

Standard 3

The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

Grade-Level Outcomes

- Describes the concept of fitness and provides examples of physical activity to enhance fitness (S3.E3.3)
- Recognizes the importance of warm-up and cool-down relative to vigorous physical activity (S3.E4.3)
- Identifies physical activity as a way to become healthier (S3.E1.3b)
- Identifies the components of health-related fitness (S3.E2.4)

Lesson Objectives

The learner will:

- Name four of the components of fitness
- Demonstrate at least two activities used in each of these four components of fitness
- Discuss the effects of these four components of fitness
- Describe a physically fit person in relation to the components of fitness

Materials and Equipment

- Pencil and rubber band for demonstration of flexibility
- Student journal and pencil for each student

Introduction

Who likes to play? Did you know that playing makes you healthy? We are going to learn a part of being healthy today called physical fitness. Who has heard of this before? What do you think being physically fit means? Today, we will learn about four parts, or components, of physical fitness.

**LEARNING EXPERIENCE: CARDIORESPIRATORY OR AEROBIC ENDURANCE—
INCREASING THE HEART RATE**

Can you hear your heart beating? When the room is very quiet, just before you go to sleep at night, you can “hear” your heart beating. Another way to “listen” to your heart is by counting your pulse. Let’s count our pulse while we are seated in our resting position. First, how many seconds are in a minute?

- Allow students enough time to find their pulse. Tell them to practice counting to themselves. On the signal “Go,” allow them six seconds to count. Now, ask them to multiply the number of pulse beats they count by 10.

That’s how many times your heart beats in one minute when you are resting.

- Repeat once for practice.

(Don’t worry if the pulse count is not accurate. The increase of the pulse during activity is the focus, and that increase will be obvious to the children.)

What do you think will happen to your heart rate when you walk?

- Have students walk in general space for about 30 seconds and then stop and find their pulse. Repeat the 6-second count.

Raise your hand if the number was higher this time.

What do you think will happen to your heart rate when you jog or run, or jump rope?

- Standing in self-space, students perform magic jump rope (jumping without a rope) for 30 seconds. Students jump up and down on two feet and turn the pretend rope until you give the signal to stop. On your signal, they stop and position their fingers ready to count their pulse.
- Students find their pulse and repeat the 6-second count.

What happened to your pulse? Why does your heart beat faster when you are active? Activities that make your heart beat faster are called aerobic activities. Aerobic activities help you build cardiorespiratory endurance, which helps your heart (cardio) and lungs deliver oxygen to your muscles through your blood. Cardiorespiratory endurance is one component, or part, of fitness.

Note: A number of terms (e.g., cardiorespiratory endurance, cardiorespiratory fitness, cardiovascular fitness, aerobic fitness, aerobic capacity) are used to describe this component of health-related fitness. These terms describe the ability of the heart and lungs to circulate oxygen-rich blood to the exercising tissues, the ability of the muscle cells to use the oxygen for energy production, and the ability of the circulatory system to return blood to the heart (Ayers & Sariscsany, 2011). We recommend using the term *cardiorespiratory endurance* with elementary school students because it “reflects the ability of a person to perform functional fitness activities of daily life associated with the three principal systems supporting performance (cardiovascular, respiratory, muscular)” (Corbin et al., 2014). Also, many elementary students understand that *cardio* refers to the heart. Students will learn about aerobic fitness in middle school when the FITT principle is introduced.

LEARNING EXPERIENCE: MUSCULAR STRENGTH AND ENDURANCE

Muscular strength and muscular endurance are other important components of fitness. Strength is how much you can move or hold with your muscles, and endurance is how long you can do it. Who is the strongest person you know? What makes him or her strong? We build a strong heart muscle by exercising the heart by running, swimming, or jumping rope. We also build strong leg muscles when we run and jump. We build strong abdominal muscles (point to the abs) when we do curl-ups. How can we build strong arm muscles? What type of things do you do when you play that build strong muscles? Today we are going to learn other exercises that help you build muscular strength and muscular endurance.

Push-Ups

- Demonstrate a correct 90-degree push-up. Emphasize a straight body and arms bent to a 90-degree angle before returning to starting position. Provide an example of poor technique (buttocks in the air, belly swaying toward the floor, arms remaining straight). Have students try proper technique for about 30 seconds.
- Modified push-up. Demonstrate the modified push-up with weight on the knees. Have students try for about 30 seconds.
- Inverted push-up. Demonstrate a “belly-up” push-up. Have students try for about 30 seconds.

Crab Walk and Kicks

- Demonstrate the crab walk and have students travel without touching others for about 30 seconds.
- Have students, in self-space, alternate the right and left legs for crab kicks. They should hold each kick for 5 seconds.

If you were able to do most of those tasks, you demonstrated muscular strength. If you did not get tired doing those tasks for 30 seconds, you demonstrated muscular endurance. Think of a long-distance runner. He or she has more endurance than runners who go a short distance as fast as they can. The short-distance runner is called a sprinter and needs muscular strength to go fast. Remember: How much you can move or hold—in this case, your own weight—is muscular strength. How many you can do or how long you can do it is muscular endurance.

LEARNING EXPERIENCE: FLEXIBILITY

Another component of fitness introduces another new word: flexibility. What do you think flexibility means? (Demonstrate with a rubber band and a pencil.) Can a rubber band stretch and bend? How about the pencil? Which one is flexible? Flexibility is the ability to stretch and bend. Who can tell me the sports or physical activities in which flexibility is important? Do we need to be flexible for good health and wellness? Why?

V-Seat Stretch

- Demonstrate the V-position by stretching gently toward the toes and then holding for five seconds. Have students try the V-stretch. Inform them that not everyone can stretch the same distance.
- Seated in the V-position, students place their fingers on their knees and “walk” their fingers forward to see how close they can get to their socks. They hold for five seconds. Then, ask whether they can walk fingers forward to touch the shoelaces. They hold for five seconds. Last, if successful with the shoelaces, they walk their fingers forward to their toes and beyond.

Isn't it easier when we approach with a gentle stretch?

Side Stretches

Lead students in side stretches by placing one hand on the waist and stretching the opposite hand above the head and across the body. Hold for five seconds. Alternate sides and repeat three to five times.

Shoulder Stretch

- Demonstrate from a back view by extending your right hand upward and reaching behind your back to touch your left hand (FitnessGram). Have students attempt the stretch and hold for five seconds. Repeat with the left hand upward and reaching.

Discuss briefly the importance of stretching: Warming up muscles prevents injury and enhances performance. Warming up and cooling down is important with vigorous physical activity. Share that it is best to stretch after a few minutes of moderate activity. Discuss the importance of flexibility in each of these areas.

Assessment

Students write two or three sentences in their journals describing a physically fit person. Prompt: What does it mean to be physically fit?

Closure

Today, we talked about fitness in several areas. We performed activities in each of the areas. Raise your hand if you can name one of the components of fitness that we introduced today.

- How do we improve fitness? Name two activities that are good for improving fitness.
- How do we make our muscles stronger?
- How do we become more flexible?
- Why is stretching important before physical activity? Why is cooling down important after physical activity?
- Can you tell by looking at a person that he or she is physically fit? How do you know? (This might open up an opportunity to teach students that not all thin people are fit and that heavy people might be fit in some components.)

Reflection

- Can students identify four of the components of fitness?
- Can they define and discuss the components introduced today?
- Can they make the connection between a physically fit person and those components of fitness?