrition, 92
    - for personal health, 142
    - for physical activity, 118
    - for safety and environment, 294
    - for tobacco/smoking, 220
  - Physical abuse, 71
  - Physical activity and fitness, 122–125, 124–131
    - aerobic, 125
    - balancing food with, 105

- benefits of, 121, 122, 123–125
  - and the body system, 179
  - calories burned during, 121
  - and cool-down exercises, 130
  - definition of, 120
  - and diabetes, 287
  - and fitness log, 129, 129
  - fitness ratings for, 128
  - FITT principle, 128
  - for flexibility, 124
  - goal setting for, 136–137
  - and heart rate, 129, 129–130, 130
  - and lifestyle activities, 121
  - measuring fitness level, 127
  - safety in, 132–135, 133
  - and staying fit for life, 138
  - for strength, 123, 125
  - as stress relief, 49
  - and warm-up exercises, 130
  - Physical development, 204
  - Physical health, 4–5
    - benefits of physical activity on, 122
    - and drug abuse, 253–254
    - inventory of, 26
  - Physical neglect, 71
  - Physicians, 199
  - Physiology, puberty and
    - changes in, 167, 204, 204
  - Pituitary gland, 203
  - Pivot joints, 182
  - Plaque, 145, 146
  - Plasma, 190
  - Platelets, 190
  - Poison control centers, 316
  - Poisoning, 243, 316
  - Poisonous plants, 316
  - Pollution, 318–321
  - Portion size, 103
  - Positive attitudes, 11
  - Positive messages, 33
  - Positive peer pressure, 76, 256
  - Positive stress, 46
  - Posture, 63
  - Practicing healthful behaviors
    - and appealing exercise, 130
    - and building strong bones, 183
    - and caring for the body system, 194–195
    - and dealing with feelings, 54–55
    - and online safety, 64
    - for physical activity, 122
    - and the reproductive system, 209
    - and safe habits, 299
  - Pregnancy, 80, 211, 248
  - Prejudice
    - definition of, 82
    - myth of positive, 82
  - Prenatal care, 212
  - Prenatal development, 211, 211, 212
  - Prescription medicines, 159, 162
    - labels for, 161, 161
  - Pressure points, 314
  - Prevention
    - of accidental injuries, 297
    - of cancer, 284
    - of communicable diseases, 275
    - of conflicts, 82
    - definition of, 12
    - of diabetes, 287
    - of drowning, 306
    - of heart disease, 283
    - of HIV and STDs, 280
    - of injuries, 12, 84, 297
    - of noncommunicable and hereditary diseases, 283, 284, 287
    - of sexually-transmitted diseases, 280
    - of violence in schools, 303–304
  - Preventive care, 163
  - PRICE formula for injuries, 134
  - Priorities, setting, 48
  - Product labels, 156
  - Products. *See* Consumer skills
  - Protective gear (for sports), 12
  - Proteins, 95
  - Protozoa, 270
  - Puberty, 203, 204
    - accessing information about, 214–215
    - physical changes during, 204, 204
  - Public health (government health care), 165, 167
  - Pulse rate. *See* Heart rate
  - Pupil (eye), 152
- Q**
- Quadriceps, 184
  - Questions, asking, 83
  - Quiz. *See* Health quiz
- R**
- Radiation treatments, 284
  - Reading guides
    - for alcohol and drugs, 242, 249, 253, 256
    - for the body system, 176, 181, 185, 188
    - for disease prevention, 272, 277, 282, 286
    - for growth and development, 202, 206, 210
    - for health/wellness, 4, 8, 12, 16, 20
    - for healthy relationships, 62, 67, 73, 78, 81
    - for mental/emotional health, 32, 36, 41, 45, 50
    - for nutrition, 94, 98, 102, 108
    - for personal health, 144, 151, 155, 159, 163
    - for physical activity, 120, 126, 132
    - for safety and environment, 296, 300, 305, 308, 318
    - for sexually transmitted diseases, 277
    - for tobacco/smoking, 222, 227, 230
  - Reading skills
    - for alcohol and drugs, 245, 247, 248, 250, 251, 252, 254, 255, 257, 258
    - for the body system, 178, 180, 182, 183, 187, 190, 191, 192
    - for disease prevention, 269, 270, 271, 273, 275, 278, 280, 282, 283, 285, 287
    - for growth and development, 178, 205, 208, 209, 212
    - for health/wellness, 3, 6, 10, 11, 14, 21, 22
    - for healthy relationships, 63, 64, 66, 68, 69, 70, 72, 75, 77, 79, 80, 83, 85
    - for mental/emotional health, 31, 35, 38, 39, 41, 43, 44, 47, 49, 51, 52

- for nutrition, 97, 101, 103, 107, 108, 110
  - for personal health, 144, 145, 149, 150, 152, 154, 158, 160, 162, 166, 167
  - for physical activity, 122, 124, 125, 130, 131, 135
  - for safety and environment, 296, 297, 302, 303, 304, 306, 307, 309, 310, 311, 315, 317, 319, 321
  - for sexually transmitted diseases, 280
  - for tobacco/smoking, 222, 226, 228, 232
  - Recovery (from drugs), 254
  - Recovery heart rate, 130
  - Recycling, 320
  - Red blood cells, 190
  - Red Cross. *See* American Red Cross
  - Reducing waste, 320
  - Refusal skills, 78–80
    - abstinence, 80
    - definition of, 78
    - for drugs/alcohol, 257, 262
    - as health skill, 13, 15
    - S.T.O.P. strategy, 79, 79–80
    - against tobacco, 230, 231, 234–235
  - Rehabilitation (from drugs), 255
  - Reinforce, 33
  - Relationships
    - communication skills for, 62–66
    - definition of, 62
    - family, 67–72
    - friends and peers, 73–77. *See also* peer pressure
    - healthy. *See* Social health
  - Relaxation, 48, 48
  - Reliability, 74
  - Reproductive cells, 211
  - Reproductive system, 206–209
    - care of the, 209
    - definition of, 206
    - female, 206–208, 207
    - male, 208, 208, 209
  - Rescue breathing, 313, 313
  - Resilience, 34
  - Resolving conflicts. *See* Conflict resolution
  - Respect
    - as character trait, 37
    - in friendships, 75
    - for others' bodies and feelings, 109
  - Respiratory system, 178, 179, 187, 191
  - Responsibility, 162
    - as character trait, 38, 39
    - in the family, 68, 68
    - and good character, 213
  - Resting heart rate, 129
  - Retina, 152
  - Reusing items, 320
  - Rh factor, 190
  - Risk
    - cumulative, 17
    - definition of, 16
  - Risky behaviors, 44
    - and abstinence, 44, 80
    - and alcohol use, 246
    - and cumulative risk, 17
  - Road safety, 303, 303
  - Role models
    - definition of, 39
    - on television, 40
  - Roles (in the family), 68
- S**
- SADD (Students Against Destructive Decisions), 257
  - Safety, 296–311
    - and the body system, 179–180
    - drug, 161
    - in exercising, 132–135, 133
    - and first aid, 312–317
    - food, 105
    - with medicines, 161
    - online, 64
    - outdoors, 305–307
    - and preventing accidents, 296
    - on the road, 303, 303
    - in schools, 303
    - in severe weather, 308–311
    - on the trail, 306–307
    - from violence, 84–85
  - Safety belts, 11
  - Saliva, 185, 186, 274
  - Salivary glands, 186
  - Salt, 106–107
  - Sartorius, 184
  - Saturated fats, 106
  - Saving money, 158
  - Saying No, 262. *See also* S.T.O.P. strategy
  - Scale (for wellness), 7
  - Scalp problems, 149
  - School counselors, 59
  - Schools
    - dealing with bullies, 88
    - violence prevention in, 303–304
  - Science connections
    - alternate energy sources, 319
    - bacteria, 270
    - deafness, 153
    - HIV, 280
    - and teeth and gums, 146
  - Sclera (eye), 152
  - Scrotum, 208
  - Second-degree burns, 316, 316
  - Secondhand smoke, 232
  - Sejnowski, Terrence, 196
  - Self-concept, 32–35
    - definition of, 32
    - media influence on, 34
  - Self-control, 44
  - Self-destructive behaviors
    - peer influence on, 77
    - resiliency as defense against, 34
  - Self-esteem, 34
  - Self-help groups, 72
  - Self-image, 32
  - Sensory neurons, 192
  - Separation (of parents), 69
  - Serving sizes (food), 101–101, 104
  - Servings per container, 104
  - Sexual abuse, 71
  - Sexually transmitted diseases (STDs), 277–281
    - AIDS, 278–280
    - HIV, 278–280, 280
    - prevention of, 280
  - Shared interests, 73, 74
  - Shoes, athletic, 134
  - Shopping, 156–158
  - Short-term goals, 21
  - Sicknesses. *See* Diseases
  - Side effects of medicines, 160
  - Simple carbohydrates, 95
  - Single-custody families, 68
  - Single-parent families, 68, 88
  - Situations, understanding, 17

- Skeletal muscles, 183, 184
- Skeletal system, 178, 179, 181–182, 182
- Skin, 147–148, 187, 224
- Skin cancer, 284
- Skin cells, 177
- Sleep, 196
- Small intestine, 186
- Smog, 319
- Smoke alarms, 302
- Smokeless tobacco, 224, 226
- Smoking. *See* Tobacco
- Smooth muscle, 183, 184
- Snacks, 102, 103, 106
- Sneezing, 272, 273
- Snowstorms, 310
- Snuff, 226
- Social development, 205
- Social health, 4–6, 62–88
  - benefits of physical activity on, 122
  - and bullies, 88
  - and communication, 62–66
  - and conflict resolution, 81–87
  - and drug abuse, 254
  - and family, 67–72
  - and friends, 73–77
  - inventory of, 6, 26
  - and refusal skills, 78–80
- Sodium, 106–107
- Sound, loudness of, 154
- Sources (in advertising), 14
- Specialists, health care, 164, 165. *See also* specific occupations
- Sperm, 208, 208, 209, 211
- SPF. *See* Sun protection factor
- Spiders, 51
- Spinal cord, 192, 193
- Sports, 12, 39. *See also* Outdoor safety; Physical activity and fitness
- Sports gear, 12, 132, 133, 297
- Sports medicine, 141
- Sprains, 317
- Standardized Test Practice
  - for alcohol and drugs, 265
  - for the body system, 199
  - for disease prevention, 293
  - for growth and development, 219
  - for health/wellness, 29
  - for healthy relationships, 91
  - for mental/emotional health, 59
  - for nutrition, 117
  - for personal health, 173
  - for physical activity, 141
  - for safety and environment, 327
  - for tobacco/smoking, 239
- Staying informed, 13
- STDs. *See* Sexually transmitted diseases
- Steroids, anabolic, 251
- Stimulants, 250, 253, 254
- Stomach, 183, 184, 186, 225, 290
- S.T.O.P. strategy, 79, 79–80
- Strangers, 85
- Strength, 123, 125, 138
- Strep throat, 273
- Stress
  - definition of, 45
  - response to, 47, 47
  - sources of, 46
  - types of, 46–47
- Stress management, 45–49
  - as health skill, 13, 13
  - and relaxation exercises, 48
  - strategies for, 48–49
- Stroke, 283
- Students Against Destructive Decisions (SADD), 257
- Substance abuse, 256, 257
- Substance abuse counselor, 265
- Sugar, 106
- Suicide, 51–52
  - definition of, 51
  - warning signs of, 52
- Sun exposure
  - and eye health, 151
  - and skin cancer, 284
  - and skin health, 147–148
- Sun protection factor (SPF), 148
- Sunblocks, 148, 284
- Sunscreen, 148, 284
- Support, 75, 76
- Support groups, 72, 258
- Surgeon General's warning, 236
- Surgery, cancer, 284
- Sweat glands, 148
- Syphilis, 278
- Systems, body. *See* Body systems
- T**
- T.A.L.K. conflict resolution strategy, 83
- Tar, 221, 224
- Target heart rate, 130, 130
- Tartar, 145
- T-cell, 278, 279
- Tears, 274
- Technology, 10
- Teeth and gums, 145–147
  - brushing/flossing, 146, 146
  - dental visits, 147
  - preventing problems with, 146
  - and tobacco, 224, 226
  - and tooth decay, 145
- Television. *See also* Media and decision making, 18
  - role models on, 40
- Temperatures (food), 105
- Tension headaches, 290
- Testes, 203, 208, 209
- Third-degree burns, 316, 317
- Throat, 224
- Thunderstorms, 309
- Thyroid gland, 203
- Time management, 49
- Time together (families), 69
- Time-out, 83
- Tinnitus, 153
- Tissues, 176, 177
- Tobacco
  - addiction to, 223
  - and cancer, 284
  - chemical dependency on, 223
  - and citizenship, 231
  - and the cost of smoking, 233
  - harmful effects of, 221–226, 224–225
  - and the media, 228, 228
  - and peer pressure, 77
  - pressure to use, 228
  - and quitting smoking, 230, 231, 236
  - reasons for use of, 228
  - refusal skills against, 234–235
  - smokeless, 224, 226
  - staying free of, 230–233
  - substances in, 221
  - teenagers and, 227–229, 236
  - warning others about, 233
  - ways of refusing, 231

Toenails, 150  
Tolerance  
  definition of, 82  
  of medicines, 160  
Tooth decay, 145  
Tornadoes, 310–311  
Trachea, 191  
Trails, 306–307  
Training techniques, 131  
Trans fats, 106  
Transfusions (blood), 190  
Trash, 320  
Triceps, 184  
Trustworthiness, 37  
Tuberculosis, 273  
Tumors, 284  
Type 2 diabetes, 286, 286  
Typhoid, 319

**U**

Ultraviolet (UV) rays, 147, 148, 168  
Umbilical cord, 212  
Unit pricing, 157, 157  
Upper respiratory system, 191  
Urethra, 208, 209  
Urine, 187  
U.S. Department of Agriculture (USDA), 98  
U.S. Food and Drug Administration (FDA), 158, 161  
USDA (U.S. Department of Agriculture), 98  
Uterus, 207, 207  
UV rays. *See* Ultraviolet rays

**V**

Vaccines, 160, 275, 275  
Vagina, 207

Values, 17  
Vas deferens, 208, 209  
Vegetables, 100, 105  
Veins, 189, 189  
Violence, 303–304  
  avoiding, 84  
  definition of, 84  
  strategies for avoiding, 84–85  
Viruses, 269, 278, 279  
Vision  
  color, 170  
  problems, 152  
Vitamins, 96, 96  
Voluntary health agencies, 165, 166  
Voluntary muscles, 183  
Volunteering, 165, 166, 213

**W**

Warm-up exercises, 130  
Waste disposal, 320  
Waste reduction, 320, 322–323  
Water  
  benefits of drinking, 187  
  as nutrient, 97, 97  
  pollution of, 319  
  when exercising, 133  
Water safety, 305–306  
Weapons, 84, 304  
Weather emergencies, 308–311  
Weather-related injuries, 134–135  
Weight management, 108–111, 179  
Wellness, 7  
West Nile Virus, 271  
White blood cells, 190, 274  
Whole grains, 105  
Withdrawal (from drugs), 254–255

Words, communication  
  through, 63  
Writing skills  
  for alcohol and drugs, 242, 249, 253, 256  
  for the body system, 176, 181, 185, 188  
  for disease prevention, 272, 282, 286  
  for growth and development, 202, 206, 210  
  for health/wellness, 4, 8, 12, 16, 20  
  for healthy relationships, 62, 67, 73, 78, 81  
  for mental/emotional health, 32, 36, 41, 45, 50  
  for nutrition, 94, 918, 102, 108  
  for personal health, 144, 151, 155, 159, 163  
  for physical activity, 120, 126, 132  
  for safety and environment, 296, 300, 305, 308, 312, 318  
  for sexually transmitted diseases, 277  
  for tobacco/smoking, 221, 222, 227, 230

**X**

X chromosomes, 211

**Y**

Y chromosomes, 211



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