Lesson Six
The Physical Fitness Components

Objectives

After participating in this lesson students will
• Practice resistance band exercises.
• Be able to identify and explain the four components of being physically fit: cardiorespiratory fitness, muscular strength, muscular endurance and flexibility.

Time

50 minutes Prep Time: 20 minutes

Activities

6.1 Review and Plan for the Day 3 minutes
6.2 Resistance Bands 8 minutes
6.3 Introduction to Physical Fitness 5 minutes
6.4 Being Fit Fact Sheet 10 minutes
6.5 Being Fit Quiz 10 minutes
6.6 Physical Fitness Examples 7 minutes
6.7 Closure—Correct Quiz 7 minutes

Key Terms

• Physical Fitness
• Cardiorespiratory
• Muscular Strength
• Muscular Endurance
• Flexibility

Materials

☐ Resistance Bands
☐ Benefits of Being Physically Active poster
☐ Being Fit (Information Sheet 6.4)
☐ Highlighters
☐ Being Fit Quiz (Activity Sheet 6.5)
☐ Being Fit Quiz Key (Transparency 6.7)
Teacher Preparation

- Write Plan for the Day and Objectives on chart paper or board.
- Write 3 resistance band exercises on chart paper or board.
- Create Benefits of Being Physically Active poster. (See Activity 6.3.)
- Make copies of Being Fit (Information Sheet 6.4), 1 for each student, and place in portfolios.
- Make copies of Being Fit Quiz (Activity Sheets 6.5), 1 for each student, and place in portfolios.
- Write 4 components of fitness on 4 pieces of chart paper.
- Make transparencies of Being Fit Quiz Key (Transparencies 6.7).

6.1 Review and Plan for the Day 3 minutes

Materials: Plan for the Day and Objectives

Write the Plan for the Day and Objectives on the board before class, listing all of the activities that the students will be doing.

Plan for the Day:
- Resistance Bands
- Introduction to Physical Fitness
- Being Fit Fact Sheet
- Being Fit Quiz
- Physical Fitness Examples
- Closure—Correct Quiz

Review the previous class by asking students what their calorie levels are for a day. Ask them if they think they stayed within that limit since the last class. Tell them to use the poster they made as a reference for how much food equals their calorie level.

Explain that today they will be starting class with some resistance band exercises and then learning about the components of being physically fit. They’ll read and summarize a handout about physical fitness and then review the answers.

Review the Objectives with students.

6.2 Resistance Band Exercises 8 minutes

Materials: Resistance bands, 3 Resistance Band Exercises written on chart paper or board.
Explain that students will begin class with resistance band exercises.

- Explain that resistance bands develop muscular strength and flexibility. You can determine the intensity of the exercise by grabbing the resistance band closer to the center of the band.

- Show the resistance band and demonstrate how to use it. Let students know that it is not for playing with, only for doing the specific exercises. Emphasize the importance of being safe while doing the exercises so they won’t hurt themselves. It’s possible to injure a muscle by doing the exercise incorrectly. Show the students the Resistance Band Workout activity sheet in their portfolio to follow along with.

- Explain that when choosing a band, the thicker the band the more resistance it has.

**Perform the Resistance Band Workout with students.** Have students find a space away from each other, facing toward you. Demonstrate each activity and then go around and help students as needed.

**Exercises:**

- **Bent Over Row**
  Center band under feet and bend forward at the waist, back flat and abs in. Grab tube close to the feet and bend the elbows to pull the arms up to the torso, squeezing the back.

- **Overhead Press**
  Place both feet on tube and grasp ends or handles, bringing hands up just over shoulders with elbows bent and palms in. Press arms up over head and then lower.

- **One-Armed Reverse Fly**
  With front foot standing on one end of the band, hold other end in one hand and lean over, abs in, torso at 45 degrees. Keeping elbow slightly bent and in a fixed position, raise arm out to shoulder level, squeezing shoulder blades.

- **One-Armed Lateral Raise**
  Stand with one end of tube under foot and the other end in one hand. Keeping elbow slightly bent and fixed, lift the arm out to the side, to shoulder level.

- **Bicep Curl**
  Place both feet on tube and grasp handles (the wider the feet, the harder the exercise). Bend the elbows and curl hands up toward shoulder. Lower and repeat.
Cross-Body Bicep
Place left foot on band and hold the handle or end in right hand. Begin the move with palm facing in and bend the elbow, curling hand up towards the shoulder, going across the body.

6.3 Introduction to Physical Fitness  5 minutes

Materials: Benefits of Being Physically Active poster

Start by introducing what it means to be physically active.

- Ask students what **physical fitness** (good health or physical condition, especially as the result of exercise and proper nutrition) means to them. Record their responses on the board or chart paper.

- If the students do not include non-athletic activities such as walking, yoga or doing chores, explain that any type of movement can be considered physical activity.

Once students have learned what physical activity can be, talk about the benefits of physical activity.

- Ask what some benefits of physical activity are. Record students’ responses on chart paper or the board.

- Display the Benefits of Being Physically Active poster, taking note of the benefits that the students said and benefits that were not identified earlier. Review the benefits listed on the poster:
  - Having more energy and stamina
  - Improving flexibility, strength and endurance
  - Reducing the risk of future disease (diabetes, heart disease, osteoporosis)
  - Sleeping more soundly
  - Being able to concentrate better
  - Managing weight
  - Feeling better about your body

- Once the class has identified what physical activity is and what the benefits are, reiterate why it is so important to be physically active, not only because of the benefits but also because the obesity rate in the United States has tripled in one generation.
6.4 Being Fit Fact Sheet

10 minutes

Materials: Being Fit (Information Sheet 6.4), highlighters

Explain that students are now going to be reading some information about the 4 components of physical fitness.

- Have students find the Being Fit information sheet in their portfolios. Hand out a highlighter to each student. Explain that you would like them to highlight key points about each component of fitness as the class reviews the information sheet together.

- Review the information sheet with students. Read the first component—cardiorespiratory fitness—and then have students read the other three components of fitness. Pick a student to read each of the three parts.

- After you read the cardiorespiratory part, ask the class what cardiorespiratory fitness is. Have them highlight what cardiorespiratory fitness is and examples of how to achieve it. Do this for each of the sections.

- Here are the definitions and examples from each component of physical fitness:
  
  - **Cardiorespiratory Fitness**—the ability of the circulatory and respiratory systems to supply oxygen to skeletal muscles during sustained physical activity. Examples of cardiorespiratory fitness are running, biking, swimming and riding a skateboard.
  
  - **Muscular Strength**—the maximum amount of force a muscle can put out when it contracts. This is built by exercise that is strenuous for short periods of time. This type of exercise is known as anaerobic exercise. Examples are sprinting, sit-ups, push-ups, squats and weight lifting.
  
  - **Muscular Endurance**—the ability of the muscle to sustain activity or continue to perform work. Examples are bicycling, running, swimming, backpacking, etc.
  
  - **Flexibility**—the ability of the muscles and joints to extend themselves through their range of motion. Flexibility is increased by activities that extend the range of motion of joints and muscles. Examples are yoga, stretching, Capoeira, etc.

The intensity, duration and frequency of these activities can be increased by consistently engaging in these activities.
6.5 Being Fit Quiz  

Materials: Being Fit (Information Sheet 6.4), Being Fit Quiz (Activity Sheets 6.5)

Explain that now that they know a little about the four physical fitness components, they are going to take a quiz on the information they just read.

- Direct students’ attention to the Being Fit Quiz (Activity Sheet 6.5) in their portfolios. Explain that they can use the Being Fit information sheet to help them complete the quiz.

- Once all of the students have completed the quiz, explain that before reviewing the answers they are going to look at different physical fitness activities they participate in.

6.6 Physical Fitness Examples  

Materials: Chart paper with 4 components of physical fitness, markers

Bring students’ attention to the chart paper labeled with the 4 components of physical fitness. (Post these around the room before class.)

- Explain that you would like them to go around to each of the posters and write an activity that would fall under that category. For example, write “riding bikes” under cardiorespiratory, “lifting weights” under muscular strength, “bicycling” under muscular endurance and “yoga” under flexibility.

- After students have listed an activity for each of the components, discuss what they wrote. Discuss activities that fall under more than one component of physical fitness.

- Remind students that being fit doesn’t always look a certain way. Fitness looks different on people depending on their body type, age, gender and activity preferences. Physical fitness is about being and feeling healthy by participating in physical activity.
6.7 Closure—Correct Fitness Quiz

7 minutes

Materials: Being Fit Quiz (Activity Sheet 6.5) and Being Fit Quiz Key (Transparency 6.7)

Direct students’ attention to the Being Fit Quiz (Activity Sheet 6.5).
- Explain that the quiz is going to be corrected now.
- Go over all of the questions with the students, using the Being Fit Quiz Key transparency as a guide.
- If an answer is incorrect, have students change their answer to the correct one.
- Ask students to choose one aerobic (cardiorespiratory) activity that they will do in the coming week, write it in or circle it on the quiz and tell their plan to the person sitting next to them.

Resources

- HealthSmart High School: Nutrition and Physical Activity, Lesson 1, Activity 4
  - Benefits of Being Physically Active Transparency
  - Physical Activity and Fitness Quiz Answer Sheet Transparency 6
  - Being Fit Information Sheet
    - Modified by All 4 You 2! curriculum, Lesson 7, Activity 4
  - Being Fit Quiz
    - Modified by All 4 You 2! curriculum, Lesson 7, Activity 4
- Activity 6.6 Physical Fitness Examples: from All 4 You 2! curriculum, Lesson 7, Activity 5
- http://exercise.about.com
Being Fit

Cardiorespiratory fitness

Intensity
- How fast you walk/run or how hard you work.
- Intensity can be determined by your target heart rate.
- To get the most out of physical activity your target heart rate zone should be between 60-80% of your maximum heart rate.
- Average target heart rate for teenagers is 120-160 beats per minute.
- New and beginning exercisers should stay near that low end of the range.

Frequency & Time (Duration)
- How often and how long you are active.
- Moderate to vigorous activity 30 minutes a day.
- Small amounts (5-10 minutes) throughout the day.

Aerobic activities include walking, running, bicycling, skateboarding, tennis.

Helps in preventing heart disease and obesity.

Muscular endurance

The ability of the muscle to sustain activity or continue to perform work.
- Necessary for everyday tasks.
- Key to success in sports.
- Raking leaves, carrying a backpack, running.
- Weight bearing activities, such as running, help in preventing osteoporosis.

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Muscular strength

The maximum force muscles put out when they contract.
- Needed for all movements.
- Muscles support and protect joints and internal organs.
- Can be increased through physical activity.
- Anaerobic exercise is strenuous exercise over short periods of time that targets specific muscle groups.
- Includes weight lifting, sprinting, sit-ups.

Flexibility

The range of motion of joints and muscles.
- Increased by activities that extend the range of motion of joints and muscles.
- Stretching exercises, touching toes, torso twists.

Remember: FITT = frequency, intensity, time and type of activity. Start slowly and build up over time. Pushing too hard too soon often results in injuries.
~ Being Fit Quiz ~

1. What are the 4 components of physical activity?
   • ___________________________________________________________
   • ___________________________________________________________
   • ___________________________________________________________
   • ___________________________________________________________
   • ___________________________________________________________

2. Cardiorespiratory fitness strengthens which 2 body parts?
   ___________________________________________________________
   ___________________________________________________________

3. What are 3 examples of aerobic activities?
   ___________________________ ___________________________ ___________________________

4. For maximum benefit, teens should exercise so that their target heart rate is _____ per minute.

5. For health benefits, the duration of aerobic exercise should be AT LEAST _____ minutes.

6. Name 2 disease conditions aerobic exercise helps to prevent.
   ___________________________ ___________________________

7. Weight bearing activities help prevent what disease?
   ___________________________

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8. Brief, strenuous exercise to near exhaustion is sometimes referred to as _______________ exercise.

9. What advice should be given to someone who is just beginning to exercise?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

10. Over exercising and pushing too hard can result in ____________.
Being Fit Quiz Key

1. What are the 4 components of physical activity?
   • Cardiorespiratory fitness
   • Muscular Strength
   • Muscular Endurance
   • Flexibility

2. Cardiorespiratory fitness strengthens which 2 body parts?
   Heart and Lungs

3. What are 3 examples of aerobic activities?
   Walking, running, bicycling, rollerblading, skateboarding, swimming, cross-county skiing, hiking, basketball, dancing, tennis

4. For maximum benefit, teens should exercise so that their target heart rate is _____ per minute. 120 – 160 beats per minute

5. For health benefits, the duration of aerobic exercise should be AT LEAST _____ minutes. 30 minutes

6. Name 2 disease conditions aerobic exercise helps to prevent.
   High blood pressure, heart disease, stroke, diabetes, high cholesterol, obesity

7. Weight bearing activities help prevent what disease?
   Osteoporosis

8. Brief, strenuous exercise to near exhaustion is sometimes referred to as _____________ exercise. Anaerobic

9. What advice should be given to someone who is just beginning to exercise?
   Start slowly and build up over time.

10. Over exercising and pushing too hard can result in ___________. Injury

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