



## What Happens When You Move?

### *Extension Activity for “What Happens When You Move?” Lesson*

#### **Activity Overview:**

In this activity, families participate in a five-day physical activity challenge. Each family member logs his/her heart rate after participating in a different family activity each evening, including a hopscotch showdown, a speed walking race, a marching contest, a dance off, and a jump rope jump-off. At the end of the challenge, families will examine data and determine which activities increased their heart rate the most. Families use the information from their analyses to answer a set of questions aimed at encouraging more physical activity at home.

**Activity Duration:** Will vary

#### **Objectives:**

Students will:

- Discuss the American Heart Association’s physical activity recommendations for kids and adults.
- Participate in physical activity aimed at increasing their heart rate
- Investigate how different types of movement affect heart rate
- Demonstrate how to accurately measure and calculate heart rate
- Collect and examine heart rate data to make better decisions about their family’s physical fitness

#### **Standards**

##### National Health Education Standards

- Standard 1: Comprehend concepts related to health promotion and disease prevention to enhance health
  - 1.8.1 Analyze the relationship between healthy behaviors and personal health
- Standard 6: Demonstrate the ability to use goal-setting skills to enhance health
  - 6.8.2 Develop a goal to adopt, maintain, or improve a personal health practice
  - 6.8.3 Apply strategies and skills needed to attain a personal health goal
- Standard 8: Demonstrate the ability to advocate for personal, family, and community health
  - 8.8.2 Demonstrate how to influence and support others to make positive health choices

##### National Physical Education Learning Standards:

- Standard 3: The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.
  - S3.M10.6 Differentiates between aerobic and anaerobic capacity, and between muscular strength and endurance

#### **Materials:**

- **Physical Activity Challenge** handout
- Sidewalk chalk or masking tape
- Upbeat dance songs

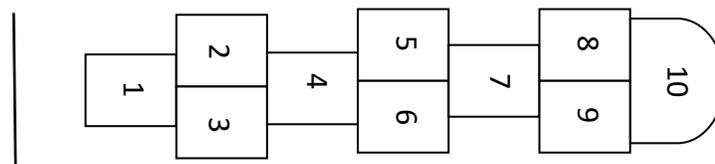
#### **Procedure:**

1. List the names of any family members who will be participating in the Physical Activity Challenge on the data table.
2. Teach your family how to calculate their heart rate in beats per minute (BPM).
  - Measure resting heart rate by finding radial pulse (at the wrist) or carotid pulse (at the neck).
  - Count the number of beats in 15 seconds.
  - Multiply that number by four to calculate the average number of heart beats per minute (BPM).

3. Record resting heart rates for all participants on the Physical Activity Challenge data table. (*Note: It is important that everyone has been resting for 5 to 10 minutes before taking this measurement.*)
- Discuss the American Heart Association’s physical activity recommendations with your family and how physical activity can affect your body and make your heart beat faster.
  - The AHA recommends that children age 2 and older should participate in at least 60 minutes of enjoyable, moderate-intensity physical activities every day that are developmentally appropriate.
  - The AHA recommends that adults be physically active for:
    - i. At least 150 minutes of moderate intensity physical activity each week  
OR
    - ii. At least 75 minutes of vigorous aerobic activity each week; or an equal combination of moderate- and vigorous-intensity aerobic activity  
AND
    - iii. Physical activity should be done in blocks of at least 10 minutes spread throughout the week.

4. Each evening of this challenge, all family members should participate in one of the following physical activities for 10 minutes:

- **Hopscotch Showdown:** Create a hopscotch diagram with ten boxes (see diagram below) and number each box using chalk or masking tape. If your family has more than three members, draw a second board so that no family member is inactive for a long period of time. Play hopscotch for 10 minutes. When your family has mastered the game, work together to make up some Family Rules for playing!
  - Guidelines for Play: Each player has a marker such as a shell, button, or bean bag. For Round 1, the first player stands behind the starting line and tries to toss his or her marker into box 1. The player hops over box 1 to box 2, then continues hopping to square ten, turns around, and hops back again. On the way back, the player pauses in box 2 to pick up the marker in box 1, hops in box 1, and then hops back to the starting line. Each player takes a turn until all students have attempted box 1. Play continues in the same way for boxes 2 through 10.
    - Rules:
      - The marker must land inside the box without bouncing out. If the marker bounces out, the player loses the turn and must start with the box they missed when it is his/her turn again.
      - All hopping is done on one foot unless the hopscotch design is such that two squares are side-by-side. Then two feet can be placed down with one in each square.
      - A player must always hop over any square where a marker has been placed.



- **Speed Walking Race:** Set a timer for 10 minutes. Each family member walks at a fast pace for 8 minutes. For the last 2 minutes, each family member will speed walk as fast as they can and try to out-walk the others!
- **March it Out Spelling Bee:** The family participates in a March it Out Spelling Bee in the backyard or other open area. Each family member spells the following words by marching out the shapes of the letters (and symbol): “heart,” “healthy,” “active,” “♥,” “family,” “pulse,” and

“go.” Be sure to keep your knees up as you march!! If everyone finishes the Spelling Bee before the 10 minutes are up, start over but try going a bit faster the second time around.

- **Dance Off:** Family members dance to a series of upbeat songs for 10 minutes. After heart rates have been measured, family members vote on the best dance/dancer!
- **Jump Rope Jump-Off:** Each family member demonstrates their jump rope abilities for 2 minutes, then rests for 1 minute. Repeat this procedure four times, then measure heart rates. Make sure you measure heart rates after the last 2 minutes of jump roping and not after the last minute of rest! If a jump rope is not available, do jumping jacks or mimic jumping rope for each 2-minute jumping segment. The family will decide who was most consistently steady in their jumping skills.

The order in which you choose to participate in these activities throughout the week does not matter. The important part is that the family participates for the same amount of time each evening in the chosen activity. We are recommending 10 minutes for each but you may choose to go a bit longer depending on your family’s circumstances. Consistency is key! Also, remember these activities should be done in addition to your regular physical activity in order to the AHA’s physical activity recommendations.

5. Each family member measures and records their heart rates on the **Physical Activity Challenge** on the data table immediately following each activity in the evenings.
6. Determine which activity increased the heart rate the most and write it in the space provided on the table. (See example provided on the data table.)

#### **Assessment:**

- After all challenges have been completed, examine the data from the table and answer the following questions.
  - Whose rate was highest/lowest for each activity?
  - Which activities were most strenuous according to the heart rate data?
  - Whose heart rate changed the most from resting to active each evening?
  - What are other activities we could participate in as a family to get more physical activity?
- According to the American Heart Association, physical inactivity is a major risk factor for developing coronary artery disease. It also increases the risk of stroke. Physical activity improves risk factors for cardiovascular disease such as high blood pressure and high cholesterol. Discuss ways you can help increase physical activity as a family.

Family Members	Resting Heart Rate	Heart Rate After Physical Activity						Activity with Highest Heart Rate
		Hopscotch	Speed Walking	Marching	Dancing	Air Boxing		
Joe Dad	62 BPM	85	105	118	152	140	Dancing	