

# Module Two:

## Physical Activity Recommendations

### Background Information

The United States Department of Health and Human Services provides guidance on the amounts and types of physical activity that we need to be healthy. These recommendations are split into three groups based on life stage: youth (6-17 years), adults (18-65 years), and older adults (older than 65 years). The amounts of physical activity recommended in each life stage are based on scientific evidence of what levels and types of activities are associated with overall health and the reduced risk of disease.

Children and adolescents (6-17 years) need 60 minutes or more of physical activity every day. This activity should include aerobic activities like running, dancing, or biking; muscle-strengthening activities like climbing trees, using playground equipment, or lifting weights; and bone-strengthening activities like running or jumping rope.

Adults (18-65 years) should engage in 30 minutes of activity five days per week for a total of 150 minutes per week. This activity should include muscle-strengthening activities (such as lifting weights or using resistance bands) that involve all major muscle groups.

Older adults (older than 65 years) also need 30 minutes of physical activity, five days per week for a total of 150 minutes per week. A special recommendation for this age group is that activity should include exercises that improve balance. Older adults who are unable to do 30 minutes of physical activity five days per week due to chronic health conditions should be as physically active as their abilities and conditions allow.

The recommendations also state that physical activity should be moderate or vigorous in intensity to get the most health benefits. There are three types of intensity: light, moderate, and vigorous. These categories vary by the amount of calories needed by our bodies to do the activity.

Light intensity physical activities require very little effort and a minimal amount of calories (less than 3.5 calories per minute of activity). When doing light activities, heart rate and breathing rate are similar to those at rest. Light activities include casual walking, bicycling slowly with no resistance (on a flat road), stretching, light weight training, dancing slowly, leisurely sports (table tennis, playing catch), floating in a pool, boating, fishing, light yard/house work. Although light intensity activities are not included in the recommendations for physical activity, they still are an important part of living an active lifestyle.

Moderate intensity physical activities require some effort and a moderate amount of calories (between 3.5 and 7 calories per minute of activity). When doing moderate physical activity, heart rate and breathing rate are increased. Examples of moderate intensity activities include walking briskly (3 miles per hour or faster, but not race walking), water aerobics, bicycling slower than 10 miles per hour, but with some resistance (on a light/medium hill), tennis (doubles), ballroom dancing, general gardening.

Vigorous intensity is physical activity that is strenuous, and requires a lot of effort and a lot of calories (more than 7 calories per minute of activity). When a person is engaging in vigorous activities his or her heart rate and breathing rate will be very fast. Vigorous activity includes race walking, jogging or running, competitive sports (soccer, volleyball, gymnastics, basketball, baseball, hockey, football, lacrosse, rugby, water polo, kickball), karate, judo, taekwondo, jiu-jitsu, swimming laps, tennis (singles), aerobic dancing (Zumba, hip hop, tap, jazz, ballet), bicycling 10 miles per hour or faster, jumping rope, jumping jacks, heavy gardening (continuous digging or hoeing), hiking uphill or with a heavy backpack.

## Activity 2.1 : Classroom Activity

Time Required  
**45 to 60 mins**

Suggested Groupings  
**Small teams of 3 to 4**

### Materials Needed

(\*Materials provided in curriculum)

- Youths' Journals (Appendix 1F) with Module 1 completed
- Flip chart paper
- Markers or writing utensils
- \*Physical Activity Recommendations (Appendix 2A)
- \*Physical Activity Cards (Appendix 2B)
- One sheet of 8 1/2 x 11" blue paper
- One sheet of 8 1/2 x 11" green paper
- One sheet of 8 1/2 x 11" yellow paper
- \*Character Cards (Appendix 2C)
- \*Warm-Up Activities (Appendix 2D)
- Pedometers or physical activity monitors (optional)

## Concepts and Vocabulary

- **Aerobic:** involving, utilizing, or increasing oxygen consumption for metabolic processes in the body.
- **Calories:** a unit of measurement of energy.
- **Heart Rate:** how frequently the heart beats, expressed as the number of heart beats per minute (BPM). Heart rate will change depending upon intensity of physical activity.
- **Breathing Rate:** the frequency of breathing, expressed as the number of breaths per minute. Breathing rate will change depending upon intensity of physical activity.
- **Intensity:** in physical activity, this refers to the amount of energy, or calories, used by our bodies during the physical activity.
- **Light Intensity:** activities that require very little effort and require our bodies to use less than 3.5 calories per minute.
- **Moderate Intensity:** activities that require some effort and require our bodies to use between 3.5 and 7 calories per minute.
- **Recommendation:** a suggestion about what should be done.
- **Vigorous Intensity:** activities that require a lot of effort and require our bodies to use more than 7 calories per minute.

## Getting Ready

1. Make copies of the Physical Activity Recommendations (Appendix 2A); one copy for each team.
2. Make copies of the Physical Activity Cards (Appendix 2B); one set for each team.
3. Cut out each of the 12 Physical Activity Cards.
4. Cut each sheet of colored paper into four equal pieces.
5. Glue or tape each Physical Activity Card onto one piece of colored paper so that light intensity cards are on the blue paper, moderate intensity cards are on the yellow paper, and vigorous intensity cards are on the green paper.
6. Make one copy of the Character Cards (Appendix 2C). Cut out each of the eight Character Cards along the dotted line; one character card for each team. If there are fewer than eight teams, select at least one card from each age range. Fold the cards in the middle so that the character description and physical activity are facing out on each side.
7. Optional: provide each youth with a pedometer or physical activity monitor. Explain to the youth they can use these devices to track the amount of physical activity.
8. Organize the class into small teams of 3 to 4 youth.



Facilitator tip: these can be the same teams that were formed in Lesson 1, Activity 1. By doing so, the youth may continue developing teamwork skills with the same team members.

9. Provide each team with one sheet of flip chart paper and markers to answer opening questions.

## Journal Review

1. Have the youth share their completed Module 1 journal reflections (Journal Page 4).
2. Follow the youth's lines of thinking developed through their thoughts and observations. If necessary, ask more targeted questions/ prompts:
  - Explain what you noticed about the physical activity that you graphed.
  - Describe some benefits you think you got from doing physical activity.
  - Explain how you went about deciding the types of activities you can do in the next week to increase your physical activity.

## Opening Questions/ Prompts

Ask the youth to respond to each question/prompt below by recording them on the flip chart

paper provided and sharing their ideas verbally.

- Explain why you think it's important to be physically active.

## Procedure (Experiencing)

1. Provide each team with the Physical Activity Recommendations handout (Appendix 2A). Ask the youth to read and discuss the information on the handout. Ask them to compare and contrast the different physical activity recommendations. Encourage the youth to use their flip chart paper to record their thoughts.

2. Ask the youth to share what similarities and differences they noticed about the physical activity recommendations for different age groups.

3. Explain to the youth that there are different types of intensities of physical activity and that the recommendations state that the amount of physical activity needed for each age group should be moderate or vigorous activity.

4. Explain to the youth that in order to better understand the differences between light, moderate, and vigorous intensity levels, they are going to do an investigation.

5. Provide each team with a set of Physical Activity Cards (Appendix 2B).

6. Ask the youth to sort the cards into different intensity levels. Ask them to discuss their observations of similarities and differences between the cards.

7. Provide each team with a Character Card (Appendix 2C). Explain that the card has two sides, but for this portion of the activity, just focus on the side that says "physical activity." Explain that after doing the warm-up exercises, each team will lead the class through the physical activity listed on the card.

8. Lead the youth through the Warm-Up Activities (Appendix 2D). Complete the exercises in order, 1-3. Explain to the youth that doing warm-ups before engaging in physical activity increases our blood flow and raises our body temperature and that doing these warm-up exercises before engaging in physical activity helps to prevent injuries.

9. Ask each team to lead the class through the activity on their character card, one at a time. Explain to the youth that they should first demonstrate the exercise to the class and then tell the class to "Go" when they should begin the activity together as a group. Have the teams use a stopwatch to keep time for the duration that the activity should be done. During the activities, engage the youth in discussion using the following questions/prompts:

- a. Explain how your body is feeling during this activity.
- b. Describe what part of your body you think is working the most during this activity.
- c. What do you think is the intensity level of this activity?

10. After all of the activities have been completed, ask the youth to return to their teams.

11. Ask the youth to flip over their character card to the second side of the card that has information about a person and what types of physical activity they typically do. Explain that they will be investigating information about the person to determine whether that person has met his or her recommended amount of physical activity.

12. Explain to the youth that they will need to use the information on the Physical Activity Recommendations handout and the Character Card to determine the amount of physical activity recommended for that person, if that person had enough physical activity to meet the recommendation, and if not, what additional activities he or she should do. Explain that they can use the Physical Activity Cards to identify additional physical activities.



Facilitator Tip: Youth may need assistance in understanding the importance of light intensity physical activity. Any misconceptions youth have about light intensity physical activity counting toward the recommendation will typically be addressed in the Sharing, Processing, and Generalizing. It is important to remind youth that even though light intensity is not a part of their recommendation, it still plays an important part in overall health.

## Sharing, Processing, And Generalizing

- Have the youth share the information about the person on their Character Card, the amount of physical activity recommended for that person, if that person had enough physical activity to meet the recommendation, and if not, what additional activities he or she should do.
- Follow the lines of thinking developed through the youth's thoughts, observations, and questions as they share the similarities and differences between the characters and their physical activity recommendations. If necessary, ask more targeted questions/prompts:
  - o Explain how you went about deciding whether your character met the physical activity recommendation.
  - o If your character didn't meet the recommendation, explain how you went about deciding what additional activities he or she should do.
  - o Explain what you noticed about the similarities and differences between the characters and their recommendations for physical activities.
  - o Explain what you noticed about the similarities and differences between the people on the character cards.

## Concept and Term Discovery/introduction

Make sure that the youth understand the importance of being physically active over the lifetime and that each life stage has different physical activity recommendations and that youth ages



6-17 should do 60 minutes of physical activity every day. Youth should understand that while all forms of activity are encouraged, only **moderate** and **vigorous** physical activity count towards meeting the recommended amount of physical activity. Light physical activity plays an important role in overall health and fitness even though it does not count towards the physical activity recommendation. Additionally, make sure that key vocabulary terms are either discovered by the youth or introduced to them: **intensity**, **light intensity** physical activity, **moderate intensity** physical activity, and **vigorous intensity** physical activity.

## Activity 2.2 : Journal Activity

Time Required  
**10 to 15 mins**

### Materials Needed

- (\*Materials provided in curriculum)
- \*Healthy Choices in Motion Journal (Appendix 1F) prepared as part of Module 1
- Pedometer or physical activity monitor (optional)

## Concepts and Vocabulary

- Intensity: in physical activity, this refers to the amount of energy, or calories, used by our bodies during the physical activity.
- Light Intensity: activities that require very little effort and require our bodies to use less than 3.5 calories per minute.
- Moderate Intensity: activities that require some effort and require our bodies to use between 3.5 and 7 calories per minute.

## Procedures (Experiencing)

1. Explain to the youth that they will use this journal to record and reflect on their physical activity by recording the minutes of activity every day. Optional: provide the youth with pedometers or physical activity monitors. Ask them to use the data collected by these devices (steps/minutes/distance) to track and monitor physical activity in their journal.
2. Explain that after tracking the activity for the week the youth will complete the questions at the end. Explain that they will use the data they recorded to create a graph of the physical activity they did over the course of one week, to reflect on their progress, and set goals for the next week.
3. Ask the youth to bring their journals to class with the Module 2 section completed and share their graphs and their answers to the questions.



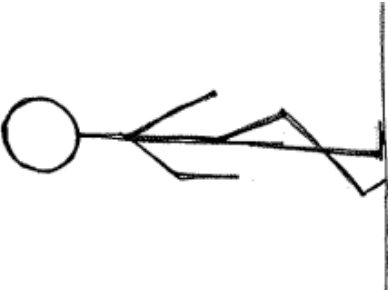

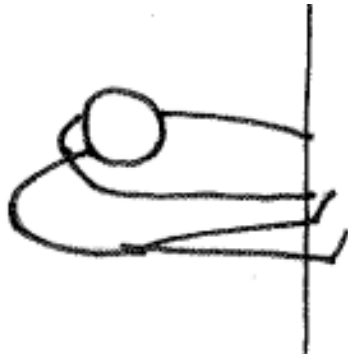
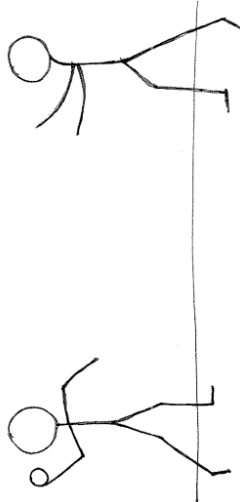
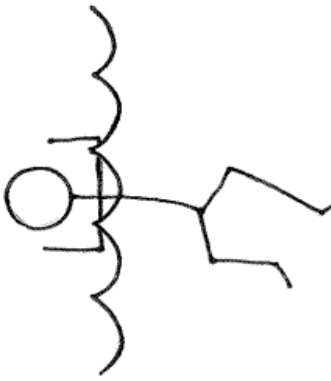
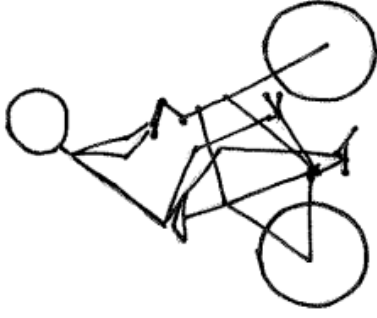
Facilitator Tip: Sharing their journal recordings can be done as a way to review the content before facilitating Classroom Activity 3.1.

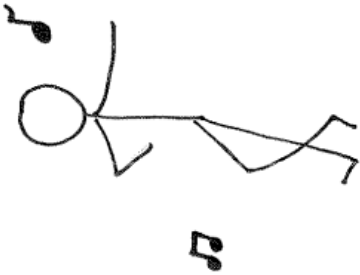
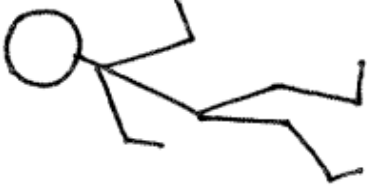
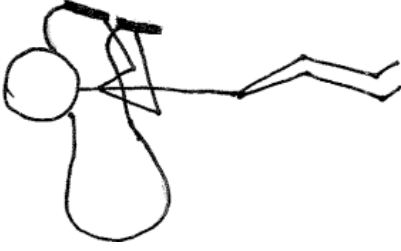
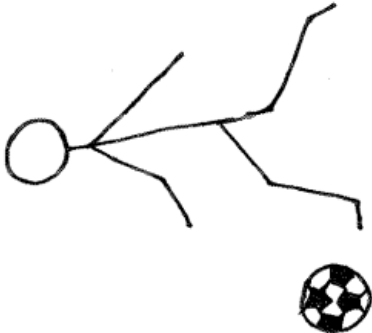
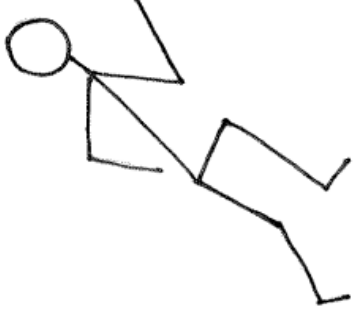

## References Used

1. <http://health.gov/paguidelines/>
2. U.S. Department of Health and Human Services (2008) Appendix 1. Translating Scientific Evidence About Total Amount and Intensity of Physical Activity Into Guidelines. Accessed March 29, 2016. <http://health.gov/paguidelines/guidelines/Appendix1.aspx>
3. U.S. Department of Health and Human Services (HHS) Physical Activity Guidelines for Americans.
4. U.S. Department of Health and Human Services. (1999). Promoting physical activity. Champaign, IL: Human Kinetics.

Life Stage	Amount	Intensity	Additional Recommendations
<p>Children and adolescents 6-17 years</p>	<p>60 minutes or more</p>	<p>Moderate or vigorous</p>	<p>Physical activity should include:</p> <ul style="list-style-type: none"> <li>• Aerobic activities (running, dancing, or biking)</li> <li>• Muscle-strengthening activities (climbing trees, using playground equipment, or lifting weights)</li> <li>• Bone strengthening activities (running or jumping rope)</li> </ul>
<p>Adults 18-65 years</p>	<p>30 minutes per day, 5 days a week or more (150 minutes per week)</p>	<p>Moderate or vigorous</p>	<p>Physical activity should include:</p> <ul style="list-style-type: none"> <li>• Aerobic activities (running, dancing, or biking)</li> <li>• Muscle-strengthening activities (such as lifting weights or using resistance bands) that involve all major muscle groups</li> <li>• Bone strengthening activities (running or jumping rope)</li> </ul>
<p>Older adults Older than 65 years</p>	<p>30 minutes per day, 5 days a week or more (150 minutes per week)</p>	<p>Moderate or vigorous</p>	<p>Physical activity should include:</p> <ul style="list-style-type: none"> <li>• Exercises that improve balance</li> </ul> <p>Older adults who are unable to do 30 minutes of physical activity five days per week due to chronic health conditions should be as physically active as their abilities and conditions allow.</p>



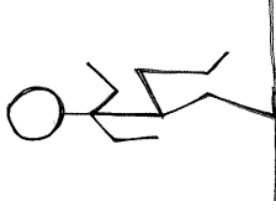
<p><i>Light Intensity</i></p>  <p>Casual Walking</p>	<p><i>Light Intensity</i></p>  <p>Light Yard Work</p>	<p><i>Light Intensity</i></p>  <p>Stretching</p>
<p><i>Light Intensity</i></p>  <p>Playing Catch</p>	<p><i>Moderate Intensity</i></p>  <p>Water Aerobics</p>	<p><i>Moderate Intensity</i></p>  <p>Bicycling (on a light/medium hill)</p>

<p><b>Moderate Intensity</b></p>  <p><b>Salsa Dancing</b></p>	<p><b>Moderate Intensity</b></p>  <p><b>Walking Briskly</b></p>	<p><b>Vigorous Intensity</b></p>  <p><b>Jumping Rope</b></p>
<p><b>Vigorous Intensity</b></p>  <p><b>Soccer</b></p>	<p><b>Vigorous Intensity</b></p>  <p><b>Running</b></p>	<p><b>Vigorous Intensity</b></p>  <p><b>Swimming Laps</b></p>

**Janelle** is 9 years old and loves soccer more than anything. She plays on a soccer team and practices for 40 minutes a day. At the end of practice, they also do some stretches for 20 minutes.

**Physical Activity**

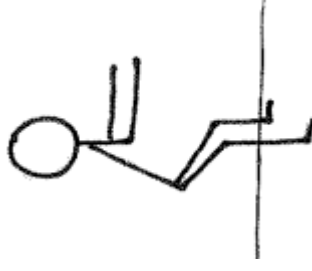
**Run-in-place  
30 seconds**



**Mike** is 11 years old and has been playing football for 2 years. He practices for 45 minutes with the football team every day and stretches after for 15 minutes. Mike hopes to make the varsity football team in high school.

**Physical Activity**

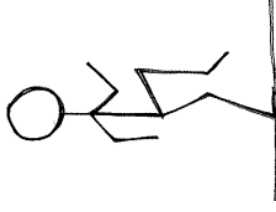
**Football Feet  
30 seconds**



1. Stand on your toes with feet shoulder-width apart
2. Rapidly run in place without lifting your feet higher than three inches off the ground

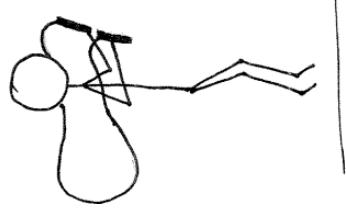
**Amir** is 12 years old and wants to become a firefighter, like his mom. After school, he bikes on a medium hill the 10 minutes to get to the firehouse where he sits and does his homework. He casually walks 5 minutes to the kitchen to make himself a snack.

**Physical Activity**  
**High Knee Run**  
**30 seconds**



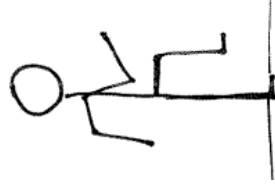
**Sophia** is 10 years old and science is her favorite subject. At recess, she likes to play jump rope with her friends for 15 minutes, casually walk around for 5 minutes, and then sit and read her science magazine.

**Physical Activity**  
**Jumping Rope**  
**30 seconds**



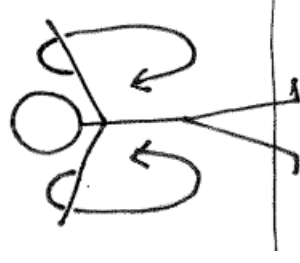
**Liam** is 40 years old and is a working father of 3 children. Every morning he walks briskly 10 minutes to the office where he works as a businessman and 10 minutes home in the evening. Liam does light yard work for 20 minutes and then eats dinner with his family. Then they usually watch a TV show together before it is time for bed.

**Physical Activity**  
**Walk In Place**  
**30 seconds**



**Isabella** is a 35-year-old working mother of 3 children. She wakes up very early 3 times a week to go swimming for 30 minutes and stretches for 10 minutes before she heads to the office where she works as a scientist.

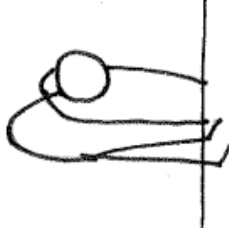
**Physical Activity**  
**Arm Circles**  
**30 seconds**



**Santiago** is 70 years old and loves to salsa dance. He goes out dancing twice a week for 30 minutes. He also enjoys doing water aerobics for 20 minutes and stretching for 10 minutes on Saturdays.

**Physical Activity**

**Stretch: Touch Your Toes**  
30 seconds

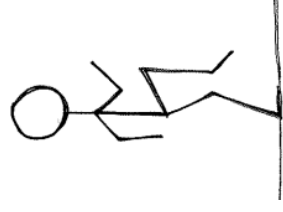


Slowly reach down and touch your toes. This should be a slow smooth movement.

**Gabriella** is 67 years old and is a school guidance counselor. She is also the school's cross-country and track coach, since she used to be an Olympic athlete. Gabriella still runs for 20 minutes each day and casually walks for 20 minutes.

**Physical Activity**

**Jog in Place**  
30 seconds





1	2	3
<div data-bbox="285 468 474 737" data-label="Image"> </div> <p data-bbox="261 793 503 827">Marching in Place:</p> <ol data-bbox="188 873 535 1247" style="list-style-type: none"> <li>1. Stand with your feet together and your arms by your sides.</li> <li>2. March in place swinging your arms forwards and backwards.</li> <li>3. March in place for 30 seconds.</li> </ol>	<div data-bbox="683 468 930 743" data-label="Image"> </div> <p data-bbox="732 800 889 833">Arm Circles:</p> <ol data-bbox="618 877 990 1289" style="list-style-type: none"> <li>1. Stand with your feet together and your arms held out by your sides.</li> <li>2. Move arms in large forward circles for 30 seconds.</li> <li>3. Reverse motion, moving arms in large backward circles for 15 seconds.</li> </ol>	<div data-bbox="1149 464 1365 751" data-label="Image"> </div> <p data-bbox="1122 800 1386 833">Side Leg Extensions:</p> <ol data-bbox="1060 877 1438 1367" style="list-style-type: none"> <li>1. Stand with your feet together.</li> <li>2. Extend your right leg outward then return to standing.</li> <li>3. Extend your left leg outward then return to standing.</li> <li>4. Repeat at slow pace for 30 seconds.</li> </ol>

