

## Montgomery County Public Schools Grade 6 Physical Education Curriculum Framework

<b>Standard I: Exercise Physiology</b>
Students will demonstrate the ability to use scientific principles to design and participate in a regular, moderate to vigorous physical activity program that contributes to personal health and enhances cognitive and physical performance in a variety of academic, recreational, and life tasks.
I.6.1 Analyze the effects of physical activity on the body systems.
a. Explain and discuss how the muscular, skeletal, nervous, and circulatory systems respond to exercise. <b>Clarifying Example:</b> <i>The student will discuss the effect of exercise on the cardio respiratory system taking carotid and/or radial pulse.</i>
I.6.2 Analyze and adapt components of the FITT principle to adjust levels of physical activity.
a. Select the components of the FITT principle to analyze the impact on improving personal fitness. <b>Clarifying Example:</b> <i>The student will take the PACER test after each of their units to analyze how the type of exercise within the unit influences results.</i>
I.6.3 Analyze and manipulate the components necessary to design a fitness plan.
a. Identify and perform activities to maintain or improve the specific health related fitness components: aerobic capacity/cardiorespiratory endurance, muscular endurance, muscular strength, and flexibility. <b>Clarifying Example:</b> <i>The student will classify out-of-school movement activities performed over the last two weeks into the four fitness categories (cardiovascular endurance, muscular strength, muscular endurance, and flexibility) to identify the activities that provide the greatest fitness benefits for themselves</i>
I.6.4 Investigate the benefits of physical activity.
a. List the physical, emotional, and cognitive benefits resulting from physical activity. <b>Clarifying Example:</b> <i>The student will utilize the think-pair-share strategy to discuss all of the benefits resulting from physical activity.</i>
I.6.5 Analyze the relationship between nutrition and physical activity.
a. Examine the importance of hydration based on level of physical activity. b. Explore various types of hydration such as water, sports drink, juice, soda, milk, tea, and coffee. c. Discuss the effects of caffeinated versus non-caffeinated beverages on physical activity. <b>Clarifying Example:</b> <i>The student will learn through class discussion the research-based benefits of a variety of fluids used for hydration.</i>
I.6.6 Examine the factors influencing exercise adherence.
a. Identify factors that promote physical activity. b. Identify factors that limit physical activity. <b>Clarifying Example:</b> <i>The student will identify personal factors that promote or limit their engagement in physical activity.</i>
I.6.7 Investigate the impact of media perceptions on physical activity.

a. Describe how media influences physical activity.

**Clarifying Example:** *The student will bring to class an advertisement from a newspaper or magazine that is associated with physical activity. They will examine the ways that the advertisement attempts to portray the activity.*

## Standard II: Biomechanical Principles

Students will demonstrate an ability to use the principles of biomechanics to generate and control force to improve their movement effectiveness and safety.

### II.6.1

Apply Newton's Laws of Motion to optimize movement and minimize injury.

- a. Describe Newton's Laws of Motion as they relate to movement patterns and skills.
- b. Identify internal and external factors that impact movement such as bones, muscles, air resistance, buoyancy, gravity, friction, and reaction.

**Clarifying Example:** *The student will experiment catching a variety of balls with elbows flexed, with elbows extended, and finally with elbows moving from extended to flexed to discover the importance of absorption of force.*

- c. Explain and show absorption of force in specific sport skills.

### II.6.2

Identify levers which increase the effect of a force exerted on a body or increase the distance a body moves by increasing speed.

- a. Describe levers.
- b. Explain and give examples of internal and external levers

**Clarifying Example:** *The student will experiment shooting a basketball with the elbow extended, with the elbow flexed, and then with the elbow moving from flexed to extended to discover the importance of using a lever to increase distance.*

<b>Standard III: Social Psychological Principles</b>
Students will demonstrate the ability to use skills essential for developing self-efficacy, fostering a sense of community, and working effectively with others in physical activity settings.
III.6.1 Recognize the relationship between <i>effort</i> and improvement.
a. Chart performance in a variety of physical activities. <b>Clarifying Example:</b> <i>The student will compare his/her own Fitnessgram results from the fall to the spring to determine if effort leads to improvement.</i>
III.6.2 Work effectively with others in physical activity settings.
a. Create strategies to improve self-regulation in challenging settings. <b>Clarifying Example:</b> <i>The student will develop a self-check rubric centered on working effectively with others to be reflected on as needed throughout the year.</i>
III.6.3 Build and maintain relationships which develop a sense of community and a peaceful, healthy environment for all.
a. Identify problem-solving techniques which maximize personal potential and demonstrate respect and concern for others. <b>Clarifying Example:</b> <i>The student will brainstorm the meaning of sportsmanship. Answers will be posted and referred during times of conflict.</i>
III.6.4 Establish and modify personal physical activity goals while monitoring progress towards achievement.
a. Design and implement a realistic short-term physical activity goal. <b>Clarifying Example:</b> <i>The students will select two components of Fitnessgram and will set a goal for improvement within the next month. Students will track their progress.</i>
III.6.5 Apply effective time management strategies.
a. Perform predetermined time management plans to allow completion of a series of tasks within a specified amount of time. <b>Clarifying Example:</b> <i>The student will estimate the amount of time to complete all stations during a designated amount of time.</i>

## Standard IV: Motor Learning Principles

Students will demonstrate the ability to use motor skill principles to learn and develop proficiency through frequent practice opportunities in which skills are repeatedly performed correctly in a variety of situations.

### IV.6.1

Evaluate stages of learning.

- a. Evaluate personal specific motor skills using a rubric.

**Clarifying Example:** *The student will demonstrate a skill using the cues from the rubric. Based on the results, the student will assign a rubric score to that performance.*

- b. Evaluate a peer's specific motor skills using a rubric.

### IV.6.2

Develop and implement an appropriate practice plan for skill proficiency.

- a. Identify ways for improving a specific motor skill.

- b. Modify and perform a specific motor skill based on feedback and discussion.

**Clarifying Example:** *The student will identify ways to improve the performance of the motor skill while observing a partner.*

### IV.6.3

Show that skills will develop with practice over time.

- a. Demonstrate and apply the principles of practice progression to personal skills development.

**Clarifying Example:** *The student will describe the skills necessary to perform a dance routine, practice those skills, and by the end of unit will be able to put them together in a patterned dance.*

## Standard V: Physical Activity

Students will demonstrate the ability to use the principles of exercise physiology, social psychology, and biomechanics to design and adhere to a regular, personalized, purposeful program of physical activity consistent with their health, performance, and fitness goals in order to gain health and cognitive/academic benefits.

### V.6.1

Assess and analyze individual circulatory fitness.

- a. Perform a series of activities to enhance circulatory fitness.

**Clarifying Example:** The student will perform a criterion referenced cardio respiratory test. (Fitnessgram)

- b. Use technology to monitor individual heart rate.

**Clarifying Example:** The student will use heart rate monitors, pulse sticks, or pedometers with pulse feature to monitor individual heart rate during physical activities.

- c. Calculate target heart rate to reflect personal activity goals.

- d. Differentiate between aerobic and anaerobic activity.

**Clarifying Example:** The student will participate in a variety of activities and record exercise heart rate. After charting heart rates, the student will categorize the activities as aerobic or anaerobic based on increased heart rate (Sprinter vs. Distance Runner, Soccer Goalie vs. Midfield Player, Soccer player vs. Football Player).

- e. Assess personal level of circulatory fitness using a standardized test.

### V.6.2

Assess and analyze individual muscular strength and muscular endurance.

- a. Perform a variety of activities to enhance muscular strength and muscular endurance.

**Clarifying Example:** Perform a criterion referenced curl-up, modified push-up/push-up and bent-arm hang/pull-up test. (Fitnessgram)

- b. Define the principles of overload, specificity, and, progression in relation to muscular strength and muscular endurance.

**Clarifying Example:** The student will read the story of Milo and the Bull and discuss how the principles of specificity, overload, and progression apply.

- c. Assess your personal level of muscular strength and muscular endurance using a standardized test.

### V.6.3

Assess and analyze individual flexibility.

- a. Perform a variety of activities to enhance **flexibility** for various muscle groups.

- b. Assess personal level of **flexibility** using a standardized test.

**Clarifying Example:** The student will perform a criterion referenced flexibility test for shoulder, hamstring, and trunk flexibility. (Fitnessgram)

- c. Demonstrate stretches that enhance sport/activity specific flexibility.

**Clarifying Example:** The student will create a flexibility warm-up routine for different activities (soccer, football, basketball, gymnastics, lacrosse, etc.). The student groups will then share their stretching routines with the class and analyze the differences.

<b>Standard VI: Skillfulness</b>
Students will demonstrate the ability to enhance their performance of a variety of physical skills by developing fundamental movement skills, creating original skill combinations, combining skills effectively in skill themes, and applying skills.
VI.6.1 Develop fundamental movement skills and apply them to a variety of recreational and daily life experiences.
<ul style="list-style-type: none"> <li>a. Identify and self-assess the skill related fitness components: agility, balance, coordination, power, speed, and reaction time.</li> <li>b. Apply fundamental movements that will enhance physical skills and <b>skill themes</b>.</li> </ul> <p><b>Clarifying Example:</b> <i>The student will use the skills of throwing, catching, kicking, and striking with or without implements in small-sided, modified games.</i></p>
VI.6.2 Develop creative skill combinations and apply them to a variety of recreational and daily life experiences.
<ul style="list-style-type: none"> <li>a. Modify a given movement pattern to create an expression of individuality.</li> </ul> <p><b>Clarifying Example:</b> <i>The student will perform a dance movement and add their own creative/interpretive expression while maintaining the same beat count.</i></p>
VI.6.3 Record and evaluate skillful movements to maintain and or improve personal motor ability and fitness levels.
<ul style="list-style-type: none"> <li>a. Develop and perform skillful activities that will improve personal motor ability and fitness levels.</li> </ul> <p><b>Clarifying Example:</b> <i>The student will participate in an obstacle course challenge at various times during the school year. The students will record their times and reflect on the activities that they need to practice to improve their time in the future.</i></p>
VI.6.4 Develop the ability to solve tactical game problems (scoring and preventing scoring) using on-the-ball skills and off-the-ball movements.
<ul style="list-style-type: none"> <li>a. Classify physical activities into the four basic categories of strategic games (net/wall, invasion, fielding/run scoring, and target).</li> <li>b. Identify strategic movement concepts used in each game category.</li> <li>c. Explore movement concepts that add to student success during participation in net/wall, invasion, fielding/run scoring, and target activities.</li> </ul> <p><b>Clarifying Example:</b> <i>The student will participate in a teacher- developed small-sided activity that highlights a specific offensive or defensive concept. (Example - 3 on 3 No Dribble Basketball highlights movement without the ball. This prompts give and goes, supporting the ball carrier, and cutting to get open.)</i></p>