**Grade Six**

Students in grade six apply fundamental skills and knowledge of anatomical structures and movement principles to build movement competence and confidence through acquisition, performance, and refinement of skills. Cooperative and competitive small-group games are appropriate as well as outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, and sports (net/wall, striking/fielding, and goal/target), with an emphasis on developing skills and tactical understanding. Students use feedback to initiate and maintain practice to improve skill performance. Students assess their health-related fitness status and set reasonable and appropriate goals for development, maintenance, and improvement. Students in grade six will explain the connection between energy balance and nutrition guidelines, meal planning, and heart rate. Social interaction becomes more complex as peer pressure becomes increasingly pronounced, affecting individual performance. Students solve problems and make responsible decisions as they work together. They identify and seek opportunities to participate in regular physical activity at school and outside the school environment.

*Motor Skill Development*

6.1 The student will demonstrate all critical elements in movement forms in various activities and demonstrate the six components of skill-related fitness.

1. Combine and apply manipulative skills into small-sided games for overhand and underhand throwing and catching, throwing and catching to a target with accuracy and control, and hand and/or foot dribbling with accuracy at varying speeds while applying spatial awareness within partner and small-group modified game-play.
2. Combine and apply the manipulative skills of volleying with a partner over a net or against a wall with changes in force, accuracy, and direction into small-sided games.
3. Combine and apply the manipulative skills of striking/batting an object with a short and long implement with changes in force, accuracy, direction in small-sided games.
4. Combine and apply manipulative skills in small-sided games, dribbling/passing a soccer ball with accuracy at varying speeds while applying spatial awareness to a partner or within a small group.
5. Create and perform a movement sequence in a jump rope or dance activity.
6. Demonstrate and apply the six components of skill-related fitness (i.e., agility, balance, coordination, power, reaction time, and speed).
7. Demonstrate basic offensive and defensive strategies in noncomplex, modified, and small-sided activities.

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| **Essential Understandings** | **Essential Knowledge and Skills** |
| Motor skill development includes combining locomotor and manipulative skills and applying the skills to ever-changing physical activity/game situations.* Combine overhand and underhand throwing and catching, execution to a target, hand and/or foot dribbling, volleying/striking and/or batting ball skills with changes in direction, speed, patterns, pathways, and spatial relationships and apply to partner and small-group modified game-play that includes dynamic and unpredictable situations. (6.1.a, 6.1.b, 6.1.c, 6.1.d)

Movement competency involves patterns.* Student-created individual or group rhythm/jump rope/dance sequences that include a beginning and ending counts for 4/8, variety of skills/movements, and changes in directions or pathways. (6.1.e)

Skill-related fitness components increase one’s ability to perform in various activities and leads to good overall health. (6.1.f)* Agility: the ability to move quickly and easily; quick change of direction.
* Balance: stability produced by even distribution of weight; muscles tense to keep the body in a balanced position.
* Coordination: the harmonious functioning of parts for effective results; it takes eye-hand coordination to strike an object.
* Power: physical might; the ability to act or produce an effect; kicking a ball for distance.
* Reaction time: the time required for a subject to initiate a prearranged response to a defined stimulus; the time between hearing a whistle and starting to run or the time between seeing a ball being thrown to a place out of reach and moving to catch it.
* Speed: the rate of motion; the ability to move swiftly.

Movement situations can be evaluated for direction, speed, accuracy, and pathways to improve performance. (6.1.d)* Example: Intercepting a pass (thrown, kicked, or bounced) between players requires knowledge of the direction of the pass, how fast to move to intercept before it gets to the teammate, where to be to intercept it, and the pathway to intercept (forward, sideways, diagonal.)

Spatial awareness allows people and objects to move safely through the environment. (6.1.d)Basic offensive and defensive skills will increase success during non-complex, modified, and small-sided game play activities. (6.1.g)* Offensive skills include moving to open spaces, give and go, fakes, pivots, changing speed/direction, positioning in front of defender closer to a teammate, communicating with teammates, and continually moving/not standing still.
* Defensive skills include ready position (knees slightly bent, hinge at the hip), reducing space, positioning between the person with the ball and another player on offense, positioning between offense and goal, positioning to defend a particular player on offense or to defend and area of the field of play, player-to-player defense, and transitioning from offense to defense quickly.
* Non-complex, modified games break games into their simplest format and then build on the basics, increasing in complexity as students’ skill levels advance.
* Small-sided game play activities are games that use a smaller number of players per team (3 v 3 or 5 v 5), which allows each player more time with direct participation to advance their skills.
 | In order to meet these standards, it is expected that students will* demonstrate manipulative skills and movement sequences in partner and small-group modified game-play (6.1.a);
* analyze movement situations for changes in force, direction, speed, accuracy, and pathways to improve performance (6.1.b, 6.1.c);
* demonstrate spatial awareness in partner and small-group modified game play (6.1.d);
* student-created and performance of movement sequences in a jump rope, rhythmic, or dance activity (6.1.e);
* identify the six components (i.e., agility, balance, coordination, power, reaction time, and speed) of skill-related fitness (6.1.f);
* describe basic offensive and defensive strategies (6.1.g);
* demonstrate offensive strategies without defensive pressure (6.1.g);
* demonstrate defensive strategies during small-group/modified game play (6.1.g).

Additional resources:SHAPE America National Standards and Grade-Level Outcomes[OPEN Online Physical Education Network](https://openphysed.org/) [Health Smart Virginia](http://www.healthsmartva.org/)[PE Central](https://www.pecentral.org/) [Dynamic PE ASAP](https://www.dynamicpeasap.com/) |

*Anatomical Basis of Movement*

6.2 The student will apply both movement principles and concepts including the knowledge of anatomical structures to movement-skill performance.

1. Refine and adapt individual and group activity skills by applying concepts of relationships, effort, spatial awareness, direction, speed, accuracy, and pathways to improve performance.
2. Apply knowledge of the skeletal system by identifying major joints, associated bones, and types of joints, including ball-and-socket, and hinge joint.

| **Essential Understandings** | **Essential Knowledge and Skills** |
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| Relationships, effort, spatial awareness, direction, speed, accuracy, and pathways affect performance. (6.2.a) * Relationships: connections and effects of movements (throwing a ball with accuracy, leading a running teammate, and enough force to ensure teammate can catch the ball).
* Effort: the work done to achieve a particular end/result, genuine attempt/try.
* Spatial awareness: knowing where the body is in space in relation to objects and other people; ability to move with and around others and objects.
* Direction: the path along which something travels.
* Speed: the rate of motion; the ability to move swiftly.
* Accuracy: the quality of being precise; the ability to get an object where it is intended to go.
* Pathways: straight, curved, zigzag, diagonal.

Muscles contract to produce movement at joints. Joints are the connections between two bones. (6.2.b)* Ball-and-socket joint: rounded surface of one bone moves within a depression on another bone; hip (head of femur and depression of pelvis); shoulder (humerus, scapula, clavicle).
* Hinge joint: backward and forward swing motion; joints between bones of the fingers (phalanges); ankle (fibula, tibia, and talus of the foot); elbow (ulna and humerus); knee (femur, tibia, and patella).
 | In order to meet these standards, it is expected that students will* refine and adapt individual and group activity skills by applying concepts of relationships, effort, spatial awareness, direction, speed, accuracy, and pathways to improve performance (6.2.a);
* apply knowledge of the skeletal system by identifying major joints, associated bones, and types of joints, including ball-and-socket, and hinge joint. (6.2.b)

Additional resources: SHAPE America National Standards and Grade-Level Outcomes[OPEN Online Physical Education Network](https://openphysed.org/) [Health Smart Virginia](http://www.healthsmartva.org)[PE Central](https://www.pecentral.org/)[Dynamic PE ASAP](https://www.dynamicpeasap.com/)[KidsHealth.org](https://kidshealth.org/) |

*Fitness Planning*

6.3 The student will apply skills of measurement, analysis, goal setting, problem solving, and decision making to improve or maintain physical fitness.

1. Create a basic 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.
2. Identify resources, including available technology, to evaluate, monitor, and record activities for fitness improvement.
3. Calculate resting, active, and recovery heart rate during a variety of physical activities, and identify the relationship between heart rate and rate of perceived exertion (RPE) levels.
4. Describe how being physically active improves physical and mental health.
5. Interpret fitness data, comparing individual scores to health-related criterion-referenced standards(Virginia wellness-related fitness standards, FitnessGram, Centers for Disease Control and Prevention guidelines)*.*
6. Create and implement an activity plan to meet the Centers for Disease Control and Prevention’s Physical Activity Guidelines for Americans and identify the necessary safety precautions for participation.
7. Describe a rate of perceived exertion scale.

| **Essential Understandings** | **Essential Knowledge and Skills** |
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| Self-assessments allow you to determine the factors that you can alter when creating a personal fitness plan to make changes toward a healthy lifestyle and fitness goals. (6.3.a)SMART goals clarify exactly what to do and the measures needed to improve and maintain your fitness level and plans. (6.3.a)* **S**pecific: Goals are straightforward and detail what is to be accomplished.
* **M**easurable: Goals must be able to be measured for improvement (how much, how many, how will you know the goal is accomplished?).
* **A**ttainable: Goals require effort beyond what already has been achieved.
* **R**ealistic: Goals need to be achievable and reachable.
* **T**imely: Goals should have a time element attached to keep you on track to accomplish in a given time period.

Physical fitness can be evaluated through a variety of methods including measurements and assessment tools, criterion-referenced health-related fitness standards, and available technology to evaluate, monitor, and record activities for fitness improvement. (6.3.b)Heart rate can be used to help determine personal fitness levels. The more fit a person is, the more quickly the heart will recover after strenuous physical activity. (6.3.c) * Resting heart rate (RHR) is best taken after 10 minutes of rest.
* Active heart rate can be taken at multiple points during the activity and include being taken immediately after stopping the activity.
* Recovery heart rate is the decrease in heart rate that occurs one minute after maximal exercise. A faster decrease in heart rate is associated with individuals with higher levels of fitness.

Regular participation in physical activity in childhood is associated with a decreased cardiovascular risk in youth and adulthood. (6.3.d)Physical activity helps to maintain weight; reduce high blood pressure; reduce the risk for type 2 diabetes, heart attack, stroke, and several forms of cancer; reduce arthritis pain and associated disability; reduce the risk for osteoporosis and falls; and reduce symptoms of depression and anxiety. (6.3.d)Comparing individual scores to health-related criterion-referenced standards (Virginia wellness-related fitness standards, FitnessGram, CDC guidelines) assists in the analysis, goal setting, problem-solving, and decision making needed to improve or maintain physical fitness. (6.3.e)* FitnessGram standards for the healthy fitness zones.
	+ Scores are evaluated against criterion-referenced standards, called Healthy Fitness Zones. These zones are established to indicate levels of fitness corresponding with health. Standards have been set for boys and for girls based on age and what is optimal for good health. The use of health-related criteria helps to minimize comparisons between children and emphasizes personal fitness for health, rather than goals based solely on performance.

Setting goals is a fundamental component to long-term success and preparing a written plan can improve your adherence to safely execute the plan. (6.3f)Activity plans follow fitness and physical activity safety precautions. (6.3.f)Perceived exertion is how hard a person feels like their body is working. A rate of perceived exertion (RPE) scale is a way of measuring the intensity of physical activity. Scales may range from five to 20 levels. (6.3.g) Example (variation of Borg scale):* Level 1 – Very light activity (watching TV)
* Level 2 – Light activity (can maintain for hours, easy to breathe)
* Level 3 – Moderate activity (breathing heavily, somewhat comfortable)
* Level 4 – Vigorous activity (borderline uncomfortable, short of breath)
* Level 5 – Very hard activity (difficult to maintain exercise intensity, barely breathe)
* Level 6 – Max effort activity (almost impossible to keep going, out of breath)
 | In order to meet these standards, it is expected that students will* create a basic 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 (6.3.a);
* identify resources, including available technology (e.g., heart rate monitors, pedometers) to evaluate, monitor, and record activities for fitness improvement (6.3.b);
* calculate resting, active, and recovery heart rate during a variety of physical activities and identify the relationship between heart rate and rate of perceived exertion (RPE) levels (6.3.c);
* describe how being physically active leads to a healthy body (6.3.d);
* interpret fitness data, comparing individual scores to health-related criterion-referenced standards (Virginia wellness-related fitness standards, FitnessGram, CDC guidelines) (6.3.e);
* Create and implement an activity plan to meet the Centers for Disease Control and Prevention’s Physical Activity Guidelines for Americans and identify the necessary safety precautions for participation (6.3.f);
* describe a rate of perceived exertion scale (6.3.g).

Additional resources: SHAPE America National Standards and Grade-Level Outcomes [KidsHealth.gov](https://kidshealth.org/)[Health Smart Virginia](http://www.healthsmartva.org/)[MyPlate.gov](https://www.myplate.gov/)[OpenPhysed](https://openphysed.org/)[Physical Activity Guidelines for Americans, 2nd ed.](https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf)[Healthy Children.org](https://www.healthychildren.org/English/healthy-living/fitness/Pages/The-FITT-Plan-for-Physical-Activity.aspx) |

*Social and Emotional Development*

6.4 The student will demonstrate and apply skills of communication, conflict resolution, and cooperation to achieve individual and group goals that apply to working independently and with others in physical activity settings.

1. Demonstrate effective communication and creative thinking skills to solve problems, make decisions and resolve conflict with others and promote safe participation in physical activities.
2. Compare and critique rules, safety procedures, and etiquette for two different physical activities.
3. Develop an improvement plan for a self-selected physical activity, discuss the challenges faced, and reflect on how these challenges were overcome.
4. Describe the benefits of competitive and non-competitive physical activities.
5. Demonstrate integrity and apply rules/etiquette for a team-building activity.
6. Participate in developing student-led classroom activities that promote feelings of inclusion, which supports feelings of acceptance, belonging, and being valued, for all students.

| **Essential Understandings** | **Essential Knowledge and Skills** |
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| To maintain a positive learning environment, students must demonstrate effective communication skills, be safe, cooperative, and positively solve problems. (6.4.a)Effective communication * Listen with eyes and ears.
* Be clear when describing a demonstration or when giving feedback.
* Keep information short and simple.

Creative thinking skills* Ability to come up with new solutions to problems.

Problem-solving* Identify/define the problem.
* Generate several solutions.
* Evaluate the pros and cons of each solution.
* Choose a solution.
* Implement, document, and reflect on the solution.

Conflict resolution skills* Able to reduce own stress quickly – calming oneself before addressing the conflict.
* Be emotionally aware of yourself and the other person – how are you feeling, how is the other person feeling.
* State what the conflict is about
	+ Communication skills
	+ Listening carefully to others
	+ Speaking directly to each other
	+ Speaking honestly, and kind
* Proposing solutions or compromises.
* Agree on a solution or compromise to try.

Decision-making skills* Identify the decision to be made.
* List all the possible options.
* Evaluate the pros and cons of each option, using criteria such as:
	+ Is this option healthful and does it reflect my beliefs and values?
	+ Is this option legal?
	+ Is this option safe?
	+ Is this option respectful to myself and my family?
	+ Is this option responsible?
* Make your decision based on the evaluation of each option.
* Reflect on the decision that was made.

Rules promote the safety of the players and the integrity of the game. (6.4.b)* 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.

Safety procedures and etiquette allow for safe participation, safe learning, and inclusion of all students. (6.4.b) * Etiquette is the rules indicating the proper and polite way to behave (e.g., shaking hands/giving high fives/congratulating other teams at the end of a game).

Learning and practicing self-management skills and determination can help individuals develop a new way of thinking when developing an improvement plan for a personally challenging skill or activity. (6.4.c)Reflecting on performance can assist in developing a plan for improvement. (6.4.c)Non-competitive physical activities allow success without any losers, with teammates learning that the cooperative process is what is important. (6.4.d)Competitive physical activities that allow individuals to work as a decision-making team that takes risks, makes decisions, succeeds, and sometimes fails will prepare individuals to be confident adults, able to make decisions and work well within a group. (6.4.d)Participation in physical activities/sports can provide an opportunity for developing an understanding and respect for differences among people. (6.4.e)A responsible participant views behaving well and including others as important as playing safely. (6.4.e, 6.4.f)Integrity is the quality of being honest and fair. Integrity in physical activity settings allow for inclusive, fair, and safe participation for all participants (6.4.f)* Inclusive practices and safe participation strategies may include adapting rules to accommodate a variety of abilities, eliminating or adding time, modifications to an activity (e.g., use a beach ball for volleyball), and changing or eliminating scoring. (6.4.f)
 | In order to meet these standards, it is expected that students will* demonstrate effective communication and creative thinking skills to solve problems, make decisions and resolve conflict with others and promote safe participation in physical activities (6.4.a);
* compare and critique rules, safety procedures, and etiquette for two different physical activities (6.4.b);
* develop an improvement plan for a self-selected physical activity, discuss the challenges faced, and reflect on how these challenges were overcome (6.4.c);
* describe the benefits of competitive and non-competitive physical activities (6.4.d);
* demonstrate integrity and apply rules/etiquette for a team-building activity (6.4.e);
* participate in developing student-led classroom activities that promote feelings of inclusion, which supports feelings of acceptance, belonging, and being valued, for all students. (6.4.f)

Additional resources: [OPEN Online Physical Education Network](https://openphysed.org/) [Health Smart Virginia](http://www.healthsmartva.org/)[PE Central](https://www.pecentral.org/)[EverFi](https://everfi.com/k-12/social-emotional-learning)[KidsHealth.org](https://kidshealth.org/) |

*Energy Balance*

6.5 The student will explain the relationship between energy balance and nutrition guidelines, meal planning, and exercise intensity.

1. Create a one-day meal and snack plan based on Recommended Dietary Allowance (RDA), portions, hydration, and sugar.
2. Describe the relationship between resting heart rate and exercise intensity.
3. Explain the effects of physical activity guidelines on energy expenditure.

| **Essential Understandings** | **Essential Knowledge and Skills** |
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| Meals and snacks, including beverages, should meet Recommended Dietary Allowance (RDA) for portions and meet hydration needs. RDA information is available at the National Institutes of Health (NIH) Office of Dietary Supplements website: <https://ods.od.nih.gov/HealthInformation/Dietary_Reference_Intakes.aspx>. (6.5.a)* Recommended Dietary Allowance (RDA): The recommended minimum amount of a nutrient needed for good health.

Planning healthy meals will help the body grow and develop normally and increase overall health and wellness. (6.5.a)Energy for movement comes from the food we eat (animal and plant sources), which provides energy-rich nutrients. (6.5.a)Resting pulse is a valuable metric to not only determine your fitness level but your cardiovascular health. (6.5.b)Exercise heart rate and resting heart rate can be used to help determine personal fitness levels. (6.5.b)* In general, a lower heart rate at rest indicates more efficient heart function and better cardiorespiratory fitness.

Intensity level descriptions help a person understand what level of physical activity they are engaged in. (6.5.b)* In general, the higher your heart rate during physical activity, the higher the exercise intensity. The American Heart Association generally recommends a target heart rate of moderate exercise intensity: 50% to about 70% of your maximum heart rate; and vigorous exercise intensity: 70% to about 85% of your maximum heart rate.

Energy expenditure is the energy, in the form of calories, a person uses for everyday tasks. (6.5.c)Physical activity increases the number of calories your body uses for energy. (6.5.c)* Physical activity guidelines: 150 minutes of moderate-intensity aerobic activity, 75 minutes of vigorous-intensity aerobic activity, or an equivalent mix of the two each week. Strong scientific evidence shows that physical activity can help maintain a healthy weight over time.
 | In order to meet these standards, it is expected that students will* create a one-day meal and snack plan based on Recommended Dietary Allowance (RDA), portions, hydration, and sugar (6.5.a);
* describe the relationship between resting heart rate and exercise intensity (6.5.b);
* explain the effects of physical activity guidelines on energy expenditure. (6.5.c)

Additional resources: SHAPE America National Standards and Grade-Level Outcomes [KidsHealth.gov](https://kidshealth.org/)[Health Smart Virginia](http://www.healthsmartva.org/)[MyPlate.gov](https://www.myplate.gov/)[OpenPhysed](https://openphysed.org/)[Physical Activity Guidelines for Americans, 2nd ed.](https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf)[American Heart Association](https://www.heart.org/?s_src=22U5W1AEMG&s_subsrc=evg_sem&gclid=EAIaIQobChMIqrjJ-pHx9gIVwcmUCR0x3QQyEAAYASAAEgK0HPD_BwE&gclsrc=aw.ds) |