

## Montgomery County Public Schools Grade 4 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.4.1 Analyze and demonstrate the effects of physical activity on the body systems.
a. Identify and demonstrate how the components of the circulatory, muscular, and respiratory systems respond to exercise. b. Compare two activities and their effects on the body. <b>Clarifying Example:</b> <i>The student will perform activities, list what muscles were used, and describe the effects of physical activity on the body systems.</i>
I.4.2 Adapt components of the FITT principle to adjust levels of physical activity.
a. Identify and demonstrate the FITT components: Frequency, Intensity, Type, and Time through physical activity. <b>Clarifying Example:</b> <i>The student will monitor (written journal) his/her own physical activity and note the components of FITT.</i> b. Describe the relationship between the FITT components: Frequency, Intensity, Type and Time.
I.4.3 Recognize and identify the components necessary to design a fitness plan.
a. Identify and assess the health related fitness components: aerobic capacity/cardiorespiratory endurance, muscular endurance, muscular strength, and flexibility. <b>Clarifying Example:</b> <i>The student will participate in activity, identify the health-related fitness component, and have a working knowledge of how to improve.</i>
I.4.4 Investigate the benefits of physical activity.
a. Identify the emotional benefits developed through physical activity. b. Identify and express the emotional benefits developed through physical activity. <b>Clarifying Example:</b> <i>The student will identify their feelings associated with participation in physical activities.</i>
I.4.5 Analyze the relationship between nutrition and physical activity through movement experiences.
a. Distinguish between various types of physical activity and their effect on caloric expenditure. <b>Clarifying Example:</b> <i>The student will compare and contrast activities and his/her caloric expenditure using a calorie chart.</i>
I.4.6 Examine the factors influencing exercise adherence.
a. Develop strategies to address the factors that promote or limit physical activity for elementary school students. <b>Clarifying Example:</b> <i>The student will list the factors that promote or limit physical activity and brainstorm positive solutions.</i>

## 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.4.1

State and define Newton's Laws of Motion.

a. Identify internal force, external force, gravity, friction, and resistance.

**Clarifying Example:** *The student will identify the external and internal forces involved at various activity stations.*

b. Identify forces that impact movement.

### II.4.2

Demonstrate static and dynamic movement patterns.

a. Examine factors that influence static balance positions while maintaining balance.

**Clarifying Example:** *The student will create a balance using four bases of support (foot, foot, hand, hand) and describe what happens as he/she eliminates one base of support at a time using balance vocabulary.*

b. Examine factors that influence dynamic balance in a variety of physical activities.

**Clarifying Example:** *The student will examine various static and dynamic movements applying balance concepts to dance and sport skills using stations.*

### Standard III: Social Psychological Principles

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.4.1

Recognize the relationship between *effort* and improvement.

- a. Evaluate personal skills and fitness data and explain the relationship between *effort* and skill improvement.

**Clarifying Example:** *The student will review personal logs, skill ability checklists, and fitness data to draw conclusions about the effort put forth and skill performance and explain trends toward improvement.*

#### III.4.2

Work effectively with others in physical activity settings.

- a. Incorporate social rules within specific social/physical settings (working with others, following directions).

**Clarifying Example:** *The student will work in teacher-selected small groups (3-6 people) to design and play an invasion game. The group will discuss and adopt at least three rules to follow when playing the game to ensure safety, fairness with regard to everyone being part of the advancement of the ball, staying within boundaries, and respect for decisions of “officials” in rule infractions. The students will play the game, demonstrating their understanding of appropriate behaviors to be displayed when following rules and interacting with others.*

#### III.4.3

Build and maintain relationships which develop a sense of community and a peaceful, healthy environment for all.

- a. Identify and demonstrate a variety of ways to show consideration for others, to maximize personal potential and build and maintain healthy relationships.

**Clarifying Example:** *The student will use appropriate verbal and non-verbal behaviors to demonstrate acceptance of peers during partner skill practice, peer coaching, peer evaluating, and group activities/games.*

#### III.4.4

Establish and modify personal physical activity goals while monitoring progress towards achievement.

- a. Identify personal physical activity goals that are challenging yet attainable.

**Clarifying Example:** *The student will review a list of appropriate fitness activities and write a plan to include three fitness activities (two of which the student cannot currently perform) as part of his/her daily routine.*

#### III.4.5

Apply time management strategies wisely.

- a. Describe the importance of managing time when being held responsible for completing a series of tasks.

**Clarifying Example:** *The student will describe the benefits of managing and making time for fitness within a typical day (school, after-school clubs/sports/activities, homework, family responsibilities, nourishment, and rest).*

## 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.4.1

Recognize how individuals progress through learning stages at various rates through participating in a variety of activities.

- a. Perform practice progressions that enhance personal skill development.

**Clarifying Example:** *The student will participate in a variety of skills with varying degrees of progressing difficulty. Time will be provided to reflect and revisit skills that may need improvement.*

### IV.4.2

Recognize through participation in a variety of activities that personal skill development results from prior experiences, natural ability, and practice.

- a. List motor skills that can be performed.
- b. Classify skills as either: needs improvement, developing, or consistently demonstrating.

**Clarifying Example:** *The student will complete a peer-evaluation sheet listing skills that are being practiced, and classifying “needs improvement” with a minus, “developing” with a check, and “consistently demonstrating” with a plus.*

### IV.4.3

Show that skills will develop with practice over time. (i.e., throwing, catching, kicking, striking).

- a. Recognize that practicing in progression leads to skill development.

**Clarifying Example:** *The student will use a personal skill log for previous year(s) to chart progress, compare new levels to previous levels, and reflect on changes in leisure play during childhood based on skill acquisition.*

### IV.4.4

Recognize the importance of self-evaluation and feedback in the improvement of motor skills.

- a. Detect errors in personal skill performance.
- b. Recognize the significance of feedback in the developing of motor skills.

**Clarifying Example:** *The student will work with a partner to design a movement routine, video tape the routine, and review the routine providing feedback that will improve the routine.*

## 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.4.1

Examine and compare individual cardio respiratory fitness.

- a. Examine various levels of intensities through activity and the effect on heart rate.

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

- b. Define resting heart rate, target heart rate, and maximum heart rate.

**Clarifying Example:** *Calculate maximum and target heart rate and record on personal data worksheet.*

- c. Differentiate between aerobic and anaerobic activity.
- d. d. Assess personal level of cardio respiratory fitness through a systematic approach using a standardized fitness test.

### V.4.2

Examine and compare individual muscular strength and muscular endurance.

- a. Identify and participate in developmentally appropriate muscular strength and muscular endurance activities.

**Clarifying Example:** *The student will perform a criterion referenced curl-up and modified push-up test. (Fitnessgram)*

- b. Classify and differentiate between muscular strength and muscular endurance activities.

**Clarifying Example:** *The student will create a fitness poster identifying three muscular fitness activities to improve muscular strength and/or endurance of the quadriceps using personal fitness data. The student will exhibit the poster at a Student Fitness Fair and demonstrate the activities.*

- c. Identify and demonstrate a muscular strength task that identifies a specific muscle group.
- d. Identify personal level of muscular strength through a systematic approach using a standardized fitness chart.

### V.4.3

Examine and compare individual flexibility.

- a. Identify and participate in developmentally appropriate activities to maintain and enhance flexibility.

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

- b. Identify personal level of flexibility through a systematic approach using a standardized fitness test.
- c. Classify stretches with appropriate muscles or muscle groups.

**Clarifying Example:** *The student will create a fitness poster that classifies stretches by muscle group to be shared and demonstrated at a Student Fitness Fair.*

## Standard VI: Skillfulness

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.4.1

Demonstrate fundamental movement skills.

a. Perform locomotor and non-locomotor skills while varying movement conditions.

- Speed
- Force
- Pathways
- Directions
- Levels
- Space

b. Identify and participate in activities to enhance the skill related fitness components: agility, balance, coordination, power, speed, and reaction time.

**Clarifying Example:** *The student will travel and smoothly change directions or pathways in response to music with sets (measures) of three or four beats.*

### VI.4.2

Develop creative movement skills.

a. Create an individual/partner movement sequence with or without using implements or props such as wands, hoops, balls, rhythm sticks, jump bands, and tinkling sticks.

**Clarifying Example:** *The student will combine the single-step, double-step, and hopping patterns to create a pattern with a four-four or three-four beat using tinkling sticks and music.*

### VI.4.3

Demonstrate proficiency in skill themes.

a. Demonstrate and combine skill themes in physical activity.

- Throwing
- Catching

**Clarifying Example:** *The student will throw and catch 30 attempts without a miss from a distance of 25 feet with a partner. (P.E. Central Challenge: Partner Throw and Catch)*

- Striking with the body and implements

**Clarifying Example:** *The student will form a triangle with two other students. Using a volleyball trainer and the forearm or overhead pass, students pass to each other 10 times in a row. (P.E. Central Challenge: The Volley Up)*

- Educational Gymnastics

**Clarifying Example:** *The student will design, refine, and perform dance or gymnastics sequences in a small group focusing on using different body shapes and body movements.*

- Kicking

**Clarifying Example:** *The student will dribble and pass a soccer ball to a moving partner.*

- Rolling

**Clarifying Example:** *The student will design, refine, and perform (alone or with a partner) simple sequences involving rolling, weight transfers, balances, and concepts (levels, shapes, directions, speed).*

- Object Manipulation

**Clarifying Example:** *The student will use three scarves, students create a juggling routine that combines the following methods: cascade, reverse cascade, columns.*

- Jumping and Landing

