

Improving Physical Fitness Workbook



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Physical Fitness Plan

Everyone should have a fitness plan. A personal plan can help you get started in developing your physical fitness. If you are already active or even athletic, a physical fitness plan can help you balance your activities and maintain a healthy level of activity.

Planning a Routine

When you're ready to start a fitness routine, it may be tempting to exercise as hard as you can for as long as you can. However, that approach is likely to leave you discouraged and even injured. Instead, you should plan a fitness routine that will let your body adjust to activity. Work up to your fitness goals slowly. Gradually increase both the length of time you spend exercising and the number of times you exercise each week. For example, you might start by doing a fitness activity for just 5 minutes a day, 3 days a week. Increase the amount of time you exercise, to say 7 minutes the next week and to 10 minutes during the third week of your plan. When you are

exercising 20 minutes, 3 days a week, you're ready to add a fourth day to your fitness routine. Eventually, you will be exercising for 20 to 30 minutes, 5 days a week.

Warming Up

There's more to a physical fitness plan than fitness activities. It's important to prepare your body for exercise. Preparation involves warm-up activities that will raise your body temperature and get your muscles ready for your fitness activity. Easy warm-up activities include walking, marching, and jogging, as well as basic calisthenics.

When you're developing your own fitness plan, you should include warm-ups in your schedule. As you increase the time you spend doing a fitness activity, you should also increase the time you spend warming up.

This chart shows how you can plan the time you spend on warm-ups and fitness activities.



Sample Physical Fitness Plan

DAY	Monday		Tuesday		Wednesday		Thursday		Friday	
WEEK	Warm Up	Activity	Warm Up	Activity	Warm Up	Activity	Warm Up	Activity	Warm Up	Activity
1	5 min	5 min	---	---	5 min	5 min	---	---	5 min	5 min
2	5 min	7 min	---	---	5 min	7 min	---	---	5 min	7 min
3	5 min	10 min	---	---	5 min	10 min	---	---	5 min	10 min
4	5 min	12 min	---	---	5 min	12 min	---	---	5 min	12 min
5	7 min	15 min	---	---	7 min	15 min	---	---	7 min	15 min
6	7 min	17 min	---	---	7 min	17 min	---	---	7 min	17 min
7	10 min	20 min	---	---	10 min	20 min	---	---	10 min	20 min
8	10 min	20 min	10 min	20 min	10 min	20 min	---	---	10 min	20 min
9	10 min	20 min	10 min	20 min	10 min	20 min	10 min	20 min	10 min	20 min

Five Elements of Fitness

When you're making a plan for your own fitness program, you should keep the five elements of fitness in mind.

Cardiovascular endurance is the ability of the heart and lungs to function efficiently over time without getting tired. Activities that improve cardiovascular endurance involve non-stop movement of your whole body or of large muscle groups. Familiar examples are jogging, walking, running, bike riding, soccer, basketball, and swimming.

Muscle endurance is the ability of a muscle or a group of muscles to work non-stop without getting tired. Many activities that build cardiovascular endurance also build muscular endurance, such as jogging, walking, and bike riding.

Muscle strength is the ability of the muscle to produce force during an activity. You can make your muscles stronger by working them against some form of resistance, such as weights or gravity. Activities that can help you build muscle strength include push-ups, pull-ups, lifting weights, and running stairs.

Flexibility is the ability to move a body part freely, without pain. You can improve your flexibility by stretching gently before and after exercise.

Body composition is the amount of body fat a person has compared with the amount of lean mass, which is bone, muscle, and fluid. Generally, a healthy body is made up of more lean mass and less body fat. Body composition is a result of diet, exercise, and heredity.

On the next pages, you'll find ten different fitness activities for groups. They can help you develop all five elements of fitness, with an emphasis on cardiovascular endurance. They can also help you add variety and fun to your fitness plan.

Group Fitness Activities



Fitness Elements Muscle strength and endurance, flexibility

Equipment With a group of other students, make a set of exercise cards. Each card should name and illustrate an exercise. You can include some or all of the exercises shown here.

Formation Stand in two lines facing each other, or stand in a large circle.

Directions Take turns leading the group. The leader picks a card, stands in the center of the formation, and leads the group in the exercise on that card.



Hold for a count of 10, rest, and repeat.



Hold for a count of 10, rest, and repeat.



Hold for a count of 10, rest, and repeat.



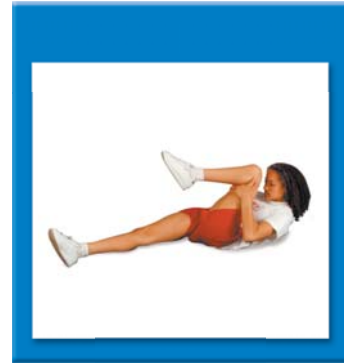
For each side, hold for a count of 10, rest, and repeat.



Kick up 5 times, rest, and repeat.



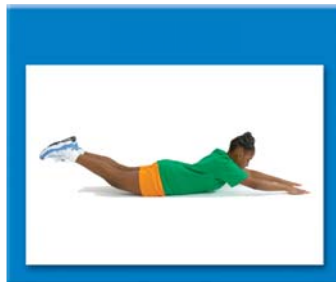
Hold for a count of 10, rest, and repeat.



Hold for a count of 10, rest, and repeat.



Hold for a count of 10, rest, and repeat.



Raise legs. Hold for a count of 10, rest, and repeat.



Raise arms and legs. Hold for a count of 5, rest, and repeat.

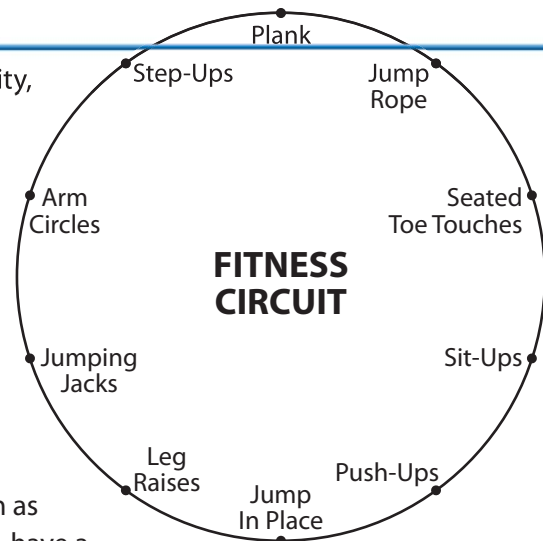


Fitness Elements Muscle strength and endurance, flexibility, and cardiovascular endurance

Equipment 2–4 jump ropes, 2–4 aerobic steps, signs or posters naming each station spread throughout the activity area (see diagram.)

Formation Set up stations as shown in the diagram. Form pairs, so that each student has a partner.

Directions With your partner, move through the stations: plank, jump rope, seated toe touches, sit-ups, push-ups, jump in place, leg raises, jumping jacks, arm circles, step-ups. Each pair can start at any station. If your group is large, two pairs may use the same station. At each station, perform as many repetitions as you can in 30 seconds. After 30 seconds, have a teacher or a student volunteer signal the end of the time. With your partner, move in a clockwise direction to the next station.



Fitness Elements Muscle strength and endurance

Equipment 3–6 crab soccer balls or other large balls

Formation Mark a goal line at each end of the playing area, and divide the players into two teams. All the players on both teams get into the crab position and remain in that position throughout the game.

Directions Put the crab soccer balls in the middle of the playing area. Members of both teams kick the balls past the other team's goal line to score. Remember, all players have to stay in the crab position all the time. The game continues until all the balls have been scored.



Fitness Elements Muscle strength and endurance

Equipment 4–5 flying disks

Formation Mark two lines 15–25 feet apart, depending on the fitness level of group members. One is the starting line, and the other is the turn-around line. Divide the group into four or five single-file lines behind the starting line. The first player in each group is in the crab position with a flying disk resting on his or her abdomen.

Directions Have a teacher or a student volunteer give a signal to start the relay. The first player in each line crab-walks to the turn-around line and back to the starting line. The players have to move in the crab position and must keep the disks on their abdomens. If the disk falls off, the player has to stop, pick the disk up, and place it back on his or her abdomen. When players return to the starting line, they hand their disks to the next player in line. The next player follows the same procedure. Continue playing until all the members of each team have participated. If you want to play again, reorganize the teams by having the first player in each line move to the team on his or her right.



Fitness Elements Cardiovascular endurance and flexibility

Equipment None

Formation Mark a line at each end of the activity area. One is the starting line and the other is the finish line. Mark two more lines, about ten feet apart, between the starting line and the finish line. The space between these two lines is the “river.” Let two volunteers stand in the “river.” They are the “piranhas.” All the other players stand behind the starting line.

Directions Have a teacher or a student volunteer give the signal to begin. The players behind the starting line run down the river. As they run, the “piranhas” try to tag them. Players who reach the finish line without being tagged are safe. Players who are tagged stay in the “river” and become “helper piranhas.” “Helper piranhas” must keep their feet in one place but can bend and stretch to tag the players running down the “river.”



Fitness Element Cardiovascular endurance

Equipment None

Formation Form pairs, so that each player has a partner. With your partner, decide which one of you will begin as the tagger and which will begin as the walker.

Directions Have a teacher or a student volunteer give the signal to begin. If you are the tagger, chase and try to tag your partner. If you are the walker, walk to stay away from your partner. You must both walk at all times, not run. Once the tagger tags the walker, change roles with your partner. Continue until the teacher or student volunteer signals the end. You can vary this activity by hopping, skipping, or using another movement instead of walking.



Fitness Element Cardiovascular endurance

Equipment Scarves (one for each player)

Formation Each player should tuck one end of a scarf into the back of his or her waistband or into a rear pocket. Then players should scatter over the activity area.

Directions Have a teacher or a student volunteer give the signal to start. Each player moves throughout the activity area, trying to grab and pull out other players’ scarves. Students who pull a scarf must say, “I got a scarf,” bend down on one knee, and place the new scarf in their waistbands or pockets. They are “safe” while they are doing this. Players who lose their scarves continue playing, trying to capture other scarves. Players may pull only one scarf at a time. They may not hold onto their own scarves, and they may not push, pull, or grab other players. Play continues until the teacher or student volunteer gives the signal to stop.



Fitness Element Cardiovascular endurance

Equipment None

Formation Mark a goal line at each end of the playing area, and divide the players into two teams. One team is the “aliens,” and the other team is the “soldiers.” Form pairs, so that each player has a partner. Throughout the game, partners have to remain together, with their arms locked. All the players on the “aliens” team stand behind one goal line, and all the players on the “soldiers” team stand behind the other.

Directions The “aliens” stand with their backs to the playing area. The “soldiers” walk quietly toward the “aliens.” When the “soldiers” are close to the “aliens,” a teacher or student volunteer calls out “There are soldiers in your galaxy!” The “aliens” turn around and chase the “soldiers.” All the “soldiers” who are tagged, or whose partners are tagged, become “aliens.” “Soldiers” who reach their own goal line are safe.

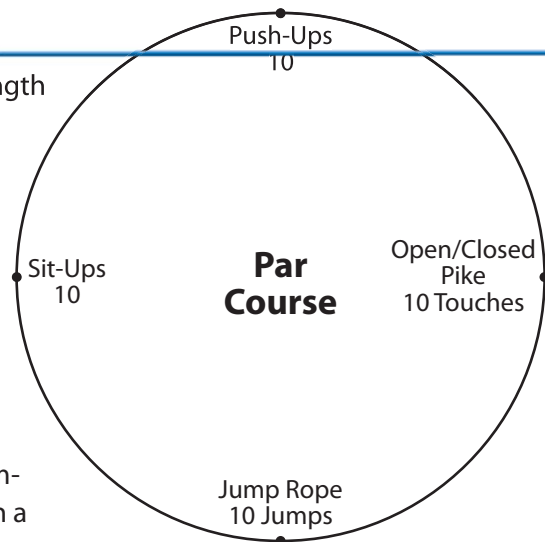


Fitness Elements Cardiovascular endurance, muscle strength and endurance

Equipment 4 jump ropes, 4 cones, signs or posters naming each station on the par course (See diagram.)

Formation: Set up stations as shown in the diagram. Mark each station with a cone and identify it with a sign or poster. Form groups of four.

Directions With the three other members of your group, start at one station on the course. Perform the activity identified there. Then jog to the next station, and perform that activity. Continue around the course until you have completed each activity at least once. If you’re participating with a large class, you might work in two shifts, with half the groups completing the full par course and then giving the other groups a turn.



Fitness Element Cardiovascular endurance

Equipment Whistle, 5-8 cones (optional)

Formation If possible, use a running track for this activity. If no track is available, use cones to mark a large circle on a gym floor or a field. All the players stand around the circle, not too close together, and all facing the same direction.

Directions Have a teacher or a student volunteer serve as the leader. The leader uses a whistle to signal how players should move. One blast on the whistle means walk, two blasts mean jog, and three blasts mean run. The leader varies the whistle commands, paying attention to the players’ energy and to the temperature.

Unit 1 Activity

Warm Up and Cool Down

Directions Read the passage below and then do the activity that follows.

Fitness Rating: Jumping Jacks	
Beats per Minute	Rating
Under 60 beats	Pass
Over 60 beats	Needs Work

Fitness Rating: Push-Ups	
Number of Push-Ups	Rating
Males: 5 or more	Pass
Less than 5	Needs Work
Females: 3 or more	Pass
Less than 3	Needs Work

Fitness Rating: Zipper Stretch	
Ability to Touch	Rating
Touch or overlap	Pass
Inability to touch	Needs Work

Directions With your teacher's permission, break into groups of 4 and come up with a plan for a warm up and a cool down. Use the matrix below to create a plan that includes stretches simple movements to get your body ready for physical activity. The first one has been done for you.

Stay safe when you exercise. Physical activity puts strain on your muscles, joints, and skeleton. When you warm up before, and cool down after, they are less likely to tear or get strained. You can help keep your body in the best physical shape.

Warm Up

- A warm up helps gradually and safely raise your heart rate. A warm up should last about 10 minutes.
- Perform easy aerobic exercises.
- After you warm up, do some light stretching. Stretch only to the point where you feel a gentle pull. Hold the stretch for 30 seconds. Prevent injury by keeping your movements smooth. Do not bounce or jerk

Cool Down

- Spend the last 10 minutes of your work out cooling down. A Cool Down helps bring your heart rate down at a healthy rate. It also helps lower your body temperature and keeps your muscles flexible.
- Continue your workout movements, but at a slower pace. If you were running, slow to a jog, and then a walk.
- Do some easy stretches for 5 to 10 minutes. This helps your body stay limber.
- Remember to Drink Plenty of water!

Type of Movement	Action	Number of Repitions
1. Stretch	Place feet should width apart, and bend forward to touch toes.	5 repitions. Hold each one steady for 10 seconds.

Unit 2 Activity

Do You Get Enough Sleep?

Directions Read the article below and complete the activity that follows that follows. Do you get enough sleep?

The Importance of Sleep

Adolescents require 8.5 to 9.25 hours of sleep each night. Only about 15 percent of adolescents report getting that much sleep on a school night. What effect does that have? Plenty.

The body needs sleep. While sleeping, the body repairs itself and grows. Activity in the brain is high as it consolidates all the learning it experienced through the day. Hormones that regulate growth and appetite are released. The immune system powers up to fight off infection. You wake up alert, refreshed, and ready to face the challenges of a new day.

Without sleep, the body wakes up tired and unable to focus. You are grumpy and prone to negative emotions like anger and sadness. Sleepiness has been shown to cause behaviors in students similar to those common in attention-deficit/hyperactivity disorder. Teens who are sleep-deprived are more prone to traffic accidents while driving. They cannot make quick and sound decisions or easily problem solve. Sleep deprivation limits a teen's ability to think creatively, pay attention, and think abstractly. Lack of sleep can cause a teen to overeat or choose foods that are sweet or fatty. It can also contribute to skin problems such as acne.

Over time, teens may turn to stimulants, such as caffeine or nicotine, to help them stay awake and be alert. Teens also tend to oversleep on the weekend. These habits can cause a shift in the sleep phase and poor sleeping habits that they may never overcome.

Recommend that teens allow themselves at least 8 hours of restful sleep every night.

Directions Fill in the matrix below to determine if you get enough sleep. Starting on a Sunday, log the hours you sleep. Do not drink caffeine, and go to sleep at the same time each night. On each weeknight, sleep each night for 7 to 8 hours without interruptions. On Saturday morning, sleep in. At the end of the week, answer the questions that follow the matrix.

Day	Time I Went to Bed	Time I Woke Up	Hours of Sleep
Sunday			
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			

1. Did you sleep more or less on Saturday night than you did during the week?

2. What is the difference between your weekend sleeping hours and the hours you slept during the week?

3. What are some ways you can healthfully balance the hours slept during the whole week?

Unit 3 Activity

Backpack Safety Tips

Directions It is possible to overwork your body during any physical activity. You may train too hard or too often, with too little rest between sessions. You may also have an accident that results in an injury. Read the following passage and then write an activity about how you can improve the way you lift, load, and carry your backpack.

Carrying a backpack that is too heavy can cause back pain and headaches and injure muscles and joints. Using a backpack correctly helps keep the skeletal and muscular systems healthy. Share these tips with students:

- **Choose a backpack made from lightweight materials that has two wide, padded shoulder straps.** A waist strap pulls the backpack closer to the body and helps distribute the load better. A padded back protects your back from the sharp edges of objects inside it. Consider using a backpack on wheels if the school allows them.
- **When putting on a loaded backpack, bend at the knees when bending down.** Place both shoulders into the shoulder straps and pull the straps snug. The straps should hold the backpack two inches above the waist.
- **Lighten the load as much as possible.** The backpack should not weigh more than 20 percent of your total body weight. While at school, make more frequent trips to your locker. Try to finish homework that requires a heavy textbook at school. Arrange to have a second set of textbooks at home.
- **Strengthen your abdominal and lower back muscles with yoga, weight training, or Pilates.** Stronger torso muscles help support the back and the weight it is carrying.

Unit 4 Activity

Calculate Your Approximate Heart Rate

Directions Calculate your resting heart rate to help you determine what your heart rate should be when engage in physical activity.

Both young men and women are often surprised as their bodies change during adolescence. It can be very difficult to find clothes that fit properly. Some might come to realize that their new body type no longer allows them to excel at a favorite sport or activity. Others might feel demoralized by the impossibly thin or overly buff bodies of models and celebrities. It is not unusual for adolescent teens to feel like their body has let them down.

As a health teacher, you can help counteract these feelings by helping students realize that these changes are normal and everyone must go through them. Create a climate of total acceptance in your classroom. Focus on taking care of the body with healthful eating and exercise. Teach students to listen to their bodies; eat only when hungry and stop eating when satisfied. Discourage students from comparing themselves to their friends and especially to models and celebrities.

Share these tools with students to help them accept themselves for who they are. This is the best way to cultivate a positive body image and improve self-esteem.

- **Gain self-confidence by trying something that is challenging.** Be proud of what you achieve.
- **Only say nice things about yourself.** If you would not say it to your best friend, then do not think it of yourself.
- **Accept and value every person you meet, whatever their physical appearance.**
- **Identify your strengths and build on them.**
- **Volunteer your time to a good cause.**
- **Have fun.**

How to Take Your Pulse

1. Place the tips of your index, second and third fingers on the palm side of your wrist below the base of the thumb. You may also find your pulse if you place the tips of your index and second fingers on your lower neck on either side of your windpipe.
2. Press lightly with your fingers until you feel the blood pulsing beneath your fingers. You may need to move your fingers around slightly up or down until you feel the pulsing.
3. Use a watch with a second hand, or look at a clock with a second hand.
4. Count the beats you feel for 10 seconds. Multiply this number by six to get your heart rate (pulse) per minute.

When you are physically active, it is important to stay heart healthy. Your target heart rate is 60 to 85 percent of your maximum heart rate. To find this, you must know your resting heart rate.

Find Your Resting heart Rate It is best to calculate your resting heart rate just after you wake up, before you get out of bed. Normal heart rates for people 15 years and younger ranges between 70 and 100 beats per minute. People older than 18 should have heart rates between 60 and 100 beats per minute.

Count your pulse: _____ beats in 10 seconds x 6 = _____ beats/minute

Find Your Maximum Heart Rate Subtract your age from 220.

220 – _____ years = _____ predicted maximum heart rate.

Calculate your Target Heart Rate During Physical activity, your heart rate should be between 60 and 85 percent of your maximum heart rate. To find the range, calculate 60 percent of your maximum heart rate. Then, calculate 85 % of your maximum heart rate.

Maximum heart rate _____ × 0.60 = [WOL]

Maximum heart rate _____ × 0.85 = [WOL]

Remember that it is always important to talk to your doctor about activities that are healthy for you. Talk to him or her before you start any sport or physical activity.

Unit 5 Activity

Create a Fitness Plan

Directions Read the passage below then complete the activity that follows

Physical Activity and Weight Control

A 2005 study showed that the United States had the most overweight and obese teens of 14 major industrialized countries. Other studies have shown that as many as 80 percent of obese teens become obese adults, and obesity at any age is associated with a wide range of medical conditions, including heart disease, certain cancers, osteoarthritis, and diabetes. Therefore, the teen years may be a crucial time to control weight in order to prevent a lifetime of health problems.

Another 2005 study found that the chief cause of weight gain in adolescent females was not overeating but a sharp drop in physical activity. Thus, promoting physical activity may be the best way to control weight in teens. Exercise helps control weight in several ways:

- Activity requires energy. If the calories taken into the body in food do not provide enough energy, stored body fat is burned for energy.
- Exercise increases body metabolism. Extra energy continues to be needed for several hours after an exercise session is over.
- Exercise increases muscle mass and decreases body fat. It takes more energy to move and maintain muscle than fat, so more energy is used when the body is leaner.

Directions Plan a week of physical activity. Track the types of activity you do, and the duration of your work out. Record your resting heart rate (RHR) and your target heart rate (THR). Ten minutes into your work out, after your warm up, pause for a moment and record your actual heart rate (AHR). Record the results. In the final column, write any comments or words of encouragement you can give yourself. An example has been completed for you.

Date	Activity	Intensity			AHR	Comments
		Duration (time and distance)	RHR	THR		
5/6/11	Swimming - freestyle	500 yards, 7 min. 35 sec.	72 beats per minute (bpm)	120-170 bpm	140	Work on Relaxing my stroke

Unit 6 Activity

Diabetes, Obesity, and Physical Activity

Directions Read the passage about Diabetes, Obesity, and Physical Activity. Then complete the questions that follow.

Diabetes, Obesity and Physical Activity

According to a study conducted by the Centers for Disease Control and Prevention, the rates of obesity and diabetes in young people in the United States are increasing rapidly. Type 2 diabetes, which was previously known as adult-onset diabetes, is becoming more and more common in young people. In this type of diabetes, insulin is produced by the body, but the body cannot use it properly. Until about 20 years ago, 3 to 5 percent of the cases of diabetes in children were type 2 diabetes. Between 25 and 30 percent of cases of childhood diabetes are now type 2 diabetes.

Type 2 diabetes can have few or no symptoms in young people. Many children have type 2 diabetes for a long period of time before the disease is recognized. Diabetes is diagnosed using a blood test. If students recognize the risk factors for diabetes, they can discuss diabetes with their parents or guardians and health care providers. They can also take steps to maintain a healthy lifestyle that can help prevent diabetes.

Type 2 diabetes is strongly associated with obesity. The rise in rates of type 2 diabetes among young people is associated with the increase in rates of childhood obesity. Maintaining a healthy weight is one of the most important steps in preventing type 2 diabetes.

Lack of physical activity is another risk factor for type 2 diabetes. Studies in adults have shown that starting a program of physical activity can help prevent the onset of diabetes in adults.

When students are studying the positive effects of regular physical activity, emphasize the importance of physical activity in the prevention of diabetes.

Another risk factor for type 2 diabetes includes having one or more family members with type 2 diabetes. Encourage students to ask their parents or guardians about a family history of diabetes.

1. List three reasons to begin exercising.

2. Make a plan of action. State the daily weekly and monthly goals of your program.

3. List all positive forces that help you achieve your goals.

4. List 3 ways that do not include food that you can reward yourself for a job well done.

Unit 7 Activity

Which Sport Appeals to Me?

Directions Read the article below. Then complete the activity that follows.

Physical Activity in Adolescence

Recent studies show that almost 50 percent of teens fail to meet current recommendations of 60 minutes of moderate-to-vigorous physical activity at least five days per week. Studies also show that the majority of teens become less active throughout adolescence and even more inactive as adults.

A major reason for the drop in physical activity during adolescence is a corresponding increase in sedentary activities, especially watching TV and playing computer games. Teens who spend the most time in these inactive pursuits have the lowest levels of physical activity. On the other hand, teens who participate in daily physical education classes or use community recreation facilities have higher rates of physical activity.

What can you do to help students become more physically active?

- Encourage students to play sports or participate in other physical activities, especially activities that they can continue to enjoy throughout life, such as walking or swimming.
- Urge students to spend less time watching TV and playing computer games. Experts recommend that teens spend no more than two hours per day involved in sedentary activities such as these.
- Become a strong advocate of physical education programs in your school and of recreational facilities in your community.

Directions There are many options to consider when you choose a sport. Some are easy to answer. What sports are available to me? Some are more difficult. Would I rather play a team sport or an individual one? Use the survey below to help you determine which sport you might like to join. You may choose sports that are familiar to you. You can also consider some new options.

1. Is there something you want to improve or accomplish?

2. What programs and facilities are in my area?

3. What are some possible outcomes? (team sports are fun, but an individual sport would fit my schedule better)

4. Which sport would I enjoy the most?

5. Which sport have I chosen? Why?

Unit 8 Activity

Measuring Muscular Strength and Endurance

Directions Read the passage below, then Measure your cardiorespiratory endurance

Physical Activity and Cardiovascular Health

A 2005 study showed that the United States had the most overweight and obese teens of 14 major industrialized countries. Other studies have shown that as many as 80 percent of obese teens become obese adults, and obesity at any age is associated with a wide range of medical conditions, including heart disease, certain cancers, osteoarthritis, and diabetes. Therefore, the teen years may be a crucial time to control weight in order to prevent a lifetime of health problems.

Another 2005 study found that the chief cause of weight gain in adolescent females was not overeating but a sharp drop in physical activity. Thus, promoting physical activity may be the best way to control weight in teens. Exercise helps control weight in several ways:

- Activity requires energy. If the calories taken into the body in food do not provide enough energy, stored body fat is burned for energy.
- Exercise increases body metabolism. Extra energy continues to be needed for several hours after an exercise session is over.
- Exercise increases muscle mass and decreases body fat. It takes more energy to move and maintain muscle than fat, so more energy is used when the body is leaner.

1. Find a sturdy bench or step about 12 inches high, and a watch or clock with a second hand.
2. Step onto the bench with your right foot. Bring it up to your left foot. Step back down, right foot first, then left foot.
3. Continue stepping up and down in the same manner for three minutes. Try to maintain 24 steps per minute.
4. After three minutes, take your pulse. Place your index and middle finger of one hand and place it on the other wrist. You may also place two fingers at the base of your neck near your windpipe. Count the number of heartbeats you feel in 15 seconds. Multiply that number by 5. To determine your heart rate.
6. Check your pulse rate against the target heart rate against the chart below

Step test	Excellent	Good	Fair	Needs improvement
Male teens	85-95	95-105	105-126	126 +
Female teens	85-95	95-106	106-126	126 +

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Unit 9 Activity

Protective Gear for Sports

Directions Staying safe while you are physically active is an important part of physical fitness. Study the types of protective gear described below, then match the sport with the type of protective gear that should be used.

Although the brain is well protected by the skull, brain injuries such as concussions are common in many sports. Brain injuries are also the main cause of sports-related fatalities. Sports with a high risk of brain injuries include football, boxing, soccer, horseback riding, skating, skateboarding, snow skiing, ice hockey, and baseball. In high school football, for example, every year about one in five players receives a brain injury. In horseback riding, brain injuries account for almost 20 percent of all injuries received while participating in the sport.

Evidence suggests that receiving one brain injury makes the brain more susceptible to subsequent injuries. When an athlete suffers from a second or third brain injury, the outcome is likely to be very serious. Repeated mild brain injuries over a long period, such as months or years, can cause permanent brain damage. Repeated mild brain injuries over a shorter time, such as days or weeks, can be fatal. In such cases, death usually is caused by swelling of the brain, which occurs because a previous brain injury did not have time to heal.

Experts recommend that athletes who receive brain injuries, even mild concussions, should not resume playing until healing can occur, generally for at least one week. Athletes who receive repeated brain injuries may be advised to stop playing the sport altogether to prevent risk of permanent brain damage or death from another brain injury.

Mouth Guard A soft protective shield that helps keep your mouth, teeth and tongue safe while you play any sport where your face might get hit.

Gloves **Gloves** help keep your hands safe from scrapes, cuts, and bruises

Ear Guards These guards are attached to a headband or cap and help your ears safe from injuries associated with impact.

Face and Throat Protection. A face mask and throat guard protects your face and throat from injuries caused when they might be hit by a ball or puck.

Helmet Protects your head from collision injuries. Always pick the right helmet for the sport you play. It should be snug, but comfortable, and should protect your forehead. It should not be able to slide forward or backward. Never wear a hat under a helmet. It may not allow the helmet to fit safely or correctly.

Chest Protectors Padded chest protectors help keep your torso from being injured by balls or pucks.

Pads Protect your bones and joints from fractures and bruises with pads. Elbow, ribs, shoulder and knee pads should always be worn during contact sports. Some sports use padded shirts and pants as well.

Elbow, Knee, Wrist, and Shin Guards these guards can prevent joints from fractures and protect these areas during falls.

1. Water Polo _____
2. Baseball _____
3. Football _____
4. Wrestling _____
5. Lacrosse _____
6. Volleyball _____
7. Basketball _____
8. Skateboarding _____
9. Cycling _____
10. Boxing _____
11. Soccer _____
12. Ice hockey _____