



## Chapter 20

# Adolescence and the Life Cycle

### Lesson 1

Adolescence – Understanding Growth and Change

### Lesson 2

Moving Toward Adulthood

### Lesson 3

Marriage and Parenting

### Lesson 4

Health Through the Life Span







## FOLDABLES™

### Study Organizer

#### Before You Read

Make this Foldable to help you organize what you learn about growth and changes taking place during adolescence. Begin with a sheet of plain  $8\frac{1}{2}$ " x 11" paper.

##### ▶ Step 1

Fold a sheet of paper in half along the long axis.



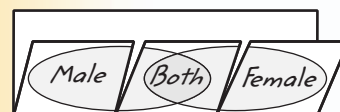
##### ▶ Step 2

Fold into thirds.



##### ▶ Step 3

Cut the top flap along the fold lines. Draw two overlapping ovals, and label as shown.



#### As You Read

As you read and discuss the material in the chapter, use your Foldable to record what you learn about the changes taking place in males and females during adolescence under the appropriate tabs.

### Quick Write

**Using Visuals.** Write sentences that describe each of these stages of life: adolescence, early adulthood, middle adulthood, and late adulthood. How can the healthy behaviors you practice now positively affect your health at each stage of adulthood?



## Lesson 1

# Adolescence—Understanding Growth and Change

### VOCABULARY

adolescence  
puberty  
hormones  
sex characteristics  
gametes  
cognition

### YOU'LL LEARN TO

- Appraise the significance of body changes occurring during adolescence.
- Identify the mental, emotional, and social changes that occur during adolescence.
- Summarize the advantages of seeking advice and feedback regarding the use of decision-making and problem-solving skills during adolescence.



Adolescence is a time of physical, mental/emotional, and social changes.

List three ways that adolescents differ from children.



Learning to cope with the changes of adolescence can help to make your teen years happy and fulfilling.

The period from childhood to adulthood, called **adolescence**, is a time of many exciting challenges and changes. One of the most noticeable of these changes is physical growth. Many of your friends have gotten taller. Voices are changing and bodies are filling out. After infancy, adolescence is the fastest period of growth. Changes are also taking place in your mental/emotional and social life.

## Puberty

Sometime between the ages of 12 and 18, individuals go through Erikson's fifth stage of development—**puberty**, the time when a person begins to develop certain traits of adults of his or her own gender. Puberty marks the beginning of adolescence. **Hormones** are chemical substances that are produced in glands and that help regulate many of your body's functions. The male hormone, testosterone, and the female hormones, estrogen and progesterone, are responsible for the changes that affect teens during puberty.





## Physical Changes During Adolescence

Growth isn't the only body change that occurs during adolescence. Perhaps the most significant body change that takes place is the development of **sex characteristics**, *the traits related to a person's gender*. Some sex characteristics, called primary sex characteristics, are related directly to the production of *reproductive cells*, called **gametes**. The male gametes are **sperm**. In males the production of sperm by the testes begins in puberty. The female's gametes are the **eggs**, or *ova*. All eggs are present at birth, but they don't mature until puberty, when ovulation begins. In females the uterus and ovaries enlarge at this time. Other changes during puberty are those associated with secondary sex characteristics, which are described in **Figure 20.1**.

Look at any group of teens, and you'll notice great variation in the size and shape of adolescents of the same age. This variation can be a source of concern among teens who sometimes compare themselves with others. For example, since boys tend to start their growth spurts later, girls who grow taller than their classmates may feel self-conscious about their height. A boy may be embarrassed when his voice "cracks" because of the growth of the larynx.

Each individual goes through the changes of puberty at his or her own rate. You may experience the changes sooner or later than others, and you may feel uncomfortable about the differences. Just remember that every teen experiences these changes, which are completely normal and will resolve themselves as time passes.

**FIGURE 20.1**

### SECONDARY SEX CHARACTERISTICS

The exact age at which puberty begins is determined primarily by heredity. These changes do not occur overnight but gradually unfold over several months or years.

#### In females:

- Breasts develop
- Waistline narrows
- Hips widen
- Body fat increases
- Menstruation starts

#### In males:

- Facial hair appears
- Voice deepens
- Shoulders broaden
- Muscles develop
- Hairline begins to recede

#### In both:

- Body hair appears
- All permanent teeth grow in
- Perspiration increases



## hotlink

**sperm** and **eggs** Learn more about the functions of the male and female reproductive systems in Chapter 18, pages 468 and 474.



### Strategies for Avoiding Acne

Acne is caused by a bacterial infection in the oil glands, which can cause pimples.

#### Tips for dealing with acne:

- ▶ Avoid oil-based makeup and greasy lotions.
- ▶ Keep your face and hair clean.
- ▶ Change washcloths and towels often.
- ▶ Don't squeeze or scratch pimples.
- ▶ In cases of severe acne, consult your family health care professional or a dermatologist, a doctor who specializes in problems of the skin.





## Hotlink

**brain** Find more information about the structure of the brain and nervous system in Chapter 15, pages 402–404.

## HEALTH

### Online



#### TOPIC The Human Brain

Go to [health.glencoe.com](http://health.glencoe.com) for links to more information about the human brain.

**ACTIVITY** Using the links, research discoveries about the human brain and its development. Write a short paragraph about your findings.

## Mental Changes During Adolescence

Not only does your body grow during adolescence, but so does your **brain**. By the time a person reaches the age of six, his or her brain is 95 percent of its adult size. However, the cerebrum—the thinking part of the brain—continues to develop in adolescence, increasing memory and **cognition**, *the ability to reason and think out abstract solutions*. As a child you could see only limited solutions to a problem; but as an adolescent, you become increasingly capable of solving problems in more complex ways. This new ability enables you to anticipate the consequences of a particular action, think logically, and understand different points of view.

As you are making the transition from child to adult, your vocabulary will grow to enable you to express your new ways of thinking. Expanding on the limited language of childhood will help you express yourself better as an adult.

What specific changes take place in your brain that enable you to develop these new skills? Examine **Figure 20.2**, and read what scientific research is uncovering about the brain during adolescence.

FIGURE 20.2

## BRAIN DEVELOPMENT IN TEENS

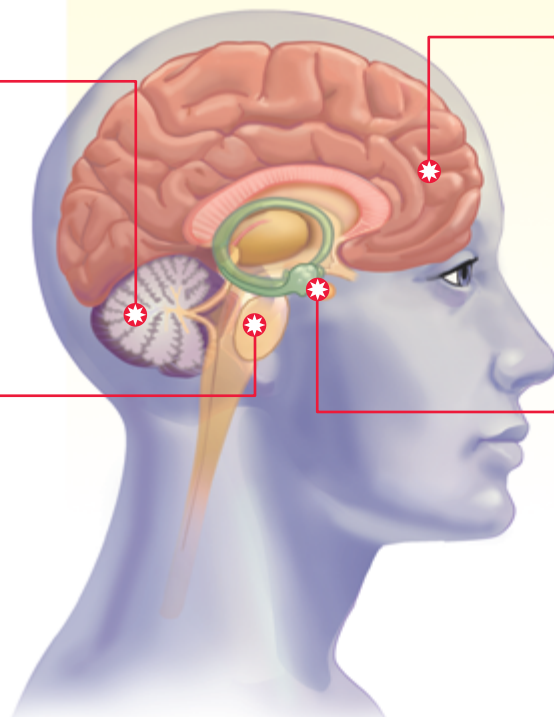
Over the past 25 years, neuroscientists have discovered a great deal about the human brain. Recent imaging techniques have enabled scientists to examine the brains of people throughout their life spans—including the teen years.

### Cerebellum

The cerebellum coordinates muscles and physical movement. Recently scientists have found evidence that it is also involved in the coordination of thinking processes. The cerebellum undergoes dramatic growth and change during adolescence.

### Amygdala

The amygdala is associated with emotion. New studies suggest that teens use this part of the brain rather than the more analytical frontal cortex that adults use in emotional responses. Scientists think this might explain why teens sometimes react so emotionally.



### Frontal Cortex

The frontal cortex is responsible for planning, strategizing, and judgment. The area undergoes a growth spurt when a child is 11 to 12 years of age. This is followed by a growth period when new nerve connections form.

### Corpus Callosum

The corpus callosum connects the two sides of the brain. It is thought to be involved in creativity and problem solving. Research suggests that it grows and changes significantly during adolescence.

Source: National Institute of Mental Health






## Emotional Changes in Adolescence

Teens often experience bursts of energy and waves of strong emotions in addition to the physical and mental changes taking place. Teens may feel that puberty is like being on a roller coaster, with constantly changing feelings that go up and down quickly. You may feel on top of the world one day and down in the dumps the next. The intensity of these feelings can be overwhelming, but it is important to know that every teen experiences these changing feelings. Support and love from family and friends are especially important and can give you a sense of security when you need it. This support can help you become more confident both emotionally and socially.

## Social Changes During Adolescence

During adolescence teens also experience social changes. The need to make friends and be accepted into a peer group becomes important. Close friends are a major part of your social experience. Expanding your circle of friends can be rewarding and fun. For example, you are meeting new people in high school and being exposed to different groups. By taking a variety of classes, and through extracurricular activities, you will meet people from many cultural and social backgrounds. Peers may challenge what you stand for, what you believe, and what you think is right or wrong. Good friends, however, will not ask you to do something that goes against your personal values. Strong friendships generally begin when people realize that they have the same goals, experiences, and values.



 **Discovering who you are is a lifelong process. *How can having close friendships be a positive experience in your development?***

## Developmental Tasks of Adolescence

**Y**ou have read about some of the physical, mental/emotional, and social changes teens experience. Adolescents don't move through these changes separately. At any given time a teen may be dealing with several of them at once. Robert Havighurst, a well-known sociologist, identified more specific tasks connected to the transition from adolescence to adulthood. Some of these developmental tasks include achieving emotional independence from parents, developing your identity, and adopting a personal value system. You will begin to establish goals for a career, and you will find that practicing appropriate behaviors will help you achieve these goals.

As you recognize the adjustments you are going through, evaluate your progress by asking yourself the questions that follow each task on the next two pages to help you assess your personal growth.





► **Establish emotional and psychological independence.**

You may move back and forth between the desire for independence and the security of knowing your family supports you. Teens who have an ongoing, open communication with their parents learn the advantages of seeking advice and feedback regarding the use of decision-making and problem-solving skills. When parents or guardians discuss and explain situations, rules, or reasons in the decision-making process, teens can learn from their modeling of problem-solving skills. You will discover ways that your family's support and guidance can help you become more emotionally and socially independent.

## Exploring Issues

### Should High School Classes Start Later in the Day?

Scientists have found that in late puberty the body secretes the sleep-related hormone melatonin at a different time of day than during other stages of life. This means that teens may not be able to fall asleep until very late. They may not get adequate sleep if the school day starts early. Some schools have decided to start school an hour later. Do you think this is a good idea? Here are two points of view.

**Viewpoint 1: Alexa J., age 17**

For the past couple of years, I haven't been able to fall asleep until late. Then I'm really drowsy in the morning—I have a hard time paying attention in class. Getting an extra hour of sleep would make a real difference. In addition, we wouldn't have to wait in the dark for the school bus. It's time high schools synchronized their clocks with our body clocks!

**Viewpoint 2: Ray S., age 16**

I don't think starting later in the day is going to change anything. Some people will just stay up later. Also, I have a job in the afternoons. If the school day starts later, we get out later, and I lose an hour of work time. Maybe people who have trouble falling asleep should practice a routine to help wind down. My routine seems to work. By the time ten o'clock rolls around, I'm ready to hit the sack.

#### ACTIVITIES

1. Do you think the benefits of starting school later in the day would make a difference in academic achievement? Do you agree that establishing a routine for falling asleep earlier is the way for teens to get adequate rest?
2. Research the issue of sleep cycles in adolescents. Write a short paper explaining your own views.



- ▶ **Develop a personal sense of identity.** Your identity began to develop when you were a child and your parents were your role models. During adolescence you develop confidence and become more independent. *In what ways are you a different person than you were two years ago?*
- ▶ **Adopt a personal value system.** When you were a young child, your parents provided you with a set of rules for appropriate and inappropriate behavior. As an adolescent you can begin to assess your own values when they differ from the values expressed by your peers and others. *Have you begun to establish personal beliefs and values that enhance your health and well-being? Are you acting in ways that support those standards?*
- ▶ **Establish adult vocational goals.** The teen years are the time during which you begin to identify your vocational goals. *Have you set long-term goals and identified steps to reach your goals?*
- ▶ **Develop control over your behavior.** Adolescents make decisions daily about whether to participate in risk behaviors that may harm their health. Considering your values and your short-term and long-term goals will give you a firm idea on the importance of making healthy decisions and avoiding risky situations. *Consider two recent events that challenged you to show emotional maturity and avoid a risk behavior.*



Explore opportunities and find ideas to help you establish educational and vocational goals. **Where can you get information that will help you make important decisions about your future?**



## Lesson 1 Review

### Reviewing Facts and Vocabulary

1. What is *adolescence*?
2. Describe and appraise the significance of two body changes that occur in males and two that occur in females during adolescence.
3. What is *cognition*?

### Thinking Critically

4. **Synthesizing.** Choose one developmental task of adolescence. Explain what steps you might take to accomplish this task.
5. **Analyzing.** Summarize the advantages of seeking advice and feedback regarding the use of decision-making and problem-solving skills during adolescence.

### Applying Health Skills

**Analyzing Influences.** Make a two-column chart. In the first column, list changes other than physical changes that you have observed in yourself since you became an adolescent. In the second column, identify any person, event, or idea that influenced the change.



**SPREADSHEETS** Making a table with a spreadsheet program will help you organize and edit your list. See [health.glencoe.com](http://health.glencoe.com) for tips on spreadsheets.







## Lesson 2

# Moving Toward Adulthood

### VOCABULARY

**physical maturity**  
**emotional maturity**  
**emotional intimacy**

### YOU'LL LEARN TO

- Evaluate positive effects of relationships with peers, family, and friends on physical and emotional health.
- Identify and explain the developmental tasks of adulthood.



Teens spend a lot of time thinking about what they'll be like when they are adults. Write a short paragraph that begins "My vision of myself as an adult is . . ."




Many of the changes that occur in adolescence prepare you for the role of an adult. What does it mean to be an adult? Clearly adulthood isn't something that suddenly appears on the morning of your twenty-first birthday. There is much more than chronological age to be considered. One term often used when defining adulthood is *maturity*. Maturity has several components, including both physical and emotional aspects.

## Physical and Emotional Maturity

In late adolescence or the early twenties, most people reach **physical maturity**, the state at which the physical body and all its organs are fully developed. However, an adult physique doesn't mean that you are an adult. To be an adult, you'll need to develop emotionally.

**Emotional maturity** is the state at which the mental and emotional capabilities of an individual are fully developed. An emotionally healthy person not only has a strong personal identity but also has developed close relationships. The individual possesses positive values and goals. He or she has the ability to give and receive love, the ability to face reality and deal with it, and the capacity to relate positively to life experiences and learn from them. Relationships with peers, family, and friends can have a positive effect on your physical and emotional health by strengthening your resiliency and helping you get through difficult and challenging times.

 **Physical maturity is just one component of adulthood. What other changes took place as this individual became a healthy, emotionally mature adult?**





## Considering the Entire Life Cycle

Human growth and development have intrigued many people over the years. Psychologist Erik Erikson's theory of social development covers the entire life span. Each stage of adulthood is characterized by its own accomplishments, as shown in **Figure 20.3**.




### Young Adulthood

Erikson's stages of life illustrate that as a person progresses through life, his or her goals continue to evolve. Although physical growth occurs automatically, emotional maturity develops as each individual focuses on four major aspects of life: personal independence, occupational choices, intimate relationships, and contributions to society.

**FIGURE 20.3**

### ERIKSON'S STAGES OF ADULTHOOD

The adult years are made up of three major stages. Each stage is associated with a goal that involves a person's relationships with other people.

Stage 6 – Young Adulthood 19 to 40 years	Stage 7 – Middle Adulthood 40 to 65 years	Stage 8 – Late Adulthood 65 years to death
		
<p><b>Goal:</b> To develop intimacy</p> <p><b>Description:</b> Person tries to develop close personal relationships.</p> <p><b>Positive Outcomes:</b> Individual can form close relationships and share with others; families are started.</p> <p><b>Negative Outcomes:</b> Individual may fear commitment, feel isolated, and be unable to depend on others.</p>	<p><b>Goal:</b> To develop a sense of having contributed to society</p> <p><b>Description:</b> Individual looks outside self and cares for others, often through grandparenting or volunteering.</p> <p><b>Positive Outcomes:</b> Individual helps others and the next generation.</p> <p><b>Negative Outcomes:</b> Person may remain self-centered and have little involvement with others.</p>	<p><b>Goal:</b> To feel satisfied with one's life</p> <p><b>Description:</b> Person tries to understand meaning of own life.</p> <p><b>Positive Outcomes:</b> Adult will have a sense of fulfillment and satisfaction with life choices.</p> <p><b>Negative Outcomes:</b> Person may feel disappointment with life's achievements.</p>





# Health Skills Activity

## Decision Making: Exploring Careers

"I just had a talk with the school counselor," Jason says to his friends over lunch. "He gave me tips on how to decide on a career. I'm glad summer is almost here so I can get started!"

"You mean you're going to spend your summer exploring careers?" Kim asks. "Just what did the counselor say?"

Jason replies, "Well, because I'm interested in health care, the counselor advised that I volunteer at the hospital. In fact, the hospital has a Medical Explorers Club that I can get involved in."

"What's the rush?" Lonnie asks, "You've got plenty of time to do these things, right, Kim?" "Lonnie's right," Kim agrees. "Just take it easy this summer and hang out with us. What's your hurry, anyway?"

Jason wonders what he should do.



### What Would You Do?

*Apply the six steps of the decision-making process to Jason's dilemma. Identify a health-promoting decision that will positively affect Jason's future.*

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.

## Developing Personal Independence

The desire for independence during adolescence is a part of the quest for *self-actualization*, which includes developing one's capabilities to the fullest. When leaving home or beginning to work full-time, young adults may substitute the emotional support of friends for the support they once received from parents. As they mature, however, they become more self-sufficient.

## Making Occupational Choices

As a teen you probably are giving some thought to what you want your life to be like when you are an adult. Part of that thought process may include your ideas about a career or occupation. Your ideas may be influenced by a part-time job, a role model, or the amount of education beyond high school required for a specific career.



## Establishing Intimate Relationships

As individuals grow into adulthood, they begin to develop emotional intimacy with other individuals. **Emotional intimacy** is the ability to experience a caring, loving relationship with another person with whom you can share your innermost feelings. During this time, some people may have several successive romantic relationships. This may result in marriage when individuals are ready for a permanent commitment. Individuals who are occupied with establishing a career or determining their own identity may decide to seek romantic relationships later or not at all. Some people choose to remain single. Practicing abstinence until marriage gives a person freedom from sexually transmitted diseases and maintains options for a healthy future.

## Contributing to Society

Another task of young adulthood includes determining where and how a person fits into society. You have probably already developed some of your own political ideas and religious views. Voting in elections and taking part in community projects is a way of increasing self-esteem and confidence and of contributing to society in a positive and effective manner.



Forming intimate relationships allows two people to spend time together enjoying shared interests.

*How might a close, committed relationship help a person throughout later adulthood?*



## Lesson 2 Review

### Reviewing Facts and Vocabulary

1. When do most people reach physical maturity?
2. What is the difference between *emotional maturity* and *emotional intimacy*?
3. What are the four developmental tasks of adulthood?

### Thinking Critically

4. **Analyzing.** What does Erikson say is the goal of young adulthood? Why might this goal be the most challenging? Explain your reasoning.
5. **Synthesizing.** Evaluate positive and negative effects of relationships with peers, family, and friends on a person's physical and emotional health.

### Applying Health Skills

**Goal Setting.** Identify two occupations of interest to you. Using the goal-setting process discussed in Chapter 2, list steps you can take as an adolescent to prepare for each occupation. Share these steps with a parent or your school counselor, and incorporate into your plan any additional steps they suggest.



**INTERNET RESOURCES** Use the Internet to find information about different careers. See Career Corner at [health.glencoe.com](http://health.glencoe.com).







## Lesson 3

# Marriage and Parenting

### VOCABULARY

**commitment**  
**marital adjustment**  
**adoption**  
**self-directed**  
**unconditional love**

### YOU'LL LEARN TO

- Distinguish between a dating relationship and a marriage.
- Demonstrate how married couples use effective communication skills in maintaining healthy relationships.
- Describe the roles of parents, grandparents, and other family members in promoting a healthy family.



Marriage and parenting involve many responsibilities. List five responsibilities of parenthood.



When two people decide to marry, they sometimes attend premarital counseling sessions to build skills for a healthy, lasting relationship. *Why is making a commitment for life important to a successful marriage?*

According to the U.S. Census Bureau, nearly nine of every ten people expect to marry in their lifetime. Although close to half of first marriages end in divorce, most individuals who marry begin with the intent of making a lifetime commitment. A **commitment** is a *promise or a pledge* that partners make to each other. Marriage is a long-term commitment.

## Marriage

People marry for different reasons. Most people marry because they fall in love and are ready to enter into a lasting, intimate relationship. Couples in a marriage are able to share togetherness and give each other support in hard times as well as good times.

### Choosing Marriage

There are several differences between a dating relationship and a marriage. When two individuals understand that marriage is their eventual goal, their relationship becomes more thoughtful, they make deeper commitments to each other, and they consider long-term consequences when making decisions. If an individual has any doubts or questions about a partner's reasons for marrying, these questions should be fully explored before the marriage takes place.





# Hands-On Health

## ACTIVITY

### Conflict-Resolution Skills for a Healthy Marriage

Good communication is critical for a successful marriage. Spouses who share feelings and express concerns in a respectful way are more likely to settle conflicts effectively. In this activity you will role-play a solution to a challenging marital situation using good communication and conflict-resolution skills.

#### What You'll Need

- scenarios provided by your teacher
- paper and pencils or pens

#### What You'll Do

1. Each group will be given a scenario that poses a potential challenge to a marriage. Topics may include moving because of a spouse's job, struggling to pay the mortgage, and caring for a sick relative.

2. Using content from this chapter, brainstorm several ways that the conflict can be resolved successfully. For example, for moving because of a spouse's job the partners may work together to find a new home both spouses love; budget for long-distance phone calls; agree to visit old friends and family often.

3. Plan a dialogue or skit showing ways the situation can be resolved. Use conflict-resolution skills that include "I" messages, listening skills, and agreeing on a solution that benefits both sides. Present your skit to the class.

#### Apply and Conclude

Write a paragraph explaining what you have learned about the importance of good communication and problem-solving skills in a marital relationship.

### Successful Marriages

Making a life commitment is only the first step in a successful marriage. **Marital adjustment**—how well a person adjusts to marriage and to his or her spouse—depends on these factors:

- ▶ **Good communication.** Couples need to be able to share their feelings and express their needs and concerns. Demonstrating communication skills helps couples build and maintain a healthy marriage relationship.
- ▶ **Emotional maturity.** People who are emotionally healthy try to understand their partners' needs and are willing to compromise. They don't always think of themselves first; they consider what is best for the relationship.
- ▶ **Similar values and interests.** When couples share attitudes about the importance of good health, religious beliefs, cultural heritage, family, and friendships, they spend more time together, which strengthens a marriage.



## Resolving Conflicts in Marriage

Even in the best marriages, conflict occasionally results because no two people will always agree on everything. Some common issues that cause problems in marriages include the following:

- ▶ Differences in spending and saving habits
- ▶ Conflicting loyalties involving family and friends
- ▶ Lack of communication
- ▶ Lack of intimacy
- ▶ Jealousy, infidelity, or lack of attention
- ▶ Decisions about having children and arranging child care
- ▶ Abusive tendencies or attitudes

In a successful marriage both partners respect, trust, and care for each other. Conflicts are resolved fairly without damaging the self-esteem of either partner. Couples can reduce the impact of conflict by developing good communication and **conflict-resolution** skills. Sometimes resolving marital conflict requires that a couple seek counseling.

### hotlink

**conflict resolution** Find out what strategies can help in solving a conflict by reading Chapter 10, page 264.



Teens have the responsibility to finish school and set personal goals before considering marriage. *What added responsibilities come with a marriage commitment?*

## Teen Marriages

One of the most important factors for a successful marriage is maturity. Emotional maturity enables partners to deal with the problems and decisions of marriage. Most teens are still struggling to figure out their own identity and to set goals for their own future. It is unlikely that they have had a chance to determine what is important to them or what they want in a marriage partner. That's one reason that about 60 percent of marriages involving teens end in divorce. Statistics from the CDC indicate a high probability that a teen marriage will end in its first few years.

Once in a marriage relationship, teens begin to realize that they have increased responsibilities that may interfere with personal freedoms and educational or career goals. They also recognize that they do not have enough life experience to make this important and lasting life choice. Overwhelming financial pressures add stress to the relationship. Marriage difficulties arise as the newness wears off and teens recognize the responsibilities required to make the marriage succeed.







## Responsibilities of Parenthood

**A**fter marriage many couples decide to start a family. Some couples choose to adopt a child. **Adoption** is the legal process of taking a child of other parents as one's own. Mature couples also may make a choice to bring foster children into their lives. Becoming a parent can be an exciting experience. Most parents find raising a child to be both challenging and rewarding, and they take great joy in loving and caring for their children. Parents watch with pride and joy as the child grows and develops within a healthy family environment. Parenting is a serious, ongoing responsibility. Parents must provide protection, food, clothing, shelter, education, and medical care. Parenting also involves providing guidance, instilling values, setting limits, and giving unconditional love.

### Providing Guidance

Parenting involves providing guidance and teaching children that each individual is responsible for his or her own successes and failures. One way to do this is by encouraging children and helping them develop a sense of pride in their accomplishments. Another aspect of parenthood is guiding and protecting children while teaching them to make their own decisions. Watching children learn to get along with others and solve their own problems is a satisfying experience for a parent. When parents are joined by the extended family—grandparents and other family members—in their role of promoting a healthy family, the joy of raising children becomes a shared experience. When children see family members interacting in a mature, loving, and caring manner, they are more likely to grow up to be healthy and productive.

### Instilling Values

Parents with a strong commitment to their value system and spirituality wish to pass on these important aspects of life to their children. As children grow, they develop a set of *values*, the system of beliefs and standards of conduct that they find important and that will guide the way they live. Values help children develop strong character and resiliency to resist the negative influences they may encounter. Parents who teach positive values help their children become happy, mature adults.

#### Did You Know?

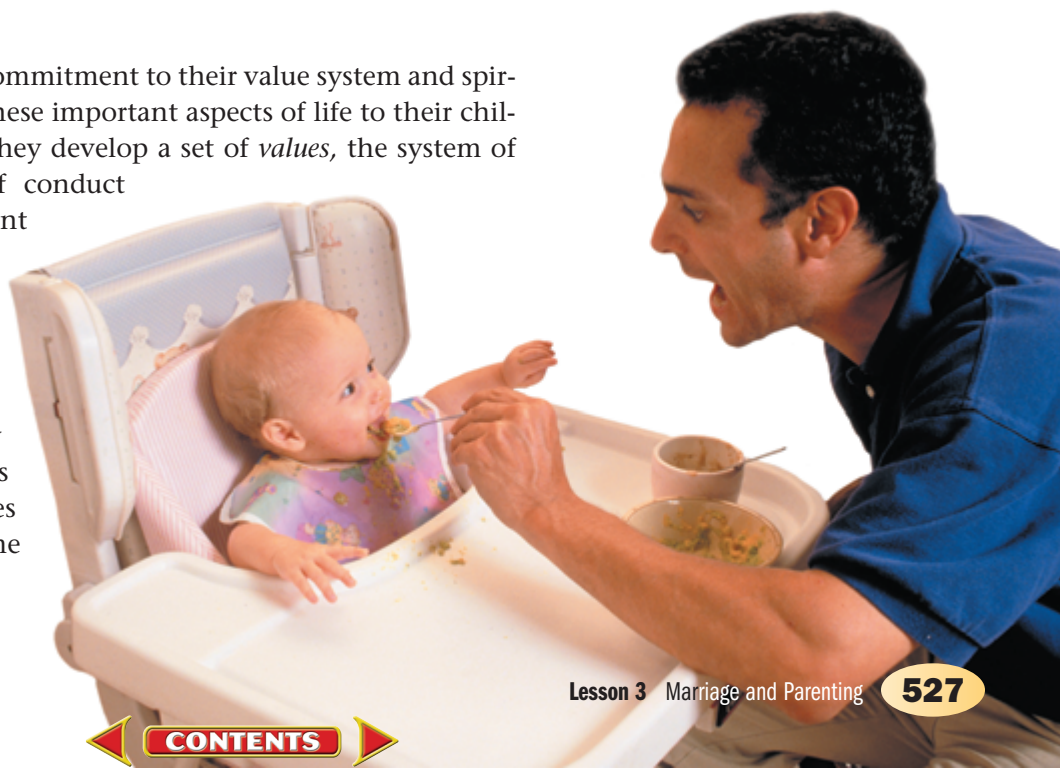


For teens the challenges of parenthood are especially difficult. The consequences of teen parenthood include

- financial problems.
- restraints on educational and career plans.
- emotional stress.
- limitations on personal and social life.



A child can bring pride and joy, but he or she also brings new responsibilities. *What role does this father have in promoting a healthy family?*





**Unconditional love is an important responsibility of parenthood. How can unconditional love contribute to a healthy childhood experience?**



## Setting Limits

One way parents can help their children develop positive values is to set limits and establish a clearly defined set of rules. When children learn limits, they become **self-directed**, or *able to make correct decisions about behavior when adults are not present to enforce rules*. When children must be disciplined, parents should follow these guidelines:

- ▶ Act quickly so that children understand the link between misbehavior and consequences.
- ▶ Distinguish between the behavior and the child so that children think of themselves as people who sometimes misbehave rather than as bad children.
- ▶ Be consistent with rules and consequences so that children can easily establish a connection between certain behaviors and resulting consequences. Praise positive behavior.

## Giving Unconditional Love

One of the most important responsibilities of parenthood is providing children with **unconditional love**, *love without limitation or qualification*. Parents need to show their children love at all times—whether the child is well-behaved, happy, sad, sick, or afraid. Receiving unconditional love helps a child thrive.



## Lesson 3 Review

### Reviewing Facts and Vocabulary

1. What commitment do two people make to each other when they marry?
2. What are two communication skills that help determine a successful marital adjustment?
3. Describe how parents, grandparents, and others contribute to a healthy family.

### Thinking Critically

4. **Analyzing.** Explain why choosing to become a parent is one of the most serious decisions a person can make.
5. **Synthesizing.** Distinguish between a marriage and a dating relationship. Discuss ways that responsibilities of marriage are different from dating.

### Health Skills Activity

**Advocacy.** List important techniques and responsibilities involved in raising a healthy, happy child. Create a pamphlet of parenting tips for married couples thinking of starting a family.



**INTERNET RESOURCES** Learn more online about parenting. See [health.glencoe.com](http://health.glencoe.com) for Web Links that offer tips for parents and families.





## Lesson 4

# Health Through the Life Span

### VOCABULARY

**transitions**  
**empty-nest syndrome**  
**integrity**

### YOU'LL LEARN TO

- Describe the physical, mental/emotional, and social transitions that occur during middle and later adulthood.
- Identify and analyze lifestyle behaviors that promote health and prevent disease throughout the life span.
- Analyze the influence of laws, policies, and practices on health-related issues, including those related to disease prevention.



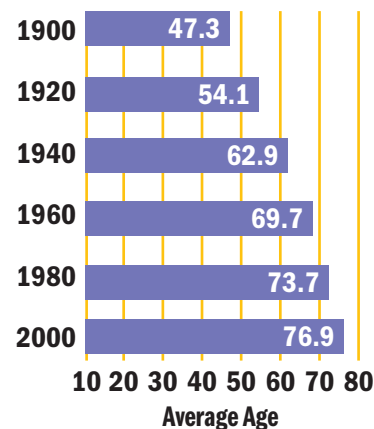
Think about some happy, healthy older adults you know.

What characteristics do they share? How do these characteristics contribute to their positive attitude?

In the United States in 1900, life expectancy was only about 47 years. Today it is almost 77 years and continues to rise. What has contributed to this increase? One factor is the advances in health care that occurred throughout the twentieth century. Another factor is the public's increased awareness about the importance of practicing healthful behaviors at all ages. Yet another is the influence of laws, policies, and practices on health-related issues, particularly those related to disease prevention.

## Middle Adulthood

In the first three lessons of this chapter, you read about the many changes that take place during adolescence and young adulthood. Erikson's seventh developmental stage is middle adulthood, encompassing the ages from 40 to 65. These years are often full of **transitions**, *critical changes that occur at all stages of life*. It can be a time of family and individual accomplishments, such as children graduating from college, the arrival of the first grandchild, achievement of a satisfying career goal, or recognition of the individual's contributions to community and friends. Enjoyment of these accomplishments is more fulfilling when people are in good health.



The average life expectancy in the United States has increased dramatically in the last 100 years. *Why has life expectancy risen?*





## Physical Transitions

Change doesn't stop when adolescence ends; it continues throughout the life span. People in middle adulthood experience physical changes as their bodies begin to age. Skin loses its elasticity, the functioning of the body's organs slows, and the body's immune system becomes less effective. Females experience menopause around ages 45 to 55. This is the stopping of ovulation and menstruation, after which a female cannot get pregnant. Hormonal changes during menopause often cause physical effects that may include hot flashes.

FIGURE 20.4

## KEEPING YOUR BODY HEALTHY THROUGHOUT THE LIFE SPAN

Many of the health habits you develop as an adolescent will affect the way you feel as you grow older. Practicing healthful behaviors and avoiding tobacco, alcohol, and other drugs during your teen years will reduce your risk of developing serious problems such as diabetes and heart disease in the future.

**Eyes** Eyesight changes with age. The eyes have more difficulty bringing images into focus. Eating plenty of leafy green vegetables, controlling blood pressure, and avoiding tobacco use promotes eye health. Sunglasses protect your eyes from damaging UV rays.

**Ears** Loud sounds take a toll on your hearing. Limit your exposure to noise. Keep the stereo at a low volume. Use earplugs when operating noisy equipment.

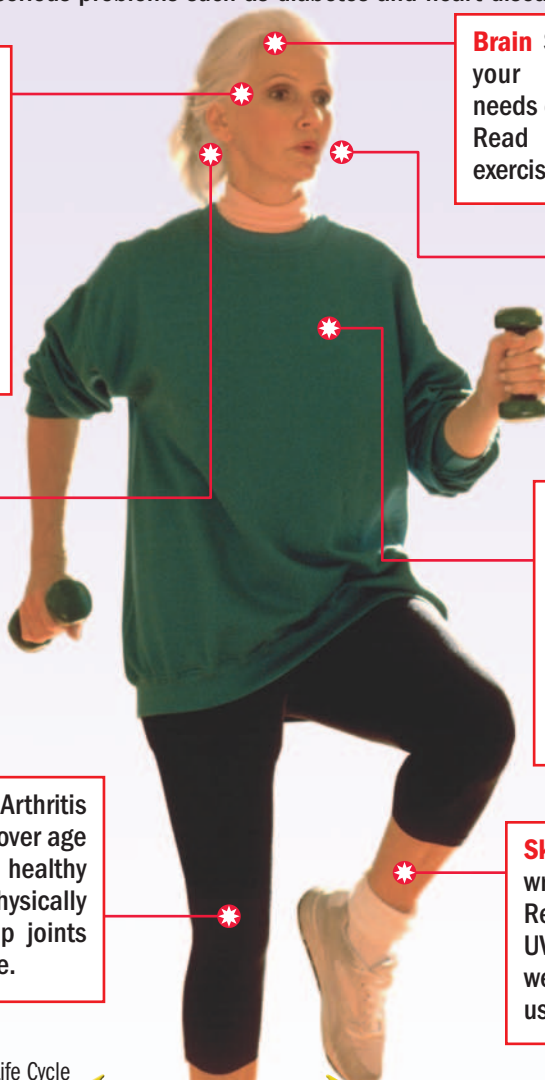
**Muscles and Joints** Arthritis affects half of those over age 65. Maintaining a healthy weight and being physically active can help keep joints healthy and pain free.

**Brain** Scientists say that like your muscles, your brain needs exercise to stay healthy. Read and keep learning to exercise your brain.

**Mouth** Teeth and gums can become decayed and diseased without proper care. Brush and floss regularly. See a dentist every six months.

**Heart** Lack of physical activity and a diet high in saturated fats are known risk factors for heart disease. Engaging in regular aerobic activity and choosing foods low in saturated fats greatly reduce the risk of heart disease.

**Skin** Aging skin may become wrinkled, spotted, and dry. Reduce exposure to harmful UV rays by covering up and wearing a sunscreen. Avoid using tanning beds.





Research indicates that most people who have practiced healthy behaviors such as weight management, nutritious eating, and regular physical activity as teens and young adults find these changes to be less severe. Adults who have developed lifelong healthy habits and continue to be active stay healthy by eating low-fat, high-fiber diets and avoiding tobacco, alcohol, and other drugs. Strength training has been proven to provide significant benefits to most adults. Those benefits include increasing muscle mass, preserving bone density, and protecting the major joints from injury. **Figure 20.4** on page 530 describes some healthy behaviors you can begin now to reduce your risk of developing the illnesses and disabilities that historically have been common among older adults.

## Mental Transitions

Just as exercise strengthens the muscles of people at any age, mental activities strengthen the brain. Solving puzzles, reading, and playing board games provide mental stimulation. An adult who “exercises” his or her brain remains mentally active. Learning is a lifelong pursuit. At midlife many adults start new careers, return to school, and learn new hobbies. The use of computers gives older adults opportunities to broaden their access to information. People reach middle adulthood with a great deal of knowledge and experience, which they can use to pursue new interests.

## Emotional Transitions

The emotional transitions for some people in middle adulthood are much like the “growing pains” of adolescence. Most people have by this time experienced many of life’s greatest joys, including children, pride in their personal accomplishments, and some disappointments. The midlife crisis for some individuals results from questions and concerns about whether they have met their goals, feel loved and valued, and have made a positive difference in the lives of others. Keeping the health triangle in balance and continuing to set goals along the way will help people avoid these concerns.

## Social Transitions

Most social transitions during middle adulthood focus on the family. Many adults of this age are faced with the death of a parent or the need to adjust to their children’s growing up and leaving home. *The feelings of sadness or loneliness that accompany children’s leaving home and entering adulthood are called **empty-nest syndrome**.*

People who maintain healthy relationships with family and friends have less difficulty adjusting to these changes. For many this is a time to apply their talents and life experience to community and social programs. They use their time to pursue new interests and make new friends. Developing good social skills as an adolescent helps ease these transitions.

## CHARACTER CHECK

**Respect.** Many older adults enjoy active, vital lives and often possess insights based on their varied experience. Try to draw upon their wisdom and knowledge by seeking their advice. **List ways you can show respect to older adults and ways you think their knowledge might benefit you in your health decisions.**



**Meeting new challenges is just one way to maintain physical health. *How can your actions as a teen help prepare you for the physical, mental, emotional, and social transitions of adulthood?***





## Late Adulthood

Erikson's final stage of development, late adulthood, occurs after age 65. One of the goals of people at this stage is to look at life with satisfaction and a sense of fulfillment. Older adults evaluate the events of their lives and their achievements. If they have lived their lives with **integrity**, making their decisions with *a firm adherence to a moral code*, they are likely to be satisfied. For example, a person who considered family a high priority may have also succeeded in a career while providing for family. Older adults who have maintained intimate relationships and remained committed to a system of values will have a sense of satisfaction. They can look back without regret and feel content with their accomplishments.

## Real-Life Application

### Government Spending for Health Research

The National Institutes of Health (NIH) gathers information from many sources to establish research priorities for the prevention and treatment of diseases, including those that affect older people. Study the illustration and captions. Then complete the activity to advocate for one of the following aging-related health issues.



Source: National Institutes of Health, 2002

#### Advocacy groups

The Alzheimer's Association advocates increased funding for **Alzheimer's disease** research.

#### Volunteer groups

Stroke survivors have testified to Congress about increased funding for **stroke** and heart research.

#### Professional groups

The American Academy of Orthopaedic Surgeons advocates increases in NIH funding for **osteoarthritis** and other musculoskeletal disorders.

### ACTIVITY

Choose one disease related to aging that you believe should receive additional research funding from the NIH. Then compose a letter to a voluntary health organization, a member of Congress, or a patient advocacy group. Write with conviction, and target your letter to the people who will be reading it. Support your letter with data from your research.





## Expanding Opportunities in Late Adulthood

Because of the increase in life expectancy in the United States, most adults can enjoy many years of late adulthood. Many look forward to retirement so that they can pursue new interests. Others choose to continue to work or even change careers. For many volunteering is another way of staying active. However they choose to do it, adults who remain mentally and physically active enjoy their later years more than those who don't challenge themselves.

## Public Health Policies and Programs for Older Adults

The Social Security system, first created in 1935, provides benefits to older adults, as well as people with disabilities. To assist retirees with their health care needs, the government offers Medicare to people 65 years of age and older and Medicaid to people with low incomes and limited resources.

Because of better health care, people can now expect to live longer after retirement. For this reason, financial planning is essential. Although some companies provide retirement benefits, many workers must plan for their own retirement with personal or company-run long-term savings plans. Through use of these funds in conjunction with Social Security benefits, the poverty rate for older adults has been reduced. Many older adults are finding that, because of a lifetime of healthy behaviors, the years after retirement are their best.



### What are Social Security credits?

As you work and pay taxes, you earn "credits" that count toward eligibility for future Social Security benefits. You can earn a maximum of 4 credits each year. Most people need 40 credits (ten years of work) to qualify for benefits.



## Lesson 4 Review

### Reviewing Facts and Vocabulary

1. What transitions do people in middle adulthood face?
2. What causes empty-nest syndrome?
3. What is *integrity*?

### Thinking Critically

4. **Analyzing.** Name specific examples of the relationship between health decisions you make as a teen and disease prevention later in life.
5. **Evaluating.** How have programs such as Social Security and personal retirement plans changed the lifestyles of older adults? Analyze how laws providing Social Security and Medicare benefits can enhance health and prevent disease in older adults.

### Applying Health Skills

**Goal Setting.** Write a list of goals indicating where you would like to be when you reach middle and late adulthood. The list should include physical, mental, emotional, and social goals. Next to each goal, write a healthful behavior that you can start now to ensure that you will reach your goal.



**WORD PROCESSING** Use a word-processing program to set up a table listing your goals. Go to [health.glencoe.com](http://health.glencoe.com) for help using your word-processing program.





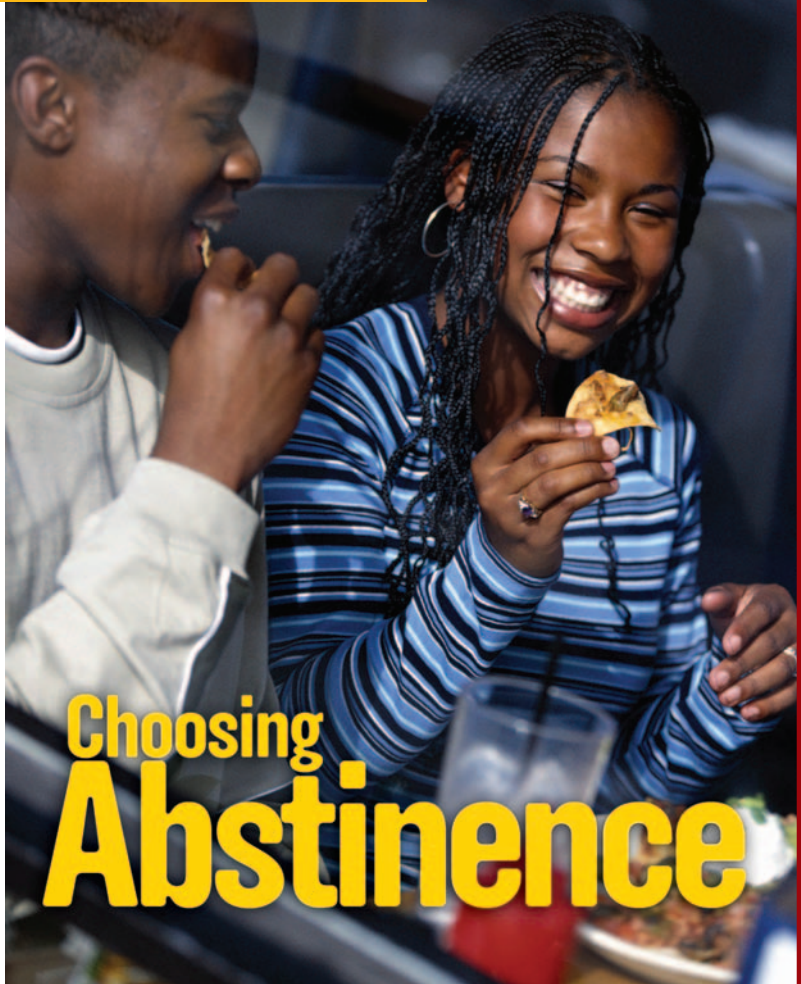
## Why more and more teens are making smart choices.

**B**y most measures, Beth is a typical teenager. She lives in suburban New Jersey, likes to read, and loves to go out dancing with her friends. When it comes to her ideas about sex, Beth gets a lot of support from her peers. This 17-year-old believes that having sex before marriage is the wrong thing to do. “I’m not ready emotionally,” she says. “I think I should wait for my true love.”

Beth and her friends abstain from sex to avoid unplanned pregnancy and STDs, and because of their beliefs. The National Campaign to Prevent Teen Pregnancy has sponsored a poll of high school seniors. Many who responded said that morals, values, and/or religious beliefs play the biggest role in their decisions to remain abstinent. Whether it’s a personal code, their family’s values, or religious teachings, these principles can be a powerful deterrent.

Take Bill, 17, of Uniontown, Pennsylvania. He feels that having sex before marriage would be letting himself and his principles down. He had a relationship that “constantly tested” him, he says, but “no matter how tempting things got, we stuck to our guns and never gave in.”

Jane, 17, of Harbor Springs, Michigan, is another example. She made a commitment to herself two years ago not to have sex until she was married—because of her faith and her feeling that sex required a long-term commitment. Eventually, her boyfriend of a year and a half



## Choosing Abstinence

threatened to break up with her unless she had intercourse with him. “I realized that he didn’t really care about what I really want out of life,” says Jane, who stood her ground against the boyfriend’s demands. “I broke up with him. Now I’m dating a guy who understands what’s important to me.” ■

### TIME to THINK...

### About Abstinence

**With a small group, write a short dialog in which you advise a friend who is being pressured into sexual behavior to avoid sex. Use the list of reasons you brainstormed in your dialog.**



## Health Skills Application



**1. Analyzing Influences.** Adolescence is a stage marked by change. List three changes teens experience. Appraise and explain how each influences and contributes to personal growth for a healthy life. (LESSON 1)



**2. Refusal Skills.** You have your sights set on a career goal, but your friends want you to go against a school rule that might cause you to jeopardize that goal. Write three refusal statements that are based on your goals. (LESSON 2)



**3. Accessing Information.** Poll friends and acquaintances who want to get married about why they would like to do so. Identify similar reasons, and use the information to create a graph showing the number of individuals choosing each reason. (LESSON 3)



**4. Practicing Healthful Behaviors.** Analyze the dynamics of family roles and responsibilities relating to health behaviors. Work with an older adult in your family to identify one health behavior that you can do together. (LESSON 4)

## CAREER Corner

### Gerontologist

If you get along well with older adults, you might want to consider a career as a gerontologist. A gerontologist often works with other professionals, such as occupational and physical therapists, dietitians, and lawyers, to improve the quality of life for older persons. Some gerontologists work in nursing homes, senior centers, and other community facilities. Still others teach or work in research facilities. Because the population of the United States is aging, the job outlook for individuals working in gerontology is excellent. Find out more about this and other careers in Career Corner at [health.glencoe.com](http://health.glencoe.com).



## BEYOND the Classroom

### Parent Involvement

**Advocacy.** Find out about community resources available to help parents with their parenting roles and child-care options. Are there programs associated with local schools or colleges? Find out how you and your parents can become involved in such programs.



### School and Community

**Active Older Adults.** Visit a senior center in your community. Meet some of the older adults who use the center. Find out why they visit the center and what other resources they use. If possible, volunteer at the center.







# Chapter 20 Review

## After You Read

Use the notes you have taken in your Foldable to review what you have learned about growth and changes that take place during adolescence.

**FOLDABLES™**  
Study Organizer

## ▶ EXPLORING HEALTH TERMS *Answer the following questions on a sheet of paper.*

### Lesson 1 *Replace the underlined words with the correct term.*

<b>adolescence</b>	<b>hormones</b>
<b>cognition</b>	<b>puberty</b>
<b>gametes</b>	<b>sex characteristics</b>

1. A person begins to develop sex characteristics during cognition.
2. Gametes are produced in glands and help regulate many of the body's functions.
3. During adolescence, puberty, the traits related to a person's gender, develop.

### Lesson 2 *Match each definition with the correct term.*

<b>emotional intimacy</b>	<b>physical maturity</b>
<b>emotional maturity</b>	

4. The state in which the physical body and all its organs are fully developed.
5. The state in which the mental and emotional capabilities of an individual are fully developed.

### Lesson 3 *Fill in the blanks with the correct term.*

<b>commitment</b>	<b>self-directed</b>
<b>marital adjustment</b>	<b>unconditional love</b>
<b>adoption</b>	

6. When someone adjusts to marriage or to his or her spouse, that person makes a \_\_\_\_\_.
7. Making decisions about behavior when adults are not present to enforce the rules is an indication that a child is \_\_\_\_\_.
8. When parents show their child love at all times without limitation or qualification, the parents are giving \_\_\_\_\_.

### Lesson 4 *Identify each statement as True or False. If false, replace the underlined term with the correct term.*

<b>empty-nest syndrome</b>	<b>transitions</b>
<b>integrity</b>	

9. The critical changes that take place during adulthood are called integrity.
10. Empty-nest syndrome may result when children move from home.

## ▶ RECALLING THE FACTS *Use complete sentences to answer the following questions.*

1. What are two physical changes that take place in the teen brain? How are these changes significant?
2. Why is it important for adolescents to expand their verbal skills?
3. How does the value system of an adolescent differ from that of a child?
4. What are two characteristics of an emotionally mature person?
5. Why does emotional maturity take longer to achieve than physical maturity?
6. What are some ways that young adults can contribute to society?
7. Why do most people marry?
8. How can couples reduce the impact of conflict on their marriage?
9. Why are teen marriages often unsuccessful?
10. How can a parent help a child become self-directed?
11. How do mental activities such as reading and solving puzzles help older adults?
12. What are some ways in which older adults can use the freedom that comes from having children move away from home?
13. How has increased life expectancy affected the way people view retirement?



### ▶ THINKING CRITICALLY

- 1. Synthesizing.** In a private health journal, answer each of the questions asked in the developmental tasks section of Lesson 1. Reflect on your answers, and identify the areas that need attention. Determine the steps you could take to accomplish those particular tasks.
- 2. Summarizing.** Interview three adults about their contributions to society, and make a list indicating how each contribution met a need in their lives. Write a short report summarizing your findings.
- 3. Evaluating.** In some cultures parents arrange the marriages of their children. How do you think this would work in today's American society?
- 4. Applying.** What advice would you give to someone who is suffering from empty-nest syndrome? Write a letter to a friend or relative with this problem.

## Standardized Test Practice



**Read the passage below and then answer the questions.**

### Teenage Volunteers

(1) More teenagers than ever are taking on volunteer jobs. (2) Some teenage volunteers choose work that is related to a cause they feel strongly about, like keeping the environment clean and safe. (3) They may volunteer to help with a beach cleanup or to plant trees in a city park. (4) Teenagers who want to work with younger children volunteer in community centers or tutor. (5) Many teenagers help people unable to get around easily by taking a dog for a walk, picking up some groceries, delivering a meal, or just visiting.

(6) Studies show that teens are successful volunteers. (7) They are reliable and friendly, and they are able to relate to younger children and to older adults with ease. (8) Volunteers can receive as well as give. (9) Most teenage volunteers stay with their assignments beyond their initial commitment.

(10) Many teen volunteers make lasting friendships, learn new skills, and gain insight about future job and education choices.

**1.** What change, if any, should be made in sentence 2?

- A** Change **choose** to **chose**
- B** Change **choose** to **used to choose**
- C** Change **strongly** to **strong**
- D** Make no change

**2.** What is the most effective way to improve the organization of sentences 8–10?

- A** Move sentence 8 to come after sentence 9
- B** Delete sentence 8
- C** Move sentence 10 to come before sentence 8
- D** Delete sentence 9

**3.** Write a paragraph describing volunteer work that you might enjoy. Give reasons why you think you would be good at it.