Chapter Preview

Lesson 1 Healthy Teeth, Skin, Hair, and Nails ...............328
Lesson 2 Healthy Eyes and Ears .................334
Lesson 3 Smart Consumer Choices .........................340
Lesson 4 Using Medicines Safely .................347
Lesson 5 Choosing Health Care ...........352
Building Health Skills ..............................356
TIME health news ....................................358
Chapter Reading Review ..........................359
Chapter Assessment .................................360

Working with the Photo

You make many choices about your health each day. **Name one type of personal health care product that a teen might use.**
Start-Up Activities

Before You Read

What do you do to take care of your personal health? Find out by taking the short health inventory on this page. Keep a record of your answers.

HEALTH INVENTORY

1. I brush my teeth twice a day.
   (a) always  (b) sometimes  (c) never
2. I apply sunscreen before going outdoors.
   (a) always  (b) sometimes  (c) never
3. I make sure to have plenty of light when reading or doing homework.
   (a) always  (b) sometimes  (c) never

Foldables® Study Organizer

Make this Foldable® to help you organize information on personal care presented in Lesson 1. Begin with a plain sheet of 11” × 17” paper.

1. Fold the short edges of the paper inward so that they meet in the middle.
2. Fold the top edge down to meet the bottom edge.
3. Unfold and cut along the inside fold lines to form four tabs.
4. Label the tabs as shown.

Record what you learn about the form, function, and care of teeth, skin, hair, and nails under the appropriate tab.

Go Online

Visit glencoe.com and complete the Health Inventory for Chapter 11.
Healthy Teeth, Skin, Hair, and Nails

Building Vocabulary
The prefix *epi-* means “above” and the root *derma-* means “skin.” Choose two terms from the list below that you think describe two layers of skin. Identify which layer is the outermost layer of skin. Add formal definitions for these terms to your notes as you read the lesson.

- fluoride (p. 329)
- hair follicles (p. 330)
- plaque (p. 329)
- ultraviolet (UV) rays (p. 331)
- tartar (p. 329)
- melanin (p. 331)
- pores (p. 330)
- acne (p. 332)
- dermis (p. 330)
- dandruff (p. 333)
- epidermis (p. 330)

Focusing on the Main Ideas
In this lesson, you will be able to:
- explain how to keep your teeth and gums healthy.
- describe ways to clean and protect your skin.
- identify how to care for your hair and nails.

Reading Strategy
Organizing Information
As you read the lesson, write down the functions of each body part discussed.

Foldable® Study Organizer
Use the Foldable® on p. 327 as you read this lesson.

Quick Write
Write down three reasons why personal hygiene is an important part of health.

Healthy Teeth

Healthy teeth give you a great-looking smile. Teeth do more than help you look good, though. You need them to chew your food for digestion. You also need healthy teeth to speak clearly. Each tooth has a root that goes into your jawbone. Roots are surrounded by pink flesh called gums. The top of the tooth is the crown, which is covered with a layer of hard, white enamel.

Your teeth and gums need to last a lifetime. It makes sense to take good care of them. Limit sugary foods and soft drinks, and brush and floss often. Fruits, vegetables, and calcium-rich foods such as milk and yogurt will help you avoid tooth decay and prevent gum disease.

Tooth Care

The keys to having healthy teeth and gums are proper brushing and flossing. Brush after every meal (or at least twice a day) with toothpaste and a soft-bristled toothbrush. Rinse with warm water or with mouthwash. Use dental floss daily to remove anything caught between your teeth, such as bits of food your toothbrush can’t reach. Flossing also keeps gums healthy and prevents gum disease. Figure 11.1 shows the right way to brush and floss.
Be sure to use a toothpaste or mouthwash that contains fluoride. **Fluoride** is a chemical that helps prevent tooth decay. In many areas, fluoride is added to tap water.

**Tooth Decay**

Brushing and flossing also remove plaque. **Plaque** is a thin, sticky film that builds up on teeth and leads to tooth decay. Bacteria in plaque feed on the carbohydrates—sugars and starches—in the foods you eat. These bacteria produce acids that can break down tooth enamel leading to tooth decay and holes, or cavities.

Plaque also causes tartar. **Tartar** is hardened plaque that hurts gum health. You can’t just brush away tartar. A dentist or dental hygienist must remove it with special tools that clean and polish surfaces of the teeth.

**Reading Check** Compare How does plaque differ from tartar?

**FIGURE 11.1**

**Brushing and Flossing the Right Way**

Brushing and flossing regularly helps prevent tooth decay and other health problems. **How else can you improve the health of your teeth?**

**How to Brush**

Be sure to brush your teeth for at least two minutes—30 seconds for each area of your mouth.

- Brush the outer surfaces of your upper and lower teeth. Use a combination of up-and-down strokes and circular strokes.
- Thoroughly brush all chewing surfaces with a soft-bristle brush to protect your gums.
- Brush the inside surfaces of your upper and lower teeth.
- Brush your tongue and rinse your mouth.

**How to Floss**

- Take about 18 inches of floss and wrap each end around the middle finger of each hand.
- Grip the floss firmly between your thumb and forefinger.
- Slide the floss back and forth between teeth toward the gum line until it touches the gum line.
- Curve the floss around the sides of each tooth. Keep sliding the floss back and forth gently as you move it up and down.
Healthy Skin

When you think of an organ, you might think of something like your heart or your stomach. You might overlook your body’s largest organ, which doesn’t lie beneath your skin—it is your skin! Figure 11.2 shows the different layers that make up the skin.

Your skin has many jobs. It gives you a sense of touch and of temperature. Skin is the first line of defense against infection. It keeps germs from getting into the body. When you sweat, your skin gets rid of water and salts and cools your body. The blood vessels in your skin allow your body to control its temperature. Finally, your skin uses energy from sunlight to make vitamin D, which helps keep your bones and teeth healthy.

**Figure 11.2**

**Parts of the Skin**

Each layer of the skin has a different function. What layer of the skin has structures that keep the skin from drying out?

**Epidermis**

The epidermis is the outermost layer of skin. The epidermis makes new cells, which replace old cells that shed from the outer part of the skin.

**Nerve ending**

Nerve endings in the skin send the brain information about touch and temperature.

**Sweat gland**

Sweat glands in the dermis produce perspiration, which is a mixture of water and salts.

**Oil gland**

Oil glands produce oils that keep the skin soft, so that it does not crack and dry out.

**Blood vessel**

Blood vessels in the skin control body temperature by allowing more or less blood to flow through them.

**Hair follicle**

Hair follicles are small sacs in the dermis from which hair grows.

**Pore**

Pores are tiny openings in the skin that allow perspiration to escape. When perspiration evaporates from the skin’s surface, the skin is cooled.

**Dermis**

The dermis is the skin’s inner layer. The dermis contains blood vessels, nerve endings, hair follicles, sweat glands, and oil glands.

**Subcutaneous layer**

The subcutaneous layer is a layer of fat cells underneath the dermis.
Skin Care

Keeping your skin healthy can help you feel, look, and smell good. Try these tips for taking care of your skin:

- Take a bath or shower every day. Use soap to wash away dirt, sweat, oils, and bacteria that collect on your skin.
- Moisturize dry skin with lotion. Dry or cracked skin can itch or become irritated.
- Limit time spent in the sun, and avoid tanning beds. When you go outdoors, wear sunscreen to protect your skin from the sun’s rays.
- Avoid tattoos and piercings. Permanent body decoration can put you at risk for disease and scarring.

Sun Damage

Factors in the environment can affect your personal health. The sun gives off ultraviolet (UV) rays, an invisible form of radiation that can enter skin cells and change their structure. Sunburn happens when UV rays damage skin cells. You might think soaking up lots of UV rays will give you a nice tan, but it will also wrinkle your skin. Even worse, too much time in the sun increases the risk of skin cancer. Be smart; protect yourself from UV rays by limiting your sun exposure and by using sunscreen.

Special cells in the epidermis make melanin, the substance that gives skin its color. Darker skin has more melanin than paler skin. Melanin can block some, but not all, UV rays from reaching the lower layers of skin.

Being outdoors in the sun isn’t the only way you can be exposed to UV rays. What about indoor tanning beds? Many people use them to stay tan year-round. Tanning beds also give off UV rays. They can damage the skin, lead to skin cancer, and hurt the eyes and immune system. The healthful choice is to stay out of tanning beds.

Ultraviolet rays from the sun can harm skin cells. How can you protect yourself from ultraviolet rays and reduce your risks for developing skin cancer?

The Dangers of Body Decoration

Tattoos and piercings are created with needles or equipment that leave a pattern of permanent dye in the skin or punch holes in the skin. Dirty equipment and needles can spread serious infections such as HIV and hepatitis. Even with sterile needles, a tattoo or piercing can cause scarring.

Write a story about a teen whose friend wants to get a tattoo. In the story, show how the main character positively influences his or her friend to make a healthful choice about body decoration.
Acne

Did you ever wake up on an important day, only to see a huge pimple? One skin problem experienced by many teens and some adults is acne. Acne is a skin condition caused by active oil glands that clog hair follicles. The openings of these hair follicles onto the skin are called pores. Bacteria gathers in the clogged pores, making them swell up. If you have a bad case of acne, you may need to see a dermatologist, a doctor who specializes in problems of the skin. Figure 11.3 shows how acne forms. If you get acne, don’t pick at it or try to pop the clogged pores. In fact, try not to touch your skin at all. Instead, wash the area with a mild soap and warm water. Be gentle, and don’t scrub too hard. Washing helps remove the dirt, oil, sweat, or makeup that can cause pores to clog.

Healthy Hair and Hair Care

You might spend a lot of time and money to give your hair “life” and “body.” Hair grows from hair follicles in the scalp. The scalp is the skin beneath the hair on your head. Your hair contains a protein called keratin. Keratin gives hair strength and allows it to bend without breaking.

Caring for your hair keeps your scalp from getting irritated. Brushing your hair daily removes dirt from your hair and scalp. It also spreads oils throughout your hair. These natural oils help keep hair healthy and whole. Wash your hair with shampoo to clean away dirt and extra oil, leaving it looking and smelling clean.
Hair and Scalp Problems

One common problem with the hair and scalp is dandruff. **Dandruff** is a condition that results when too many dead skin cells flake off the outer layer of the scalp. Dandruff can happen due to certain skin diseases. It can also result from a fungus. Using a special dandruff shampoo can help control and prevent dandruff.

Head lice can also cause problems for the hair and scalp. Head lice are tiny insects that live and feed on strands of hair and can make a person’s scalp itch. Anyone can get head lice. They spread when people share combs, brushes, hats, or other personal items. You can use a special shampoo to treat head lice.

**Reading Check** Identify What protein is found in hair and nails?

Healthy Nails and Nail Care

Nails protect sensitive fingertips and the tips of toes. To care for your nails, wash your hands regularly. Use hand lotion to keep nails and skin moist. Clip nails to keep them trimmed and neat. Use a nail file to smooth any rough edges on your nails so they won’t catch on objects and rip. Don’t bite, tear, or pick at your nails. The same goes for your cuticles, the thin layers of skin-like tissue at the base of each nail. Otherwise, germs can invade the weakened tissue and infect it.

Lesson 1 Review

**After You Read**

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

**What I Learned**

1. **Describe** Name two healthful behaviors that keep your teeth and gums healthy.
2. **Give Examples** Describe three functions of the skin.
3. **Vocabulary** Define **dandruff**. Describe how to treat it.
4. **Identify** What are ultraviolet rays?

**Thinking Critically**

5. **Analyze** How can the foods you eat affect the health of your teeth and gums?
6. **Apply** What can you do to care for your nails and cuticles?

**Applying Health Skills**

7. **Practicing Healthful Behaviors** Tisha’s friends have invited her to join them at the beach. They plan on lying out in the sun to tan. How can Tisha protect her skin from the sun’s UV rays?
Healthy Eyes and Ears

Guide to Reading

Building Vocabulary
As you read the lesson, write down each highlighted term and its definition.
- optometrist (p. 336)
- ophthalmologist (p. 336)
- cataract (p. 336)
- glaucoma (p. 336)
- astigmatism (p. 337)
- tinnitus (p. 338)
- deafness (p. 338)
- decibel (p. 338)

Focusing on the Main Ideas
In this lesson, you will be able to
- identify ways to keep your eyes healthy.
- explain why people wear glasses or contact lenses.
- describe ways to care for your ears.

Reading Strategy

Organizing Information As you read the lesson, create a chart that describes the functions of each body part discussed in the lesson and how to care for it.

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Function</th>
<th>Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ears</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quick Write

Make a list of five ways you have used your sense of hearing today. How would these activities be different if you could not hear very well?

Healthy Eyes

Like a camera, your eyes focus light in order to give your brain a picture of the world around you. Eyes allow you to see shapes, colors, and motion. Each part of the eye plays an important role in how you see. Figure 11.4 shows the parts of the eye and explains how each one works.

Eye Care

Your eyes need light to see. However, too much light can hurt them. The sun can be very hard on your eyes. For example, you should never look directly at the sun. In addition, UV rays can damage eye cells. You can solve this problem by wearing sunglasses that block UV rays.

Sitting too close to the television can cause eyestrain and headaches. Sit at least 6 feet away. If you get eyestrain while sitting at a computer, change the monitor position to cut down on the glare. Reading in dim light can also cause eyestrain. To reduce your risk for eyestrain and to protect your eyes, be sure you have adequate lighting while you read, work, or watch TV.
In many ways, your eyes are more delicate than your skin. Protect your eyes when you are doing yard work, handling power tools, or playing sports that involve flying objects. Wear glasses or goggles designed for these activities. Wear goggles when you work with strong chemicals, too. These chemicals could splash into your eyes. Chemical gases in the air or tiny bits of other material could blow into your eyes. Even small particles and dust can scratch your cornea and cause painful injury.

Don’t rub your eyes if something gets in them. Don’t use your hand to remove whatever is bothering them. Instead, flush particles out with clean water or eyedrops.

Diseases such as conjunctivitis, or pinkeye, can bother your eyes and make them very red. If your eyes feel painful for more than a short time, see a doctor right away. Also see a doctor if you have watery or crusty eyes.
Eye Examinations

Do you have trouble reading tiny print on a page? Does the writing on the chalkboard look blurry or fuzzy if you sit in the back of the room? If you answered yes, you might need corrective lenses: glasses or contacts. You can find out by having an optometrist check your vision.

An optometrist (ahp-TAH-muh-trist) is a health care professional who is trained to examine the eyes for vision problems and to prescribe corrective lenses. If you already wear glasses or contacts, visit an optometrist regularly. Schedule a routine visit at least once a year. Also see the optometrist any time you feel that your eyesight might be getting worse.

An optometrist might do initial tests for serious eye diseases. He or she may then send you to an ophthalmologist. An ophthalmologist (ahf-thahl-MAH-luh-jist) is a physician who specializes in the structure, functions, and diseases of the eye. An ophthalmologist fits people with corrective lenses. He or she also identifies and treats more serious eye problems, such as cataracts or glaucoma.

Cataract is an eye condition in which the lens becomes cloudy as a person ages. Glaucoma (glah-COH-mah) is an eye condition in which fluid pressure builds up inside the eye. If the condition is not treated promptly, it can damage the optic nerve and even cause blindness.

Correcting Vision Problems with Lasers

Laser surgery can help correct vision problems such as nearsightedness. In this type of surgery, a doctor uses a special beam of light called a laser to reshape the cornea. This allows the cornea to focus light differently so that a person can see more clearly. Laser surgery is not for people under the age of 20, as their vision might still be changing.

Do research to find out more about laser surgery to correct vision problems. Prepare a one-page report of your findings.

▲ Some activities put you at risk for splashing harmful chemicals into your eyes. What activities might put you at risk for this?
Correcting Your Vision

Vision specialists often treat people who are nearsighted, farsighted, or have astigmatism. A nearsighted person can clearly see objects only if they are up close. A farsighted person can clearly see objects only if they are at a distance. Many people become farsighted as they get older. They may need reading glasses to see objects up close. **Astigmatism** (uh-STIG-muh-tiz·uhm) is an eye condition in which images appear wavy or blurry. Corrective glasses or contact lenses can help people with all three of these vision problems. Contact lenses are clear plastic lenses placed directly in the eyes. They rest on top of the corneas.

**Explain** What are three types of vision problems?

Healthy Ears

You probably know that your ears let you hear sound. Did you know that your ears also give you your sense of balance? **Figure 11.5** explains how ears control your senses of hearing and balance.

**Ear Care**

To care for your ears, wash and dry them regularly. Your ears produce earwax, which helps trap dirt and carry it out of the ear opening, or auditory canal. Use a wet washcloth to wipe off dirt and earwax on the outside of your ears. Do not insert anything inside your auditory canal. If you get water in your ears, use special ear drops to help dry out the water and prevent an infection. Protect your ears from the cold by wearing a hat or scarf that covers your ears, or earmuffs. See a doctor if any parts of your ears hurt or become infected.

---

**Academic Vocabulary**

**vision** (VIZH uhn) (noun) the act or power or seeing, sight. Looking through another person’s glasses can make your vision blurry.
Hearing Damage

When it comes to caring for your ears, the best action you can take is to protect against hearing loss. Common hearing problems include tinnitus and deafness. **Tinnitus** is *a constant ringing in the ears*. You can get tinnitus from listening to loud music and from certain diseases.

**Deafness** is *a condition in which someone has difficulty hearing sounds or has complete hearing loss*. People can be born deaf or lose hearing later in life. Loud sounds most often cause hearing loss. **The unit for measuring the loudness of sound** is called a **decibel**. Normal conversation is about 60 decibels. Noises above 90 decibels can permanently damage the hair cells in the inner ear.

To protect your hearing, keep the volume down when listening to music. Wear earplugs when you are near loud sounds.

**Describe** How can you protect your ears from the effects of loud sounds?
Lesson 2 Review

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

What I Learned

1. **Vocabulary** What is the difference between an optometrist and an ophthalmologist?

2. **Identify** What roles do hair cells play in hearing and balance?

3. **Explain** What happens when sound waves reach your outer ear?

Thinking Critically

4. **Analyze** Janet plays on the soccer team. She is nearsighted and needs to correct her vision. What type of vision correction do you think might be best for Janet? Explain your reasoning.

5. **Evaluate** A woodshop produces noise that reaches 100 decibels. Should you wear earplugs to reduce the risks of injury to your ears while working in a woodshop? Explain your reasoning.

Applying Health Skills

6. **Practicing Healthful Behaviors** Imagine that you are packing for a backpacking trip in the mountains. The weather will be sunny but very cold. What kind of gear or clothing would you pack to protect your eyes and ears?
Being a Responsible Consumer

A consumer is a person who buys products and services. You are a consumer when you buy products like a snack or a movie ticket. You are also a consumer when you pay for services such as a haircut.

You make consumer choices all the time. What types of consumer choices can affect your health?
Most times, you can choose among products and services to buy. For example, when you shop for shampoo, many brands fill the store shelves. They have different prices and are designed to target different areas of your personal health. Figure 11.6 discusses factors that might affect consumer choices. Be smart about which products and services you choose.

**Reading Check**

Describe What are two situations in which you are a consumer?

### Advertising

You face choices every day about how to spend your money. One strong influence on what you choose to buy is advertising. An **advertisement** is a message designed to influence consumers to buy a product or service. It describes why the product might be good for you. Always remember, though, that advertisers spend billions of dollars to sell products and services. As a result, they may not explain a product’s drawbacks or how it compares to competing products.

### Figure 11.6

**Influences on Consumer Choices**

Teens often tell their friends about products and services they have bought and liked. **How can your friends’ buying tips help you make a wise purchase?**

- **Personal Factors**: You buy many products based on your personal interests and tastes. You may have had good or bad experiences with certain brands or products in the past.
- **Family Background**: You might choose certain products or services because your family members always have, or because of cultural preferences.
- **Peers**: Your friends may tell you to try certain products or brands. They may also tell you some are a waste of money. These opinions may affect your consumer choices.
- **Cost**: Sometimes you make a consumer choice based on how much a product or service costs.
- **Salespeople**: Salespeople often suggest certain products once you explain what you are looking for or what you need.
- **Advertising**: Advertisers use many approaches to sell their products.
How do companies make their products look appealing to you?

Companies make their products appealing to me with commercials. If the coloring catches my eye, I always like it. If the company can prove that their product works, then there is a higher chance of me wanting it.

Bailey R. Monument, CO

Evaluating Advertising

It helps to be able to judge an advertiser’s claim. Before you decide to make a purchase based on an ad, ask yourself a few questions. Does the ad present facts or opinions? Does the product seem too good to be true? It might be fraudulent. Fraud is a calculated effort to trick or fool others.

Selling medicines that have not been proven to work is a form of medical quackery, or health fraud. These medicines may offer fast or painless cures, but they can be noneffective or harmful. They can even keep a person from getting the medical treatment they really need. Talk to a health care professional or other adult if you are unsure about a medicine or other health care product.

Types of Advertising

Companies use different techniques to sell products. Some ads focus on people’s wish to be noticed. These ads claim that a brand name or designer product will make you popular.

Some ads suggest that a product will make you successful or beautiful, like the people shown in the ad. Many ads include celebrity endorsements. An endorsement is a statement of approval. Often, advertisers will pay actors or athletes large amounts of money to endorse a product.

Some ads show a group of teens having fun. These ads suggest that other teens use the product, so you should, too. It also sends the message that you’ll have good times if you use the product.

Ads called infomercials are long television commercials whose main purpose seems to be to present information rather than to sell a product. An infomercial may look like a news story or even a TV show. However, an infomercial is really an ad. It always features some sort of product.

Explain How might a celebrity endorsement affect what you buy?
Think Before You Buy

So how can you be a smart shopper? Take some time to make an informed decision. Figure 11.7 lists some questions to consider before buying a product or service. The Health Skills Activity on page 346 will help you become an intelligent health consumer.

Comparison Shopping

One way to make smart purchases is to comparison shop. Comparison shopping is collecting information, comparing products, evaluating their benefits, and choosing products with the best value. Different brands may differ in features, quality, or price. Some products may even have generic varieties.

Generic products are products sold in plain packages at lower prices than brand-name products. Many generic products have the same ingredients and produce the same results as similar brand-name products. Before buying, read the label and compare the ingredients to those found in a similar product. Make sure the generic variety has the same amount of active ingredient found in the brand-name product. This can help you determine whether the product will be as effective as the brand-name product.

![Figure 11.7](image)

**Should I Make This Purchase?**

Before you make a purchase, ask yourself several questions to help you make a healthful choice. Where can you find answers to consumer questions?
Some products come with a warranty. A **warranty** is a company’s or a store’s written agreement to repair a product or refund your money if the product does not function properly. Warranties may include certain services and not others. If you have to pay for a warranty, read the fine print to help you decide if it’s worth paying for.

**Reading Product Labels**

One way to learn about a product is to read the product label. By law, labels for foods, medicines, and many health products must include certain kinds of information. Product labels can also help you compare similar products. Don’t be fooled by fancy packaging with catchy phrases. It’s designed to make you want to buy the product. Take a look at Figure 11.8. It tells you the kinds of information you can find on a product label.

**FIGURE 11.8**

**WHAT A LABEL TELLS YOU**

Be sure to read a product’s label before you purchase or use the product. *What kinds of information are found on a product’s label?*

- **Product Name**
  - The name does not always tell you the purpose of the product. Read the label to find out the product’s intended use.

- **Product’s Intended Use**
  - Make sure that the product’s purpose fills your needs.

- **Amount in Container**
  - When you compare products, check the amount contained in each package. A brand with a lower price may simply contain less product than a competing brand.

- **Directions for Use**
  - For best results, read and follow the directions on the product label.

- **Warnings**
  - Pay attention to warnings on the label. Using a product improperly can be dangerous.

- **Ingredients**
  - The order in which ingredients are listed often reflects their relative amounts. The main ingredients appear at the beginning of the list. If you have allergies to certain substances, check the label. Make sure they are not in the ingredient list.

- **Manufacturer’s Contact Information**
  - Contact the manufacturer of the product if you have a problem or question.
Protecting Your Consumer Rights

Even when you are a smart shopper, you may still have problems with your purchase. A product can turn out to be faulty, broken, or noneffective. A service may not be what you expected.

Your first action is to return to the business where you made the purchase. They may be able to exchange the product, refund your money, or help you understand the warranty. If they cannot help you, you can contact the manufacturer or service provider. They may be able to help you replace or repair what you bought, or refund the cost of the service.

It helps to be organized when resolving a problem related to a product or service. Have a copy of your original purchase receipt. Write down the product serial number and/or the name of the salesperson who helped you. Also write a complete description of the problem. Your consumer rights are shown in Figure 11.9. This figure also lists community resources that you can access to get additional help for problems with products and services.

**Reading Check**

**Sequence** What steps can you take if you buy a faulty product?

**FIGURE 11.9
CONSUMER RIGHTS**

You have many rights as a consumer. How can you be active in protecting your consumer rights?

<table>
<thead>
<tr>
<th>The following is a list of your rights as a consumer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- You have the right to safety.</td>
</tr>
<tr>
<td>- Products should not harm your health.</td>
</tr>
<tr>
<td>- You have the right to be informed.</td>
</tr>
<tr>
<td>- Product labels and advertising should not be fraudulent.</td>
</tr>
<tr>
<td>- You have the right to choose.</td>
</tr>
<tr>
<td>- There should be a variety of products at competitive prices.</td>
</tr>
<tr>
<td>- You have the right to be heard.</td>
</tr>
<tr>
<td>- Government laws should address consumer issues and problems.</td>
</tr>
</tbody>
</table>

You may be unhappy with how a company responds to a problem. If so, you can get help from many organizations. The following organizations work to protect consumer rights.

| - Consumer advocates | - The Consumers Union and other consumer groups help consumers settle problems. |
| - The Better Business Bureau | - This business organization and others handle consumer complaints against local companies and small businesses. |
| - Government agencies | - Agencies such as the Food and Drug Administration and the Consumer Product Safety Commission set standards and uphold laws that protect consumer rights. |
| - Small-claims court | - Judges in these state courts rule on legal arguments between consumers and businesses. |
Lesson 3 Review

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

What I Learned

1. **Vocabulary** Define *fraud*.
2. **List** Name three of your rights as a consumer.
3. **Contrast** How does an endorsement differ from an infomercial?

Thinking Critically

4. **Analyze** Lotion A costs 20 cents per ounce. Lotion B costs $3.20 for 15 ounces. Compare the costs of these health products in order to assess which is the better value.

5. **Apply** The label for Product A lists the following ingredients: 98 percent isopropyl alcohol and boric acid. Product B contains isopropyl alcohol and 4 percent boric acid. The active ingredient is isopropyl alcohol. Which product has a greater percentage of the active ingredient?

Applying Health Skills

6. **Decision Making** Imagine that you buy an electric toothbrush from a local store. When you first try to brush your teeth, it doesn’t work properly. Using the decision-making steps on page 40, show how you would handle the situation.
Using Medicines Safely

Drugs and Medicines

If you feel a cold or cough coming on, you might head to the drugstore to buy medicine. Remember that a drug is a substance other than food that changes the structure or function of the body or mind. A medicine is a drug that prevents or cures an illness or eases its symptoms. Medicines can help your body in many ways. Figure 11.10 on page 348 gives some examples.

Quick Write
Write about a time when you took medicine prescribed by a doctor because you were ill.
Types of Medicines

There are two main types of medicines: prescription medicines and over-the-counter medicines. A **prescription medicine** is a medicine that can be obtained legally only with a doctor's written permission. When you go to the doctor, he or she may order, or prescribe, medicine. Your doctor will write out instructions that explain how much medicine you should take and how often you should take it. You can fill this prescription at a pharmacy. A **pharmacist** is a person trained to prepare and distribute medicines. Figure 11.11 shows a prescription medicine label.

An **over-the-counter (OTC) medicine** is a medicine that you can buy without a doctor's permission. Over-the-counter medicines are products found in grocery and drugstores. They commonly include pain relievers and cold medications. Always be careful when you use OTC medicines. Follow the directions on the label. If you have questions, contact your doctor or pharmacist. Both OTC and prescription medicines can cause serious problems if you don’t use them properly.

**FIGURE 11.10**

**What Medicines Do**

Medicines keep people healthy in many ways. **How can medicines contribute to good health?**

- **Prevent disease.** Medicines called vaccines protect against diseases that can spread from person to person. When you have been vaccinated, your body can make substances that will fight off the germs that cause a disease.

- **Kill germs.** Medicines called antibiotics kill disease-causing bacteria. Antibiotics should be used with caution because improper use can lead to the development of antibiotic-resistant bacteria. If that happens, when you really need an antibiotic, it might not be able to stop an infection.

- **Relieve pain.** Aspirin, ibuprofen, and acetaminophen are three types of medicines that help reduce pain and fever. Aspirin can also reduce swelling.

- **Treat conditions and diseases.** Some conditions and diseases can be treated with medicines. For example, people with diabetes take insulin to control the disease. People with allergies can take antihistamines to treat allergy symptoms.
Guidelines for Safe Use of Medicines

Medicines can fight disease, but if you don’t use them properly, they can hurt you. One way this happens is through side effects. A **side effect** is a reaction to a medicine other than the one intended. Some side effects are simply unpleasant. For example, a medicine might make you feel thirsty or sick to your stomach. A more serious side effect is an allergic reaction, which may require immediate medical attention from professional health services. Other side effects are dangerous because they might lead to injury. For example, medicines might make you sleepy or dizzy.

You can avoid some side effects if you follow the instructions from your doctor and pharmacist and always inform your doctor of any known allergies to medicines. Read the label on any kind of medicine you use. It explains when and how to take the medicine. Some medicines cannot be taken together. Also, some activities are dangerous when you take certain medicines. Ask your doctor or pharmacist if you don’t understand the label.

**Identify** Name one example of a side effect.
Misuse and Abuse of Medicines

Medicines are drugs. If misused, they can be as harmful as illegal drugs. They can cause addiction, injury, and even death. If you misuse medicines when you're young, you can have health problems later in life. For example, your liver or kidneys might fail. Certain medicines can also be very dangerous to unborn babies, newborns, or young children. A woman who is pregnant or plans to become pregnant should talk to a doctor before she takes any medicine. Figure 11.12 lists some ways to avoid problems when using medicines.

Compare How are medicines and illegal drugs similar?

Some medications have to be taken at certain times of the day. How can you remember when to take a medication?
Lesson 4 Review

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

What I Learned

1. **Contrast** How do prescription medicines differ from over-the-counter medicines?

2. **Vocabulary** Define side effect.

3. **Give Examples** Name three ways you can avoid side effects.

Thinking Critically

4. **Analyze** A certain medication makes you feel dizzy and affects your balance. What activities should you avoid while you are taking that medicine?

5. **Apply** Latrice’s doctor gave her a six-day prescription of an antibiotic for her sore throat. After only three days, all of her symptoms are gone. Should Latrice continue taking the antibiotic? Explain why or why not.

Applying Health Skills

6. **Refusal Skills** Min’s friend has offered her some of her prescription medication just to try it out. What are some ways that Min could refuse the offer?

For more Lesson Review Activities, go to glencoe.com.
Lesson 5

Choosing Health Care

Guide to Reading

Building Vocabulary
Think about the terms HMO, PPO, and POS. Write the definitions of each term. Then rewrite the definitions to include the words that each of their abbreviations stands for.

- primary care provider (p. 353)
- specialist (p. 353)
- health insurance (p. 354)
- managed care plans (p. 354)
- health maintenance organization (HMO) (p. 354)
- preferred provider organization (PPO) (p. 355)
- point-of-service (POS) plan (p. 355)

Focusing on the Main Ideas
In this lesson, you will be able to

- describe the goals of health care.
- identify the types of health care providers and facilities.
- explain the types of insurance that help pay for health care.

Reading Strategy
Comparing and Contrasting As you read this lesson, make a chart to compare and contrast the three different types of managed care plans.

Quick Write
Imagine that you are choosing a health care specialist for an injury or disease. Make a list of questions you might ask him or her about your health.

The Goals of Health Care

What would you do if you got the flu or broke a bone while playing sports? You would visit a doctor. The doctor can help you feel better. He or she can also treat you to prevent further infection or injury.

The goals of health care are to prevent disease and injury as well as cure them. Visit a doctor once a year as part of your health care routine. During these visits, the doctor will examine you to see if you have any conditions that might lead to disease or injury. He or she might also talk to you about any problems that you may

Patients often receive vaccines and other forms of preventive care from primary care providers. How does a primary care provider differ from a specialist?
have. You might talk about how well you sleep, or how nutritious your eating plan is. The doctor might ask you how much physical activity you get on a daily basis. During a checkup, you might also receive care to prevent disease. For example, you might get your vaccinations updated.

**Health Care Providers**

Doctors are not the only professionals who can help you care for your health. Pharmacists, nurses, health educators, counselors, mental health specialists, dentists, and nutritionists also provide health care services. Health care providers are any professionals who help prevent and treat injury and illness.

A **primary care provider** is a health care professional who provides checkups and general care. Examples of primary care providers include your family physician or a nurse practitioner. A primary care provider might send you to a specialist. A **specialist** is a health care professional trained to treat a special category of patients or specific health problems. **Figure 11.13** lists several specialists and their areas of specialty.

**Reading Check**
Name: Give examples of three specialists and a problem that each one might treat.

**Fig 11.13**

### Types of Medical Specialists

There are many different kinds of medical specialists. **What type of specialist would you see if you had blurred vision?**

Below is a list of medical specialists and descriptions of their specialties.

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergists</td>
<td>treat people with allergies and asthma</td>
</tr>
<tr>
<td>Cardiologists</td>
<td>specialize in heart and circulatory system problems</td>
</tr>
<tr>
<td>Dermatologists</td>
<td>specialize in skin disorders</td>
</tr>
<tr>
<td>Gynecologists</td>
<td>specialize in problems of the female reproductive system</td>
</tr>
<tr>
<td>Ophthalmologists</td>
<td>specialize in disorders of the eye</td>
</tr>
<tr>
<td>Orthopedists</td>
<td>specialize in bone, joint, and muscle problems</td>
</tr>
<tr>
<td>Pediatricians</td>
<td>treat infants, children, and young teens</td>
</tr>
<tr>
<td>Plastic surgeons</td>
<td>perform plastic surgery to repair injuries or improve appearance</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>specialize in mental and emotional problems</td>
</tr>
<tr>
<td>Urologists</td>
<td>specialize in kidney, bladder, and urinary problems</td>
</tr>
<tr>
<td>Orthodontists</td>
<td>specialize in straightening the teeth</td>
</tr>
</tbody>
</table>
Health Care in Your Community

Where you go for health care depends on your individual needs. In your community, you’ll find doctors, dentists, and other health care professionals. You will also find a range of other health services provided by the government or other community agencies. These include the public health department, fire department, police, family resource centers, hospitals, and pharmacies. Other resources include nonprofit organizations, such as the American Heart Association and the American Cancer Society.

Health Insurance

Health care can be very expensive, especially in the case of serious disease or injury. Health insurance can help pay for health care costs. **Health insurance** is a plan in which a person pays a set fee to an insurance company in return for the company’s agreement to pay some or all medical expenses when needed. There are several different types of health insurance plans. Each one covers health-related expenses differently. It is important to learn about the types of health insurance plans available before choosing the one that is right for you.

Private Health Care Plans

**Managed care plans** are health insurance plans that emphasize preventative medicine and work to control the cost and maintain the quality of health care. These include the following. A **health maintenance organization (HMO)** is a health insurance plan that contracts with selected physicians and specialists to provide medical services. HMO members pay a fixed monthly rate.
A **preferred provider organization (PPO)** is a health insurance plan that allows its members to select a physician who participates in the plan for a reduced cost or to visit the physician of their choice. PPO members who use their own doctors must pay full price for services until a certain amount of money has been paid. A **point-of-service (POS) plan** is a health insurance plan that combines the features of HMOs and PPOs. Members can see participating physicians at a reduced cost or see nonparticipating physicians for a higher cost.

**Government Public Health Care Programs**

The government has passed health care laws at the federal, state, and local levels that protect people who use and deliver health care services. Public health departments regulate how clean restaurants and other businesses must be to operate safely. Some government programs provide health information to the community. Others offer free or low-cost health care.

---

**Lesson 5 Review**

**After You Read**

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

**What I Learned**

1. **Vocabulary** Define primary care provider.

2. **Identify** What kind of managed care plan offers a fixed monthly payment but limits which health care providers it covers?

3. **Give Examples** What kinds of services do government health care programs provide?

**Thinking Critically**

4. **Apply** How might seeing a health care provider for regular checkups keep a person's medical costs down?

5. **Analyze** Compare and contrast the similarities and differences of an HMO, PPO, and POS plan.

6. **Synthesize** How can understanding the coverage limits of different health care plans help you choose the best plan for yourself?

7. **Analyze** Why are community health resources and organizations important to healthful living?

**Applying Health Skills**

8. **Accessing Information** Charles and his family have moved to a new town. His parents have asked him to find out about health services in their community. What resources can Charles use to find out what health services are offered in his community?
What Steps Can You Take to Make Healthy Decisions?

The decision-making process can help you make healthy and responsible choices. The six steps of the decision-making process are as follows:

- State the situation.
- List the options.
- Weigh the possible outcomes.
- Consider your values.
- Make a decision and act on it.
- Evaluate the decision.

Glasses or Contact Lenses?

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

1 Model

Read how Diana uses the decision-making process to help her decide whether or not to try contact lenses.

Diana wears glasses. She recently joined the volleyball team and wonders if she should get contact lenses instead. Here are the steps that Diana used to make the decision.

Step 1 State the situation: “Wearing glasses bothers me while I’m playing volleyball.”

Step 2 List the options: “I could get contact lenses or sports glasses.”

Step 3 Weigh the possible outcomes: “If I get contact lenses, I can concentrate on playing volleyball. If I get sports glasses, I won’t have to get used to wearing contact lenses.”

Step 4 Consider your values: “Contact lenses can be expensive.”

Step 5 Make a decision and act on it: After talking to the optometrist, Diana decided to try contact lenses.

Step 6 Evaluate the decision: “I am looking forward to my first volleyball game of the season and not having to worry about my glasses.”
Practice

Read the passage and then practice the decision-making process by answering the questions that follow.

Amanda has noticed that some girls in her school have a tan all year long. She knows that they go to a tanning salon in her neighborhood. Amanda thinks she would look good with a tan but has heard that tanning beds can be unhealthy.

1. What decision does Amanda have to make?
2. What are her options?
3. What outcomes could she expect from each of the choices she’s considering?
4. Which values might Amanda need to consider?
5. What advice would you give Amanda?
6. Write a few sentences evaluating the decision you advised Amanda to make.

Apply

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

Pick a hygiene- or health-related item you might want to buy. It might be a tooth whitener, self-tanning lotion, or sunglasses. Then select two different brands or types of that item. Using the decision-making steps, decide which of the two brands or types you would want to buy. Copy the six decision-making steps on a sheet of paper. Next to each step, explain what you did as you completed that step. At the bottom of your paper, describe how the decision will improve your health.

Self-Check
- Did I pick a hygiene- or health-related item that I might want to buy?
- Did I use the six decision-making steps to make a choice?
- Did I describe how the decision will improve my health?
Chapter 11: Personal Health and Consumer Choices

Q: What is acne?
A: Acne is the term for blemishes—such as pimples and blackheads—that occur on the face, neck, chest, back, and upper arms. Dermatologist James Fulton Jr. divides acne into four grades: Grade I is the mildest form, with an equal mix of blackheads and whiteheads. With Grade II, there is an increase in whiteheads. Grade III involves inflamed pimples along with whiteheads and blackheads. Grade IV is the most severe, with large cysts (often red or purple in color), pimples, and, yes, more whiteheads and blackheads.

Q: What causes acne?
A: Acne is mainly caused by the hormonal changes of puberty. Hormones stimulate certain glands to produce more oil. This oil combines with dead skin cells in the pores and becomes acne. While stress alone isn’t enough to cause acne, it may aggravate already problematic skin.

Q: Is acne hereditary?
A: Yes and no. Thanks to genetics, some people are more likely to get acne, but it’s not the only factor.

Q: Why do my nose and chin have so many little black bumps? Are they blackheads or just pores?
A: Most likely they’re blackheads—a combination of dead skin cells and oil. A pore is where the hair follicle comes out of the skin. A blackhead is a plug in that pore.

Q: Does eating empty-calorie foods give you more acne?
A: Diet is not the major factor in acne that it was once thought to be. Foods such as pizza, french fries, and chocolate are not to blame for acne. The oils you eat have nothing to do with the oil that the glands in your skin produce.

LABEL CHECK
When treating acne with over-the-counter products, look for these powerful ingredients:
1. Benzoyl peroxide
2. Salicylic acid
3. Sulfur
4. Retinol
5. Glycolic acid
Lesson 1  Healthy Teeth, Skin, Hair, and Nails

Main Idea  Taking care of your personal health includes caring for your teeth, skin, hair, nails, eyes, and ears.

- To care for your teeth and gums, brush and floss daily and see a dentist regularly.
- Wash your skin daily and use a sunscreen to protect it.
- Washing and brushing your hair regularly will help keep it healthy.
- Both your hair and nails contain a protein called keratin. Keratin gives these structures their strength and flexibility.

Lesson 2  Healthy Eyes and Ears

Main Idea  Caring for your eyes and ears will help keep them healthy.

- Avoid eyestrain by wearing sunglasses outdoors, sitting at least six feet from the television, and using adequate lighting while reading and doing homework.
- Your ears let you hear sound and give you a sense of balance.
- Protect your hearing by keeping the volume down when listening to music and wearing earplugs when near loud sounds.

Lesson 3  Smart Consumer Choices

Main Idea  Knowing how to evaluate products and services will help you become a smart consumer.

- A consumer is a person who buys products and services.
- It’s important to evaluate advertising claims before buying a product or service.
- Comparison shopping can help you make an informed decision.

Lesson 4  Using Medicines Safely

Main Idea  Medicines can contribute to good health when used properly.

- A prescription medicine can only be used with a doctor’s written permission.
- An over-the-counter (OTC) medicine can be used without a doctor’s permission.
- Using medicines improperly can cause harmful side effects.

Lesson 5  Choosing Health Care

Main Idea  The goals of health care are to prevent and treat disease and injury.

- A primary care provider provides checkups and general care. A specialist treats specific diseases.
- Most communities offer a wide range of health care resources and services.
- Health insurance helps people pay for health care costs.
Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–9. After each number, write the term from the list that best completes each statement.

- consumer
- melanin
- advertisement
- acne
- astigmatism
- fraud
- fluoride
- tinnitus
- cataract

Lesson 1 Healthy Teeth, Skin, Hair, and Nails

1. ________ is a chemical that helps prevent tooth decay.
2. Skin gets its color from ________.
3. ________ is a skin condition caused by active oil glands that clog hair follicles.

Lesson 2 Healthy Eyes and Ears

4. An eye condition in which the lens becomes cloudy as a person ages is called ________.
5. ________ is an eye condition in which images of objects appear wavy or blurry.
6. A condition in which there is a constant ringing in the ears is called ________.

Lesson 3 Smart Consumer Choices

7. An infomercial is a type of ________ shown on television.
8. When an ad contains deliberate trickery, the advertisers are guilty of ________.
9. The rights to safety, to be informed, to choose, and to be heard are all ________ rights.

Lesson 4 Using Medicines Safely

10. You must get a doctor’s permission in order to take an OTC medicine.
11. A pharmacist is a person trained to prepare and dispense prescription medicines.
12. Drowsiness and nausea are examples of side effects that you could have from taking medicine.

Lesson 5 Choosing Health Care

13. A specialist is a health care professional who provides checkups and general care.
14. A cardiologist is a kind of health care specialist who treats eye disorders.
15. HMOs, PPOs, and POS plans are all types of managed care plans.
Thinking Critically

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

16. Interpret How do government requirements for drug labels protect your consumer rights?

17. Apply A prescription medicine causes Damien to feel nauseated. What should Damien do?

Write About It

18. Descriptive Writing A new brand of underarm deodorant causes your skin to break out in a rash. Write a detailed plan you could follow to help you find the cause of the rash.

19. Expository Writing Write a letter to your friend who has just moved to a new town. Describe how your friend might get information to help him or her choose a new primary care physician.

Personal Health

Using Microsoft Word®, create a poster to showcase the variety of choices available to help foster good personal hygiene.

- Open a new Microsoft Word® project with a landscape view and insert a table with 2 columns and 6 rows.
- Add the captions: Teeth, Skin, Hair, Eyes, and Ears, by clicking Insert- Picture-WordArt. Adjust the caption font size to 16 and drag them to the top of your poster.
- Using either Clip Art or digital media files, insert an image for each section of your poster. Highlight the image and drag the corner toward the center to size.
- Place your cursor in the box and add details under each caption on how to care for that part of your personal health.
- To remove outside lines of the table, click on Toolbar view-Formatting-Tables and charts. Then select the border button that reflects the desired highlighting: grid outside, grid all boxes, or no grid at all.

Standardized Test Practice

Writing

Read the prompts below. On a separate sheet of paper, write an essay that addresses each prompt. Use information from the chapter to support your writing.

1. A person is experiencing deafness due to problems with his inner ear. Explain how a person with healthy ears is able to hear. Be sure to describe the role that hair cells play in hearing. Then, predict how damage to hair cells could cause deafness.

2. Imagine that you have a company that makes sunscreen. How would you convince buyers to choose your product? Write a script for a television or radio advertisement that sells your product. What health concerns could you address in your advertising?

TEST-TAKING TIP

Find out how much time you have to write your essay. Plan to spend part of that time at the beginning of the test organizing your thoughts and writing a rough outline. Plan to spend another part of that time at the end revising your essay and checking for errors in spelling and grammar.