

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. 147)
- 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.

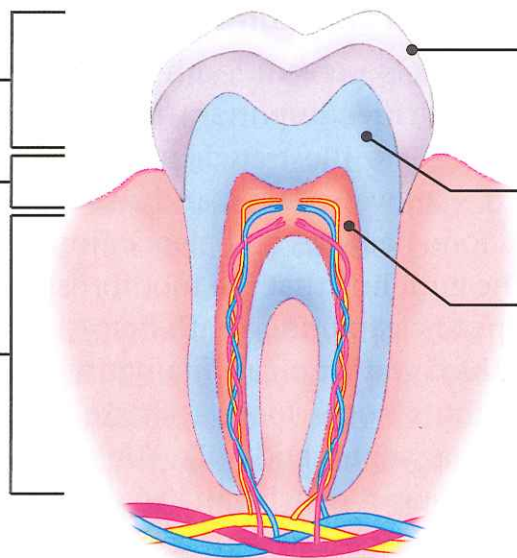
Reading Check

Define What is hygiene?

Crown—the part of the tooth visible to the eye

Neck—the part that connects the crown to the root

Root—the part that holds the tooth in the gum



Enamel—the hard material that covers the crown of the tooth

Dentin—bonelike material surrounding the pulp

Pulp—soft sensitive tissue containing nerves and blood vessels

▲ 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, your teeth can fall out.

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?**

Stage 1

The bacteria in plaque combine with sugars to form a harmful acid. This acid eats into the enamel, the hard outer surface of the tooth.



Stage 2

Repeated acid attacks on the enamel cause a cavity, or hole, to form.



Stage 3

If the cavity grows and reaches the sensitive inner parts of the tooth, it can cause a toothache.



Reading Check

Explain

How does tooth decay occur?



Connect To... Science



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.

► 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?**

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.



- 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 the thumb and forefinger. 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.



Reading Check

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** on the next page. *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, wear protective clothing and use a **sunscreen**. This is a *cream*

- ▲ Dental braces are made of a variety of materials. **Why would someone need to wear braces?**

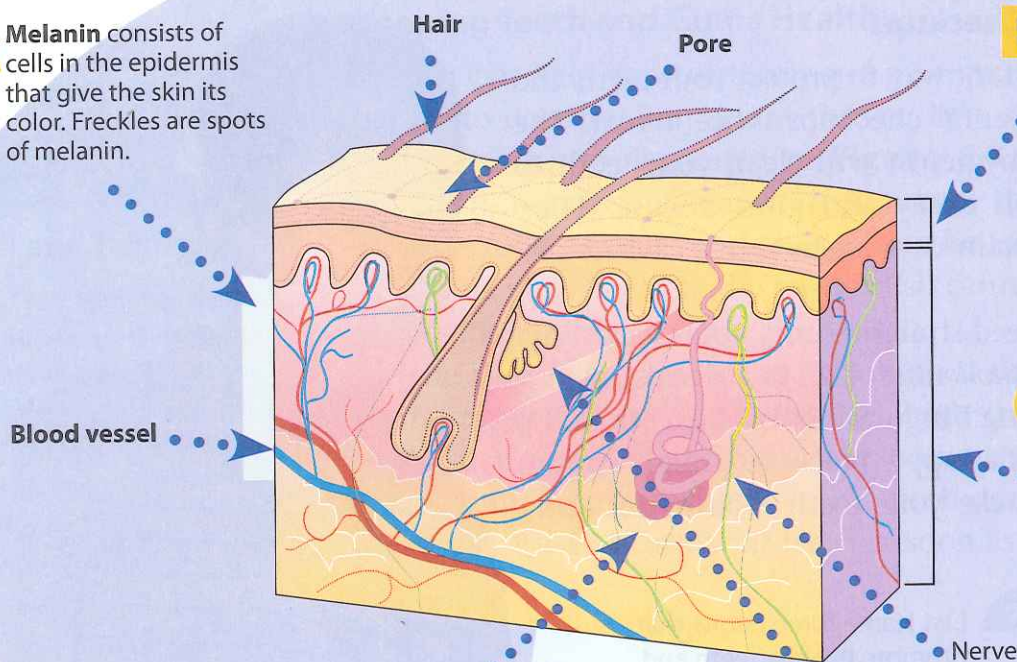
ACTIVITY Careers for the 21st Century

Dental Hygienist

 Dental hygienists examine and clean patients' teeth and gums. Dental hygienists are in demand because everyone needs to have their teeth and gums cared for. You can prepare for a career as a dental hygienist by studying teeth, gums, and the problems they can have.

What skills does a dental hygienist need? Go to Career Corner at glencoe.com to find out.

A **Melanin** consists of cells in the epidermis that give the skin its color. Freckles are spots of melanin.



B The **epidermis** continuously makes new skin cells to replace old ones. These new cells are exposed about every four weeks.

C The **dermis** contains sweat glands, blood vessels, nerve endings, oil glands, and hair roots.

E **Sweat glands** allow perspiration to escape through the pores. Sweat on the skin's surface cools your whole body. Water and salts are eliminated from your body through sweat.

D **Oil glands** keep your skin soft and protect it from cracking and drying.

▲ 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?**

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.



Go Online

Topic: Helping Troubled Skin

Visit 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.



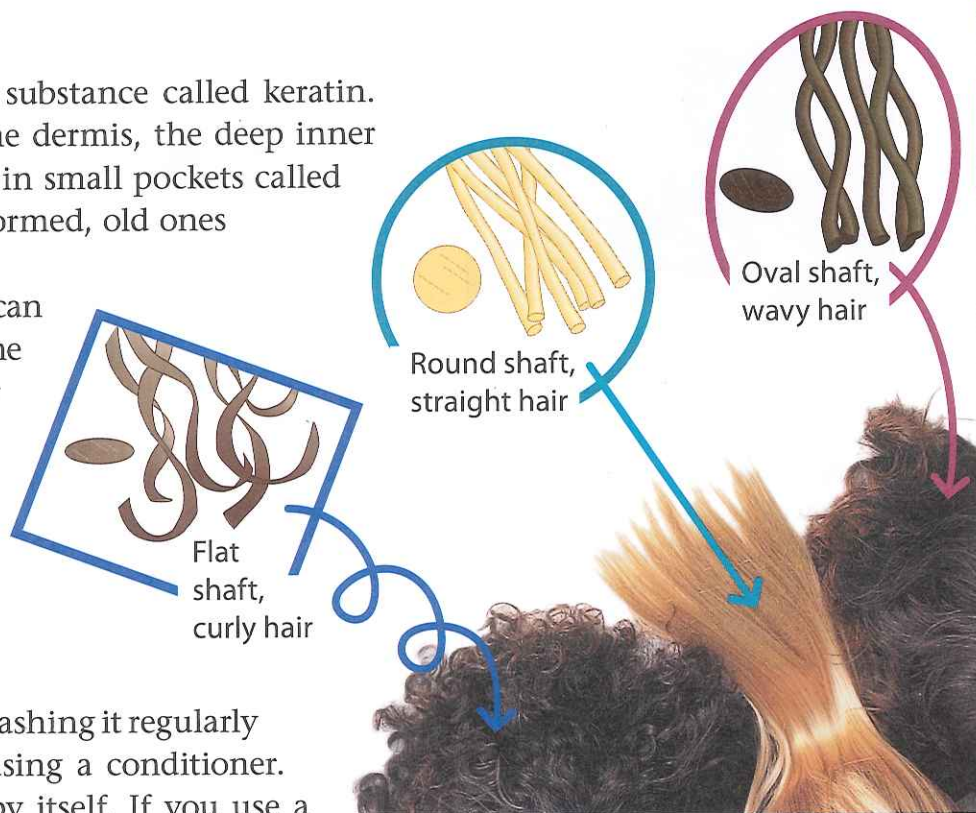
Reading Check

Explain Why is it important to keep 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.

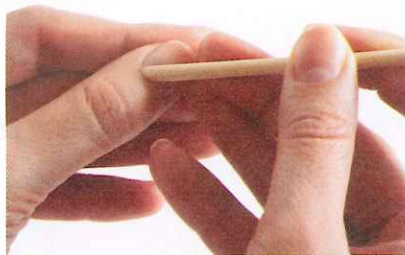
Sometimes, an itchy scalp is caused by head lice. These tiny, wingless insects live in the hair. They are easy to catch from someone else. To prevent lice from spreading, avoid sharing hats, combs, and brushes. If you get lice, you can kill them with a medicated shampoo. You will also need to wash all 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?**



Reading Check

List Name 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?



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

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.



Reading Check

Explain Describe how you should trim your fingernails and toenails.

Lesson 1 Review



After You Read

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.