

GRADE FIVE

Students in grade five apply movement principles and concepts and knowledge of anatomical structures and functions to enhance their movement performance, personal fitness, and game strategy and tactics. They develop proficiency in physical activities, dances, and educational gymnastics. Students demonstrate specialized skills alone, with a partner, or in a small group. They access and use resources to plan and improve personal fitness as they exhibit a physically active lifestyle. Students continue to develop responsible personal and social behaviors as they work with others in safe and respectful ways.

Motor Skill Development

- 5.1 The student will demonstrate movement forms, create movement patterns, and begin to describe movement principles.
- a) Demonstrate progress toward the use of all critical elements in locomotor, non-locomotor, and manipulative skill combinations in dynamic environments, modified sports activities, small-sided games, and lifetime activities, including overhand and underhand throwing and catching, execution to a target with accuracy, hand dribbling with non-dominant/dominant hand at various speeds and control to open spaces, consecutive volleying with a partner over a net or against a wall with proper force, striking a ball with short- and long-handled implements while stationary or moving with the proper force, direction, and accuracy, dribbling and passing a soccer ball with the dominant foot with varying speed while moving to open spaces with proper control and accuracy.
 - b) Create and perform an educational gymnastic sequence that combines three or more of the following movements: traveling, rolling, balancing, and other types of weight transfer, with smooth transitions and changes of direction, shape, speed, and flow.
 - c) Create and perform individual or group rhythm/dance sequences.
 - d) Perform multicultural and social dances.
 - e) Create and perform a jump rope routine/challenge (self-turn, long rope, or jump bands).

Essential Understandings	Essential Knowledge and Skills
Manipulative and movement skills can be broken down into smaller parts/critical elements to improve proficiency. Developmentally appropriate movement includes performance of all critical elements. Manipulative skills are performed	In order to meet these standards, it is expected that students will <ul style="list-style-type: none"> • demonstrate critical elements in dynamic

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<p>in isolation, and then in more complex and dynamic environments within modified sports activities, small-sided games, and lifetime activities. (5.1.a)</p> <ul style="list-style-type: none"> • Manipulative skills in more complex and dynamic environments include overhand and underhand throw and catch, execution to a target with accuracy, dribbling with hands and feet at varying speeds, consecutive striking and volleying with a partner over a net or against a wall with proper force, striking a ball while stationary and moving, and passing a soccer ball with the dominant foot with varying speed. <ul style="list-style-type: none"> ○ Overhand throw <ul style="list-style-type: none"> ▪ Side of body set up toward target; ▪ Non-throwing hand toward target; ▪ Throwing arm way back; ▪ Step to target with opposite foot; ▪ Rotate hips during throw; ▪ Weight shifts from back to front foot; ▪ Throwing arm follows through to target with wrist to opposite knee. ○ Toss, underhand throw, to partner <ul style="list-style-type: none"> ▪ Face the target; ▪ Eye on target; ▪ Use a backward-forward arm swing (tick-tock swing); ▪ Step with opposite foot as tossing/throwing/rolling arm moves forward; ▪ Release ball between knee and waist level during upward swing for throw; ▪ Bend at hip (roll); ▪ Release ball under knee for roll; 	<p>situations for overhand and underhand throw and catch, execution to a target, hand dribble, foot dribble, consecutive striking and volleying with a partner over a net or against a wall, and striking a ball while stationary and moving (5.1.a);</p> <ul style="list-style-type: none"> • demonstrate moving to open space between players as appropriate in a variety of activities (5.1.a); • demonstrate accuracy using manipulatives in a variety of activities (5.1.a); • demonstrate use of more or less force for accuracy of manipulatives in a variety of activities (5.1.a); • demonstrate accuracy, direction, and use of force to strike an object with a pre-determined purpose (placement to a target or general area) (5.1.a); • create and perform an educational gymnastic sequence, including traveling, rolling, and weight transfer, with smooth transitions, balance, and changes of direction, shape, speed, and flow (5.1.b); • create and perform individual or group rhythm/dance sequences, including multicultural and social dances (5.1.c, 5.1.d);

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<ul style="list-style-type: none"> ▪ Follow through with hand pointing to the target. ○ Catch from throw <ul style="list-style-type: none"> ▪ Watch the ball all the way into the hands; ▪ Places body in the path of the object; ▪ Extend arms outward to reach for ball; ▪ Thumbs in for catch above the waist; ▪ Thumbs out for catch at or below the waist; ▪ One foot slightly in front of the other (balanced stance); ▪ Catch with hands only; no cradling against the body; ▪ Pull the ball in to the body as the catch is made; ▪ Relax and absorb the force of the object. ○ Volley with a partner or wall <ul style="list-style-type: none"> ▪ Set up square to partner/wall; ▪ Opposite foot forward; ▪ Tick-tock swing movement with volleying hand; ▪ Contact ball with palm; ▪ Contact occurs at waist level; ▪ Follow through upward; ▪ Track the ball with eyes; ▪ Move body into position for receiving ball from partner/wall; ▪ Continuous volley. ○ Strike a ball with short-handled implement <ul style="list-style-type: none"> ▪ Shake hands with the paddle; ▪ Soft squeeze grip; ▪ Firm wrist; ▪ Contact occurs at waist level; ▪ Hit with a flat surface of implement; 	<ul style="list-style-type: none"> • create and perform a jump rope routine/challenge using long/short jump ropes and jump bands (5.1.e). <p>Additional resources: SHAPE America National Standards and Grade-Level Outcomes OPEN Online Physical Education Network Health Smart Virginia PE Central Dynamic PE ASAP</p>

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<ul style="list-style-type: none"> ▪ Follow through upward; ▪ Track the ball with eyes; ▪ Move body into position for next contact. ○ Strike a ball with long-handled implement <ul style="list-style-type: none"> ▪ Non-dominant hand grips the bottom of the implement with dominant hand stacked above (line of knuckles); ▪ Side to target (non-throwing arm closest to target); ▪ Knees slightly bent; ▪ Eyes follow ball from start to finish; ▪ Step to target in opposition; ▪ Throwing arm way back; ▪ Weight transfer from back foot to front foot; ▪ Rotate hips; ▪ Follow through with wrist to opposite knee. ○ Dribble (foot) <ul style="list-style-type: none"> ▪ Knees slightly bent; ▪ Contact the ball with shoelaces, inside of the foot, or outside of foot; ▪ Contact behind the center of the ball; ▪ Ball stays close to feet/soft touches when moving throughout space; ▪ Ball moves forward; ▪ Eyes looking forward in direction of travel; ▪ Tap ball with both feet. ○ Pass/kick to a partner <ul style="list-style-type: none"> ▪ Non-kicking foot beside the ball; ▪ Use inside of foot; 	

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<ul style="list-style-type: none"> ▪ Step to the target; ▪ Contact behind the center of the ball; ▪ Firm and controlled pass; ▪ Passing leg follows through toward target/partner. <p>Movement in dynamic situations requires appropriate speed, accuracy, force, and control. (5.1.a)</p> <ul style="list-style-type: none"> • Speed is the rate of motion and ability to move swiftly. • Accuracy is the quality of being precise or the ability to get an object where it is intended to go. • Accuracy is affected by the ability to use more or less force as needed for an intended target or outcome. • Using increased force (hard) with manipulatives may include throwing for a farther distance or striking harder to make the ball go farther. • Using decreased force (soft) with manipulatives may include throwing easier over a shorter distance or to improve accuracy to a target. • Control includes ability to use more or less force as needed for intended target or outcome. <p>Spatial awareness is knowing where the body is in space in relation to objects and other people. Moving to open spaces and closing space between players can provide a strategic advantage. (5.1.a)</p> <p>Critical elements of manipulative skills can be used to create a strategic advantage. (5.1.a)</p> <ul style="list-style-type: none"> • Accuracy requires precision of movement with the critical elements of skills, such as follow through and aim in the desired direction when 	

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<p>throwing to a target.</p> <p>Movement proficiency includes maintaining balance in a variety of movements, such as traveling, rolling, and weight transfer, during an educational gymnastics sequence. Maintaining balance allows for smooth transitions and changes of direction, shape, speed, and flow within movement sequences. (5.1.b)</p> <p>Movement competency involves patterns. Patterns are present in individual and group rhythm/dance sequences, including multicultural and social dances. (5.1.c, 5.1.d)</p> <p>Jumping rope helps with cardiorespiratory endurance, strengthening the heart, and helps with coordination. Jump rope activities include a variety of types of jumps with short ropes, long ropes and jump bands. (5.1.e)</p>	

Anatomical Basis of Movement

- 5.2 The student will apply anatomical knowledge and movement strategies in complex movement activities.
- a) Identify the major components of the cardiorespiratory, vascular, muscular, and skeletal systems.
 - b) Apply knowledge of skeletal and muscular systems to accurately describe a variety of specific movements, such as a ball strike, overhand throw, or running.
 - c) Understand the concept of flexibility as it relates to bones, muscles, and joints.

Essential Understandings	Essential Knowledge and Skills
<p>Review cardiorespiratory system components and all major muscles and bones and their locations on the body from previous grade levels. (5.2.a)</p> <ul style="list-style-type: none"> • Cardiorespiratory system <ul style="list-style-type: none"> ○ Heart ○ Lungs ○ Blood vessels • Vascular system <ul style="list-style-type: none"> ○ Veins ○ Arteries • Muscular system <ul style="list-style-type: none"> ○ Bicep ○ Triceps ○ Deltoid ○ Abdominal ○ Gluteal ○ Quadriцеп ○ Hamstring • Skeletal system <ul style="list-style-type: none"> ○ Skull 	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> • identify/label components of cardiorespiratory, vascular, muscular, and skeletal systems (5.2.a); • describe a variety of specific movements, including the body systems, bones, and muscles involved in the movement (5.2.b); • describe and demonstrate how flexibility relates to different bones, muscles, and joints (5.2.c). <p>Additional resources: SHAPE America National Standards and Grade-Level Outcomes OPEN Online Physical Education Network Health Smart Virginia PE Central Dynamic PE ASAP KidsHealth.org</p>

- Ribs
- Spine
- Sternum
- Humerus
- Radius
- Ulna
- Phalanges
- Patella
- Femur
- Tibia
- Fibula

Body systems work together to produce movement.

- Running involves leg muscles and bones quadriceps, hamstrings, femur, tibia, fibula, and patella.
- Abdominals, vertebrae, and arms help provide balance; arm swing helps provide momentum using biceps, triceps, humerus, ulna, radius, and phalanges in the hands.
- Lungs provide oxygen to the heart so that blood vessels can carry oxygen and energy to the muscles being used. (5.2.b)

Flexibility includes muscles, bones and joints working together to help the body move through a full range of motion. (5.2.c)

Fitness Planning

- 5.3 The student will use personal fitness assessment data to enhance understanding of physical fitness.
- a) Identify methods for evaluating and improving personal fitness, such as health-related criterion-referenced tests, heart rate, accelerometer, and pedometer data.
 - b) Compare and analyze personal fitness data to health-related criterion-referenced standards (e.g., Virginia wellness-related fitness FitnessGram standards, Centers for Disease Control and Prevention guidelines) to assess levels of personal fitness and identify strengths and weaknesses.
 - c) Explain the FITT (frequency, intensity, time, and type) principles and its relationship to a personal fitness plan.
 - d) Calculate the resting, activity, and recovery heart rate and calculate heart rate during various physical activities.
 - e) Explain the relationship between heart rate and cardiorespiratory fitness.

Essential Understandings	Essential Knowledge and Skills
<p>Methods for evaluating and improving personal fitness may include various sources of data such as health-related criterion referenced tests, heart rate, accelerometer, and pedometer data. (5.3.a)</p> <p>SMART goals can be used to target and improve one or multiple areas of health-related fitness. (5.3.b)</p> <p>Personal fitness planning should include a SMART goal (based on data) for at least one health-related component of fitness, activities that will address the goal, a log of activities inside and outside school, a plan to reassess fitness levels (post-data), and reflection of goal progress/attainment. (5.3.b)</p> <p>The FITT principle—frequency, intensity, time, and type of exercise—is a “formula” for planning what kind of physical activity/activities, how often to do the activities, how hard to do them, and for how long to meet fitness goals. (5.3.c)</p>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> • identify methods for evaluating and improving personal fitness (5.3.a); • create a personal fitness plan for at least one health-related component of fitness, including baseline fitness data, a SMART goal, activities that will address the goal, a log of activities inside and outside school, reassessment data (post-data) and reflection of goal progress/attainment (5.3.b); • identify and explain each part of the FITT principle; • apply the FITT principle when creating a SMART goal and wellness plan (5.3.c); • calculate resting heart rate and heart rate

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<ul style="list-style-type: none"> The FITT principle can be used to design a personal fitness plan for achieving a SMART goal (5.3.c). <p>Heart rate can be used to help determine personal fitness levels. (5.3.d)</p> <ul style="list-style-type: none"> As a person’s cardiorespiratory fitness levels increase, their heart rate (and resting heart rate) will decrease. Resting heart rate should be taken after 10 minutes of rest using the radial or carotid artery (be cautious to not press too hard on the carotid artery). Activity heart rate may be taken at different points of time during exercise/activity. <p>In general, a lower heart rate at rest indicates more efficient heart function and better cardiorespiratory fitness. (5.3.e)</p> <ul style="list-style-type: none"> Note: resting heart rates of above 100 or below 60 (unless the person is a trained athlete) may indicate an underlying problem. 	<p>during a variety of activities manually or using heart rate monitor (5.3.d);</p> <ul style="list-style-type: none"> explain the relationship between heart rate and cardiorespiratory fitness (5.3.e); determine activities that may result in a higher active heart rate, perform those activities and then measure active heart rate to determine accuracy of prediction (5.3.e). <p>Additional resources: Health Smart Virginia American Heart Association OpenPhySED</p>

Social and Emotional Development

- 5.4 The student will participate in establishing and maintaining a safe environment for physical activities.
- a) Create and implement safety rules and responsibilities for one or more activities.
 - b) Describe and demonstrate respectful behavior in physical activity settings.
 - c) Implement etiquette for at least two activities.
 - d) Identify how engaging in physical activity can improve mental health and reduce stress.
 - e) Explain the importance of inclusion in physical activity settings.
 - f) Participate in developing classroom activities led by the teacher that promote feelings of inclusion, which supports feelings of acceptance, belonging, and all students being valued.

Essential Understandings	Essential Knowledge and Skills
<p>Rules for activities/games allow for safe participation, safe learning, and inclusion of all students.</p> <ul style="list-style-type: none"> • Examples: everyone taking a turn to strike/volley an object; consequence – not taking turns results in the other team getting the ball.) (5.4.a) <p>Safety rules for activities may include rules for equipment (distribution, use, and collection), use of space (boundaries, spatial awareness, and moving in personal and general space), and activity-specific rules. (5.4.a.)</p> <p>Respectful behavior in physical activity settings includes proper etiquette, safety and inclusion of all students. (5.4.b)</p> <p>Etiquette is the rules indicating the proper and polite way to behave. Examples:</p> <ul style="list-style-type: none"> • appropriate speed of play • shaking hands/giving high fives 	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> • design a game or activity that facilitates feelings of acceptance, belonging, and value and must provide rules, safety guidelines, and etiquette (5.4.a, 5.4.f); • describe and demonstrate respectful behavior used in all physical activity settings (5.4.b); • implement etiquette for two activities (5.4.c); • describe how physical activity at a variety of intensity levels can improve mental health and reduce the effects of stress (5.4.d); • explain the importance of understanding and accepting differences (5.4.e).

Essential Understandings	Essential Knowledge and Skills
<ul style="list-style-type: none"> • congratulating other team at the end of a game • participating in the correct order, taking turns. (5.4.c) <p>Physical activity can be used to improve mood and reduce stress levels. Reduction in stress levels may be evident in slowed heart rate, calm breathing, and ability to think and communicate clearly. (5.4.d)</p> <p>Some methods of reducing stress include</p> <ul style="list-style-type: none"> • Taking deep breaths • Making sure to get enough sleep • Going outside for a walk • Using a reflective journal <p>Inclusion can be defined as being a part of a group or a part of something. Inclusion can also be defined as learning to live together, treasuring diversity, and sharing gifts and abilities. (5.4.e)</p> <ul style="list-style-type: none"> • Inclusion is a subjective, personal experience. • Physical activity is important for everyone. Seeing and respecting each other’s capabilities and abilities helps to learn from others, understand and appreciate others, and build community. <p>Respectful behaviors may include (5.4.e)</p> <ul style="list-style-type: none"> • trying to learn something from others • showing interest and appreciation for other people's cultures and backgrounds • not insulting, teasing, or making fun of others • actively listening to others when they speak • being considerate of other's likes and dislikes 	<p>Additional resources: OPEN Online Physical Education Network Health Smart Virginia PE Central EverFi KidsHealth.org</p>

Essential Understandings	Essential Knowledge and Skills
<ul style="list-style-type: none"> • not talking about others behind their backs • being sensitive to the feelings of others <p>All students, regardless of ability, when possible, should be included in physical activity settings. When rules and etiquette are created with inclusion in mind and followed by all participants, students can feel safer and more included in activities. (5.4.f)</p>	

Energy Balance

- 5.5 The student will identify and explain the nutrition component and activity guidelines for energy balance.
- a) Explain Recommended Dietary Allowance (RDA).
 - b) Explain that there are different RDAs for children, teens, and adults.
 - c) Explain the purpose of vitamins and minerals.
 - d) Describe how the body uses each macronutrient (fat, protein, carbohydrates).
 - e) Evaluate components of food labels for a variety of foods, including macronutrients, RDA, and portion size.
 - f) Explain that physical activity guidelines recommend 60 minutes of moderate to vigorous physical activity (MVPA) every day.

Essential Understandings	Essential Knowledge and Skills
<p>RDA (Recommended Dietary Allowance) is the average daily level of intake sufficient to meet the nutrient requirements of nearly all (97%-98%) healthy people issued by the Food and Nutrition Board of the Institute of Medicine, National Academy of Sciences. (5.5.a)</p> <p>RDA varies by age for children, teens, and adults. Variations are needed to help infants, children, and teens maintain calorie balance to support normal growth and development without promoting excess weight gain. (5.5.b)</p> <p>Vitamins and minerals are considered essential nutrients the body needs in order to function properly. (5.5.c)</p> <ul style="list-style-type: none"> • Vitamins and minerals boost the immune system, support normal growth and development, and help cells and organs do their jobs. • Choosing healthy foods is especially important because the body needs a variety of vitamins and minerals to grow and stay healthy. • Eating a mix of foods from all five food groups is the best way to get all the vitamins and minerals you need each day. Fruits and vegetables, 	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> • explain RDA (Recommended Dietary Allowance) (5.5.a); • explain that there are different RDA recommendations for children, teens, and adults (5.5.b); • explain the purpose of vitamins and minerals (5.5.c); • describe how the body uses each macronutrient (5.5.d); • evaluate food labels for a variety of foods, to include macronutrients, RDA, and portion size (5.5.e); • describe the recommended physical activity guidelines for youth (5.5.f); • describe MVPA and its effect on the

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<p>whole grains, low-fat dairy products, lean meats, fish, and poultry are the best choices for getting the nutrients your body needs.</p> <p>Macronutrients are nutrients the body needs in larger amounts to function properly and include fat (avocados, walnuts), protein (eggs, beans fish), and carbohydrates (oatmeal, bread, pasta.) (5.5.d)</p> <ul style="list-style-type: none"> • Carbohydrates provide sugar needed for energy; sugar from carbohydrates is broken down into glucose; glucose is released into the bloodstream for energy for the body; limited amounts of carbohydrates can be stored. • Fat is used for energy; any unused energy is stored; the body can store unlimited amounts of fat. • Protein is broken down into amino acids, used to build muscle, and to make other proteins that are essential for the body to function. • Each macronutrient provides the body a different amount of energy (calories) per gram. <p>Food labels help us evaluate the macronutrients, RDA, and portion sizes of the foods we consume (5.5.e):</p> <ul style="list-style-type: none"> • Food labels indicate the serving size and number of servings included. • All nutrient amounts listed on the label are based on one serving size. It is important to note that a lot of packaged foods contain multiple serving sizes. • The top section of the label contains product-specific information: serving size, calories, and nutrient information for fat, cholesterol, sodium, carbohydrates, protein, vitamin D, calcium, iron, and potassium, and % Daily Value (%DV), the percentage of the daily value 	<p>physical activity guidelines (5.5.f).</p> <p>Additional resources: SHAPE America National Standards and Grade-Level Outcomes KidsHealth.gov Health Smart Virginia MyPlate.gov OpenPhyzed Physical Activity Guidelines for Americans, 2nd ed.</p>

Essential Understandings	Essential Knowledge and Skills
<p>for each nutrient in a serving of the food. Daily values are reference amounts (expressed in grams, milligrams, or micrograms) of nutrients to consume/not to exceed each day.</p> <ul style="list-style-type: none"> • Bottom section contains a footnote that explains the % Daily Value and gives the number of calories used for general nutrition advice. <p>In addition to maintaining a healthy eating pattern, regular physical activity is one of the most important things Americans can do to improve their health.</p> <p>(5.5.f)</p> <ul style="list-style-type: none"> • Physical Activity Guidelines for Americans released by the U.S. Department of Health and Human Services recommend that youth, ages 6 to 17 years, need at least 60 minutes of physical activity every day, including aerobic, muscle-strengthening, and bone-strengthening activities. • Most of the 60 minutes should be moderate to vigorous aerobic physical activity (MVPA.) 	