

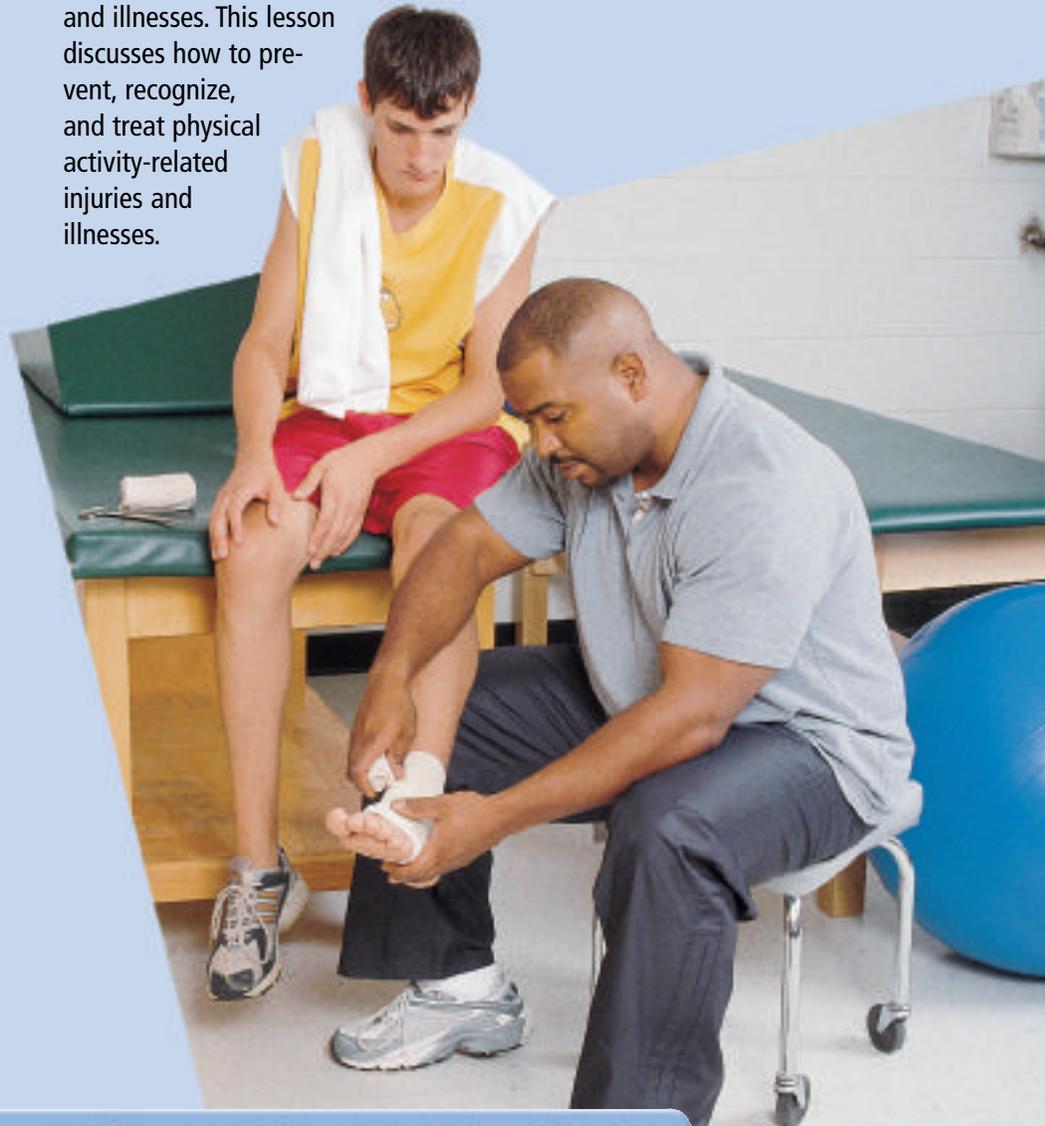
# Exercising Safely



- I will try to prevent physical activity-related injuries and illnesses.

**P**hysical activity stresses and strains the muscles and joints and may result in some muscle soreness or minor aches after you exercise.

This discomfort is temporary and not a sign of injury or illness. However, you do need to know about physical activity-related injuries and illnesses. This lesson discusses how to prevent, recognize, and treat physical activity-related injuries and illnesses.



## What You'll Learn

1. Describe six training principles for physical activities. (p. 393)
2. Explain the Fitness Training Zone. (p. 394)
3. Discuss how to prevent, recognize, and treat physical activity-related injuries. (pp. 394, 395)
4. Discuss precautions to take in physical activity during extreme weather conditions, at high altitudes, or in polluted air. (pp. 396, 397)

## Why It's Important

Understanding training principles, how to prevent, recognize, and treat physical activity-related injuries, and how to train in extreme weather conditions will greatly reduce your risk of injury or illness.

## Key Terms

- principle of warm-up
- principle of cooldown
- principle of specificity
- principle of overload
- principle of progression
- principle of fitness reversibility
- training zone
- cold temperature-related illnesses
- heat-related illnesses
- Air Quality Index (AQI)

## What Would You Do?

**Writing About Recovery** Suppose you rolled your ankle while playing basketball. After you read the information on treating activity-related injuries on page 394, write an entry in your health journal about what you can do to minimize damage from swelling and to hasten your recovery.



Health TEKS covered by Lesson 35: 2D, 5D, 7F, 13A

# Training Principles



**F**or good health, you need a plan to exercise on a regular basis. Training principles are guidelines to follow to obtain maximum fitness benefits and reduce the risk of injuries and illnesses.

## What to Know About Training Principles

**The principle of warm-up** A workout should begin with 5–10 minutes of light exercise to increase blood flow and raise the temperature in muscles, according to the *principle of warm-up*. Begin your warm-up by walking or by jogging slowly. As you warm up, blood flow increases to the muscles being used. This raises their temperature and gets them ready to do more work. Your heart rate increases gradually. Synovial fluid lubricates the surfaces of your joints. Once your muscles are warmed, do some static stretching.

**The principle of cooldown** A workout should end with 5–10 minutes of reduced exercise to help the heart rate, breathing rate, body temperature, and circulation return to the nonexercising state according to the *principle of cooldown*. Your cooldown should include walking or slow jogging and static stretching.

**The principle of specificity** A workout should include a specific type of exercise to obtain the desired fitness benefits according to the *principle of specificity*.

Suppose you want to improve cardiorespiratory endurance. You might choose an aerobic exercise such as running for your workout. Aerobic exercises provide the specific fitness benefit you desire.

**The principle of overload** A workout must include exercise beyond what a person usually does to gain additional fitness benefits, according to the *principle of overload*. Suppose you want to develop strength in your arm muscles. Then you must work the arm muscles longer or harder than usual.

**The principle of progression** The amount and intensity of exercise during workouts must be increased gradually, according to the *principle of progression*. The Fitness Training Zone diagram on the next page helps explain this principle.

**The principle of fitness reversibility** Fitness benefits are lost when training stops according to the *principle of fitness reversibility*. How fast a person loses fitness benefits depends on fitness level and the number of years the person has been training.

### Did You Know?

**Sports Injuries** Most organized sports-related injuries occur during practice rather than games. Despite this fact, many teens do not often take the same safety precautions during practices as they would for a game.

### Mini-Review

1. What is the principle of warm-up?
2. Why is a cooldown important?



# Sports Injuries

If you put unusual demands on your bones and muscles, you increase your risk of being injured. Injuries are more apt to happen if you take part in sudden and unfamiliar kinds of exercise, especially if you do not warm up and stretch beforehand.

## What to Know About Sports Injuries

**What are guidelines I can follow to prevent physical activity-related injuries?** First, have a medical examination before you begin vigorous physical activity or participate in a sport. Participate in physical activities and sports with appropriate adult supervision and obtain appropriate instruction. Develop and maintain proper conditioning.

The diagram of the Fitness Training Zone illustrates the importance of overload and proper progression. Know and follow safety guidelines and review basic first aid procedures and CPR.

Practice precautions to prevent the spread of blood-borne pathogens and wear protective clothing and select equipment carefully.

Wear footwear appropriate for the activity. Wear acrylic rather than cotton socks. Wear a safety helmet, face mask, mouth guard, and protective pads when needed. Wear reflective clothing for walking, running, and bicycling. Wear an athletic supporter and cup when appropriate. Wear an athletic bra when appropriate.

Do not participate in physical activities or sports when you have unhealed injuries. Follow precautions for exercising in extreme weather conditions.

**What is the RICE treatment?** A technique for treating musculoskeletal injuries that involves rest, ice, compression, and elevation is the **RICE treatment**. Lesson 69 includes more information about the RICE treatment.

### What are Ten Physical Activity-Related Injuries I Can Avoid?

**A side stitch** A dull, sometimes sharp pain in the side of the lower abdomen is a side stitch. To prevent a side stitch, warm up and follow the FITT formula. Plan your workout with appropriate frequency, intensity, and time. To relieve a side stitch, bend forward while pressing your hand firmly at the point of the pain.

#### Make the Connection

**CPR** For more information on CPR, see page 734 in Lesson 70.

The **training threshold** is the minimum amount of overload required to obtain fitness benefits. Workouts below the training threshold provide health benefits—such as keeping one’s body systems in good working order—but they do not improve fitness (such as expanding respiratory capacity, lowering one’s resting heart rate, etc.). The **training zone** is the range of overload required to improve fitness. The **training ceiling** is the upper limit of overload required to obtain fitness benefits without risking injury or illness. Workouts that go beyond the training ceiling are dangerous to health.





▲ Static stretching helps prevent many sports injuries.

**A sprain** The partial or complete tearing of a ligament is a sprain. A ligament is a tough fiber that connects bones. Sprains occur when the tissue around a joint is twisted. To prevent sprains, select shoes carefully. High-top athletic shoes support ankles. Talk to a trainer about taping weak ankles or wearing an ankle or knee brace for extra support. Use the RICE treatment if a sprain occurs.

**A stress fracture** A hairline break that results from repetitive jarring of a bone is a stress fracture. A stress fracture usually is an overuse injury. A stress fracture may not be detected on an X-ray or during superficial examination. To prevent stress fractures, pay attention to the FITT formula and do not overdo. The treatment for stress fractures depends on the severity and the area that is affected. Rest is important.

**Tendonitis** An inflammation of a tendon is tendonitis. A tendon is tough tissue fiber that attaches muscles to bones. Tendonitis causes pain and swelling in joints. Tendonitis in an elbow is called tennis elbow. Other joints affected by tendonitis are the knees, shoulders, and backs of ankles. To prevent tendonitis, warm up with static stretching. Choose exercises to develop muscle strength. When tendonitis occurs, use the RICE treatment. Tendonitis is slow to heal. Check with a physician before taking aspirin or other drugs to relieve pain and inflammation.

**Overuse injury** An injury that occurs from repeated use or excessive overload is an overuse injury. If you do too much, too fast, you may develop an overuse injury.

**Microtrauma** An injury that is not recognized as a person continues to work out is a microtrauma. If you do not rest the injured muscle or other body part before exercising again, the microtrauma will worsen.

**Bruise** A discoloration of the skin caused by bleeding under the skin is a bruise. Apply ice to reduce bleeding and swelling.

**Muscle cramp** The sudden tightening of a muscle is a muscle cramp. Sharp pains may signal muscle cramps. They often are caused by fatigue and dehydration. Taking precautions when exercising in hot weather and static stretching help prevent muscle cramps. Should they occur, drink plenty of fluids and gently massage the muscles that cramp.

**Muscle strain** The overstretching of a muscle that may result in tearing of a muscle or tendon is a muscle strain. A warm-up of walking, easy jogging, and static stretching help prevent muscle strain. Use the RICE treatment if muscle strain occurs.

**Shin splint** An overuse injury that results in pain in the front and sides of the lower leg is a shin splint. There may be tenderness over the shin and some swelling. To prevent shin splints, wear proper footwear. Run on even surfaces. Begin and end your workout with static stretching of the muscles of the shin and calf. Ice can be applied four times a day for 20 minutes. Check with a physician before taking aspirin or other drugs to reduce pain and inflammation.

## Did You Know?

**Concussions** Concussion, an injury to the brain caused by a blow to the head, is the mildest form of brain injury. About 30,000 concussions occur in the U.S. each year. Second impact syndrome (SIS), which can involve brain swelling or even death, can occur if a person has a second concussion before the first one is fully healed.

## Mini-Review

1. What is the training threshold?
2. What do the letters RICE mean?



# Exercising in Severe Weather

Different kinds of weather can cause safety and comfort concerns. However, it is possible to exercise in a variety of environmental conditions as long as you take certain precautions.

## If You Participate in Physical Activity During Extreme Weather Conditions

### Make the Connection

#### Taking Responsibility

For more information on taking responsibility for your health, see page 11 in Lesson 1.

**What precautions should I take if I work out in cold weather?** Conditions that result from exposure to low temperatures are **cold temperature-related illnesses**. The freezing of body parts, often the tissues of the extremities is **frostbite**.

Signs of frostbite include numbness in the affected area, waxy appearance of skin, and skin that is discolored and cold to touch.

**Hypothermia** is a reduction in the body temperature so that it is lower than normal. Hypothermia results from overexposure to cool temperatures, cold water, moisture, and wind. People with hypothermia will shiver and feel cold. The pulse rate slows and becomes irregular. A person can become unconscious and die without medical treatment.

There are some steps you can take to prevent cold temperature-related illnesses. Check the windchill before exercising in cold weather and postpone exercise if the windchill puts health status at risk.

Postpone exercise if it is icy and wet. Wear gloves, a hat, and a ski mask to protect the fingers, ears, and nose. Wear two pairs of socks or thermal socks to protect the toes.

Wear several layers of lightweight clothing. Dressing too warmly causes sweating that can cause chilling. The first layer of clothing should be made of polypropylene, which takes moisture away from the skin. Over this layer, wear a layer of fleeced polyester, which serves as a good insulator.

Wind speed MPH		Windchill Temperatures																	
		Temperature (°F)																	
		40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63	
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72	
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77	
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81	
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84	
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87	
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89	
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91	
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95	
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97	
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98	

Frostbite times: More than 30 minutes 30 minutes 10 minutes 5 minutes

Source: National Weather Service, 2003

▲ To determine windchill, find the outside air temperature on the top row. Then read down the left-hand column to the measured wind speed. This is measured in MPH (miles per hour). The windchill is the number in the box where these meet.

The top layer should be a wind-breaker of waterproof material that keeps out moisture but allows perspiration to filter out. Remember that even in cold weather you need to drink water.

**What precautions should I take if I work out in hot weather?** Conditions that result from exposure to temperatures higher than normal are *heat-related illnesses*.

**Heat cramps** are painful muscle spasms in the legs and arms due to excessive fluid loss through sweating. **Heat exhaustion** is extreme tiredness due to the body's inability to regulate its temperature. Signs of heat exhaustion include a very low body temperature; cool moist, pale, red skin; nausea and headache; dizziness and weakness; and fast pulse.

An overheating of the body that is life-threatening is called **heatstroke**. Sweating ceases so that the body cannot regulate its temperature.

Signs of heatstroke include very high body temperature; rapid pulse; rapid respiration; hot, wet, or dry skin; feeling of weakness or dizziness; and headache.

There are steps to take to prevent heat-related illnesses. Check the heat index before exercising in hot weather. Postpone exercise if the heat index puts health status at risk. Plan your workout at the time of day when the temperature is lowest. Drink fluids before and during your workout. Avoid vigorous workouts on extremely hot and humid days.

Wear porous clothing that allows air to pass through it. Wear light colored clothing that reflects the Sun's rays.

Heat Index									
Temperature (°F) V. Relative Humidity (%)									
°F	90%	80%	70%	60%	50%	40%	30%	20%	10%
65	65.6	64.7	63.8	62.8	61.9	60.9	60.0	59.1	58.1
70	71.6	70.7	69.8	68.8	67.9	66.9	66.0	65.1	64.1
75	79.7	76.7	75.8	74.8	73.9	72.9	72.0	71.1	70.1
80	88.2	85.9	84.2	82.8	81.6	80.4	79.0	77.4	76.4
85	101.4	97.0	93.3	90.3	87.7	85.5	83.5	81.6	79.6
90	119.3	112.0	105.8	100.5	96.1	92.3	89.2	86.5	84.2
95	141.8	131.1	121.7	113.6	106.7	100.9	96.1	92.2	89.2
100	168.7	154.0	140.9	129.5	119.6	111.2	104.2	98.7	94.4
105	200.0	180.7	163.4	148.1	134.7	123.2	113.6	105.8	100.0
110	235.0	211.2	189.1	169.4	151.9	136.8	124.1	113.7	105.8
115	275.3	245.4	218.0	193.3	171.3	152.1	135.8	122.3	111.9
120	319.1	283.1	250.0	219.9	192.9	169.1	148.7	131.6	118.2
High Temperature					Possible Heat Disorder				
80°F–90°F					Fatigue possible with prolonged exposure and physical activity				
90°F–105°F					Sunstroke, heat cramps, and heat exhaustion possible				
105°F–130°F					Sunstroke, heat cramps, and heat exhaustion likely, and heatstroke possible				
130°F or Greater					Heatstroke highly likely with continued exposure				
Source: The National Weather Service, 2003									

Avoid wearing rubberized and plastic clothing. These kinds of clothing trap heat and perspiration and cause fluid loss and increased body temperature. Wear a hat, sunglasses, and sunscreen.

**How does air pollution affect my workouts?** Air pollution influences the safety and effectiveness of workouts. When air is polluted, you have to breathe more often to deliver oxygen to body cells. Air pollution can cause shortness of breath.

The media issue warnings when the AQI is high. The **Air Quality Index (AQI)** is a measure of air quality based on the sum of the levels of five different pollutants. It is best not to work out outdoors when the AQI is high.

**How will being in a high altitude affect my workouts?** Being in a high altitude places extra demands on the body. Think of the extra demands of the high altitude as being a form of overload. Your body must adjust to these extra demands.

Shorten the length of your workouts at first. People who work out too much at first may develop altitude sickness. Signs of altitude sickness are shortness of breath, chest pain, and nausea.

▲ The heat index is the temperature the body feels when heat and humidity are combined. The chart shows the heat index that corresponds to the actual air temperature and relative humidity.

## Did You Know?

### Water Overload

Drinking too much water—while exercising or at other times—can lead to a condition called hyponatremia. With this condition, too much water in a person's body can lower sodium content and lead to headache, confusion, and muscle aches. In extreme cases, hyponatremia can cause brain swelling, coma, and death.

### Mini-Review

1. What is hypothermia?
2. What is PSI?

# SPEAKING OUT

## Teens Talk About Health

### Chase Turnquest Being a Sports Trainer

If you asked Chase Turnquest the secret to being an all-city tennis player, he might tell you it's the stretching. Having a killer serve and a wicked forehand also might help. But he's convinced of the importance of proper training methods.

"Our coach says that if you're not out there stretching, running, and training, you're much more likely to get hurt," Chase said. "And I've seen it happen too many times. The captain of our team tore his hamstring muscle because he didn't stretch. He just started playing," added Chase. "Another player twisted his ankle, without stretching. He went out and started running."

**Each sport is different.** In Chase's sport, like in any other, there are recommended training methods. "We do lots of running to build up endurance," he explained. The matches can last two hours or more under a hot spring sun. "Tennis players also do light weight training. We don't lift really heavy weights because we'd risk getting too bulky and losing flexibility."

Then there's the stretching before a match. "It's about the most important thing you can do to avoid getting hurt," Chase emphasized. Chase's coach puts together a training program for team members. "Another thing we're really serious about is cooling down after a training session or a match," Chase explained. His coach emphasizes that proper training methods not only help prevent injuries, but they also lead to better performance on the court.

**Knock on wood.** So far, Chase has been able to avoid serious injuries. However, like most athletes, he's had some minor ones. He cut his leg on a piece of glass while

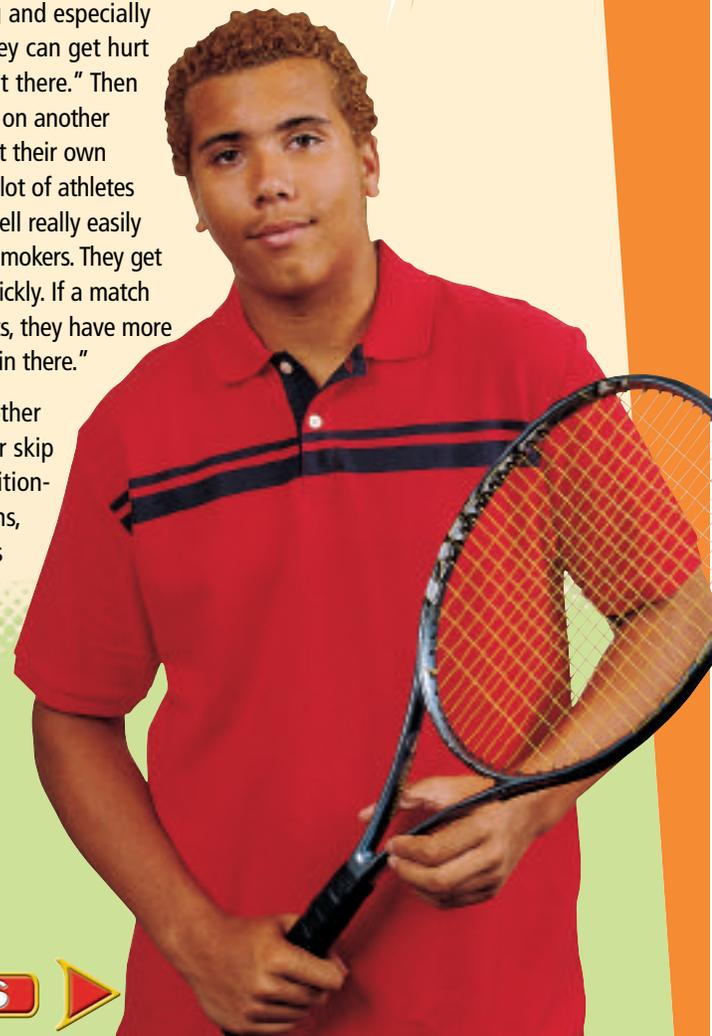
playing basketball and pulls muscles every now and then.

Rehabilitating from injuries is a special challenge for many young athletes. "When you're recovering from injury," explained Chase, "your body's not going to be in as good a shape as when you're playing. You're not going to be at the top of your game, so it can lead to trouble. You can overcompensate for an injury and get hurt in a different way all over again."

**Word to the wise** "Athletes I know could be more aware of good training practices," Chase said. "A lot of people I know just go out and play, without thinking about stretching and especially conditioning. They can get hurt really quickly out there." Then he put his finger on another way athletes hurt their own performance. "A lot of athletes smoke. You can tell really easily which ones are smokers. They get winded really quickly. If a match goes to three sets, they have more trouble hanging in there."

Chase advised other athletes to never skip stretching, conditioning, or cooldowns, and to drink lots of water.

“Our coach says that if you’re not out there stretching, running, and training, you’re more likely to get hurt.”



### Journaling Activity

Think of a sport or other physical activity you enjoy doing. Make a list of five questions you would like to ask a high school coach or a professional trainer about that activity.

Air Quality Index (AQI)  
cold temperature-related illnesses  
heat-related illnesses  
hypothermia  
principle of cooldown  
principle of fitness reversibility  
principle of overload  
principle of progression  
principle of specificity  
principle of warm-up  
RICE treatment  
training zone

CORBIS



## Key Terms Review

Explain the relationship between the pairs of lesson Key Terms below. Do not write in this book.

- principle of warm-up—principle of cooldown
- principle of specificity—principle of progression
- principle of overload—training zone
- Air Quality Index (AQI)—principle of fitness reversibility
- cold temperature-related illnesses—heat-related illnesses

## Recalling the Facts

- What are ten guidelines you should follow to prevent sports injuries?
- What training principle refers to losing fitness benefits? Why are they lost?
- Why is heat stroke dangerous?
- What is the RICE treatment?
- What is an overuse injury?
- Why are warm-ups and cooldowns important?
- What is the training ceiling?
- How would you prevent getting a muscle cramp or strain?
- How would you prevent getting a shin splint or side stitch?
- How would you prevent getting a sprain or tendonitis?
- How would you recognize and treat a side stitch, sprain, or tendonitis?
- How would you recognize and treat a muscle cramp, strain, or shin splint?
- Why is hypothermia a serious condition?

## Critical Thinking

- Give an example workout using the principle of specificity for the sport of volleyball.
- How might swimmers apply the principle of overload to their workouts?
- Explain why static stretching is recommended for both a warm-up and a cooldown.
- Analyze how workouts that go beyond the training ceiling might cause injuries and how to prevent those injuries.

## Activities

### Responsible Decision Making

- Write** You wake up on Saturday with very sore muscles from yesterday's volleyball practice. Team tryouts are Monday. Your friends tell you that what you need is a couple of hours of serious volleyball to get rid of the soreness. Write a response to this situation. Refer to the Responsible Decision-Making Model on page 61 for help.

### Real-Life Applications

- What activities do you participate in that put you in the training zone?
- How many times a week are you in the training zone?
- Choose a sport you would like to be proficient in and list the skills you would need to have to become proficient.
- Explain how you could determine what your personal training threshold would be.

### Sharpen Your Life Skills

- Use Communication Skills** Select one lifetime sport or physical activity. Prepare a 2–3 minute talk in which you encourage classmates to participate in the lifetime sport or physical activity you selected. Talk about techniques that help people avoid illnesses or injuries that can be caused by this sport.



## Key Terms Review

Match the following definitions with the correct Key Terms. Do not write in this book.

- |                              |                                    |                                      |
|------------------------------|------------------------------------|--------------------------------------|
| a. aerobic exercise (p. 375) | f. health-related fitness (p. 374) | j. principle of progression (p. 393) |
| b. athlete's foot (p. 354)   | g. insomnia (p. 363)               | k. psoriasis (p. 354)                |
| c. cardiac output (p. 368)   | h. lice (p. 357)                   | l. skill-related fitness (p. 382)    |
| d. conjunctivitis (p. 345)   | i. physical fitness (p. 371)       |                                      |
| e. gingivitis (p. 349)       |                                    |                                      |
- a condition in which the gums are red, swollen, tender and bleed easily
  - the amount of blood pumped by the heart each minute
  - an inflammation of the eye membranes that causes redness, discomfort, and discharge
  - insects that live and lay eggs in human hair
  - a fungus that grows on feet
  - the ability to perform physical activity while being energetic and alert
  - the capacity to perform well in sports and physical activities
  - the prolonged inability to fall asleep, stay asleep, or get back to sleep
  - one in which large amounts of oxygen are required continually for an extended period
  - states that the amount and intensity of exercise during workouts must be increased gradually

## Recalling the Facts

- What information is included in a health history? (Lesson 30)
- What are nine causes of hearing loss? (Lesson 30)
- Why are regular dental examinations important? (Lesson 30)
- What are six ways to treat acne? (Lesson 31)
- Describe three actions that occur during REM sleep. (Lesson 32)
- How can regular physical activity help prevent non-communicable diseases? (Lesson 33)
- Why should aerobic exercises be included in a physical fitness plan? (Lesson 33)
- What are seven benefits of muscular strength and endurance? (Lesson 34)
- What are two advantages of participating in lifetime sports? (Lesson 34)
- What happens to fitness benefits if you stop working out? (Lesson 35)

## Critical Thinking

- Explain the relationship between visual acuity and refractive errors. (Lesson 30)
- How might you overcome the dangers of sunbathing? (Lesson 31)
- How can tattoos and body piercing help spread communicable diseases? (Lesson 31)
- How might an inadequate amount of sleep affect your health? (Lesson 32)
- Explain the link between getting adequate sleep and participating in regular physical activity. (Lessons 32, 33)
- How are the level of your physical activity and your diet related? (Lesson 33)
- How are cardiorespiratory endurance and muscular strength and endurance related? (Lesson 34)
- How does the FITT formula relate to your level of physical fitness? (Lesson 34)
- Why is it important to develop skill-related fitness even if you do not play sports? (Lesson 34)
- Explain the relationship between the principles of warm-up and cooldown. (Lesson 35)





## Health Literacy Activities



### What Do You Know?

**Self-Directed Learning** Compose two factual questions relating to personal health or physical activity.

Make one more difficult than the other. Place a \* by this question. Collect questions from your classmates and put them in a bag. Play a form of basketball with your classmates. The easy question is worth 2 points and the other one is worth 3 points.



### Connection to World Cultures

**Critical Thinking** The Olympic rings were developed as symbols of the Olympic spirit. Find out what the Olympic rings mean. Why is this symbol embraced by people of different cultures?



### Family Involvement

**Effective Communication** Review with your family A Guide to Lifetime Sports and Physical Activities.

Select one sport or activity in which your family can participate together. Plan a time to enjoy this sport or activity.



### Investigating Health Careers

**Responsible Citizenship** Obtain permission from your parent or guardian. Interview a professional in the field of personal health or physical activity (for example, dental hygienist, athletic trainer, or sports nutritionist). Ask about the credentials needed for the career; where to get training; and job responsibilities. Write an article about the interview for your school newspaper or a teen magazine.



### Group Project

**Problem Solving** A sedentary lifestyle is a lifestyle in which a person does not engage in much activity.

For example, a person may take an elevator rather than climb stairs. What are five other examples of a sedentary lifestyle? How might a person change from being sedentary to being active? Compare your ideas with those in your group. How might you become a more active person? For more information, visit [tx.healthmh.com/health\\_related\\_fitness](http://tx.healthmh.com/health_related_fitness).



Reading and Writing TAKS: 2:11A, 3:7E, 3:7G, 4:1C, 4:2C, 5:2C, 5:3A, 5:3B, 5:3C, 6:2C

Reading & Writing

## Standardized Test Practice

Read the following selection and answer the questions that follow.

One of the most common complaints that doctors hear from teenagers is “feeling tired all the time.” One leading authority on teenagers’ health believes that teens need at least as much sleep as adults. That means eight hours. But that may be a minimum. Why? The authority points out that teens can be growing as much as four inches a year during growth spurts, which is almost twice the rate before puberty. All that growing is hard work, and teens need their rest. Throw in studying, working, playing sports, and just having fun, and it’s no wonder many teens feel tired much of the time. Experts recommend cutting back on some activities in order to leave enough time for rest. Many teens, however, would rather look for a way to add several hours to the 24 in each day.

### Multiple Choice

- According to this paragraph, which statement is true?
  - Growth spurts are one of the reasons teens may need more sleep than adults.
  - Scientists agree that teens need eight hours of sleep.
  - Young people grow faster before puberty than during it.
  - Spending too much time working or at sports is wrong.
- Which statement best describes the author’s theme?
  - Teens need more sleep to avoid serious health problems.
  - Doctors help teens learn about the importance of sleep.
  - Puberty is a difficult time in a young person’s life.
  - Getting enough rest is important, but many teens may have trouble reducing their busy schedules.

### Open-Ended

- What time-management skills do you use to balance your need for rest against your other activities?



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