Physical Education Framework for Instruction Strand: Motor Skill Development Grade Level: 7

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| **VA SOL Standard:** 7.1 The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities.ESSENTIAL UNDERSTANDINGS * Understanding movement improves motor skills and increases skillful performance enabling participation in a variety of physical activities.
* There are similarities and differences between movement skills that use similar patterns and concepts that can be transferred from one movement skill to another.
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| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 a)** Demonstrate and apply mature movement forms and skill combinations competently in a variety of cooperative and tactical activities that include dynamic and unpredictable situations.**Suggested Learning Targets:**I can perform the skills needed to be successful in (specific activity) isolation and in game situations and demonstrate my ability to be successful through a checklist.I can transfer skills from (specific activity) to (specific activity) and show proper application to my teacher.I can adapt movements to changing game situations in (specific activity) when challenged and not challenged by opponents and demonstrate it through a video self-assessment. | **Assessment for Learning** **(Formative)*** Pre-test skill performance of mature movement forms and skill combinations.
* Written:
* Pre-test cognitive knowledge for skills needed to be successful in activity(s) selected.
* Identify skills and movements in selected activities/games, compare to other activities/games and explain how to adapt those skills to fit the needs of that activity/game.
* Self and peer assessments.
* Teachers Observation with feedback.
* Teacher Verbal feedback
* Skill Checklist (for discrete skills)
* Skill Rubric (for game/activity application)
* Videotape: Self/Peer Assessments

**Assessment of Learning****(Summative)*** Written: Post cognitive tests and skill comparisons.

Example: Similarities and differences between the striking patterns found in two different sports skills such as: overhead throw in soccer, tennis serve, overhand volleyball serve and overhead clear in badminton. * Skill rubric

Sample Rubric4 (*Beyond what was taught)* Displays consistent and correct performance of all elements during unpredictable situations); includes smooth transitions between skills/movements; includes advanced strategies and tactics.3 (*What was explicitly taught)* Performs all critical elements (mature movement skills and patterns) appropriately and consistently during unpredictable situations and adapts movements to changing situations during game play. 2 (*Identify basic elements)* Performs critical elements (mature movements skills and patterns) in isolation (outside of game play or when unchallenged). 1 (*With help/prompts/cues)* With teacher cues, student can demonstrate some/most of the critical elements in isolation (outside of game play). | * Mature individual skills such as: Hand Dribbling (specific activity i.e. basketball)

Examples – * Control Dribble (when the defender is guarding you closely).
* Speed Dribble (moving the ball quickly down the floor).
* Crossover Dribble (dribbling from one hand to the other).
* In and Out Dribble (fake move to get around a defender).
* Hesitation Dribble ("Rocker Move").
* Behind the Back Dribble, Through the Legs Dribble.
* Spin Move (to get around a defender in the open court).
* Back-up Dribble and Crossover (retreating from a defender or a trap).
* Passing and receiving in combination with locomotor patterns of running and change of direction & speed with competency in modified invasion games such as: soccer or speedball, etc.

Examples – * Dribbling up to a stationary cone or defender, fake and go.
* Dribbling up to a defender who takes one, two or three steps in the direction of the fake.
* Complete move and pass to a teammate or shoot at a goal.
* Dribbling up to a defender who is “full live”.
* Kicking (specific activity i.e. flag football)
* Distance
* Accuracy
* Grounded and held object
* Striking
* With body parts (specific activity i.e. handball, volleyball, soccer).
* With short/long implements (specific activity i.e. badminton, cricket, floor hockey, pickle ball, tennis, softball, table tennis and golf).
* Forehand, backhand, overhand, underhand and overhead.
 | * Mature movement forms and skills such as: hand dribbling, foot dribbling, kicking and striking.
* Modified small-group activities/games involving:
* Attention to form, power, accuracy and follow-through in performing movement skills.
* Appropriate use of levels in dynamic movement situations such as jumping high for a rebound and bending knees and lowering center of gravity when guarding an opponent.
* Relationships, levels, speed, direction and pathways effectively such as crouching low for volleyball digs, stretching high to catch a disc, positioning for a soccer pass or passing ahead of a receiver.
* Dribbling a ball with dominant and non-dominant hand/foot while starting, stopping, changing directions and passing.
* Smooth combinations of fundamental locomotor skills such as running and dodging.
* Manipulative skills in dynamic situations such as overhand throw, catch, shooting, hand dribble, foot dribble, kick and striking activities such as hitting in floor hockey.
* Combinations of locomotor and manipulative skills such as pivoting and throwing, twisting and striking and running and catching.
* Volleying an object using hands, arms, paddle or racquet back and forth.
* Similarities in body position when receiving a serve (e.g., volleyball, badminton, tennis, etc.).
* Detecting and correcting errors in alignment in target sports (e.g., archery, golf) based on knowledge of results.
* Identifying similarities in body position when receiving a serve (e.g. volleyball, badminton, tennis, etc.).
* Modified small-group games and activities to include game/sport (strategic, net/wall, target and fielding/striking), rhythmic and dance and recreational activities (such as bicycling), aquatics, individual-performance activities (such as track and field).

Examples – * <http://www.sparkpe.org/wp-content/uploads/2011/05/08GolfBocceGolf.pdf>
* <http://www.sparkpe.org/wp-content/uploads/2011/05/09HandballRoyalCourt.pdf>
* <http://www.sparkpe.org/wp-content/uploads/2011/05/10HockeyFirstTo4.pdf>
* <http://www.sparkpe.org/wp-content/uploads/2011/05/12RacqPaddlesExtremeRally.pdf>
* <http://www.sparkpe.org/wp-content/uploads/2011/05/14Softball2-PitchStickball.pdf>
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| **Resources:** SHAPE America National Standards and Grade-Level Outcomes American Alliance for Health, Physical Education, Recreation and Dance Grade-Level Outcomes for K-12 Physical Education<http://www.doe.virginia.gov/instruction/physed/index.shtml>; <http://www.pecentral.org/lessonideas/cues/cuesmenu.asp> <http://www.thephysicaleducator.com/resources/games/invasion/>; <http://www.thephysicaleducator.com/resources/games/net-wall/> <http://www.thephysicaleducator.com/resources/games/striking-fielding/>; <http://www.thephysicaleducator.com/resources/games/target/> |

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| **VA SOL Standard:**  7.1 The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities.ESSENTIAL UNDERSTANDINGS* + - * Concepts of space, effort and relationships affect movements.
			* Movement concepts are comparable to adverbs (i.e., they describe how an action is performed) and are subdivided into three categories: space awareness, effort and relationships.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 b)** Demonstrate offensive strategies and tactics, to include creating open space, skilled movement, speed, accuracy and selection of appropriate skill/tactic to gain offensive advantage.**Suggested Learning Targets:**I can create open space and control my speed, direction and movements to gain offensive advantage in (specific activity) and demonstrate it through a peer reflection of my performance. I can apply appropriate offensive skills at the right time and in the right situation and write a reflective paragraph on how I demonstrated this in (specific activity). | **Assessment for Learning** **(Formative)*** Written: Cognitive knowledge of offensive strategies and tactics for selected activity(s).
* Teachers Observation: Verbal or written feedback.
* Videotaping
* Self/Peer Assessment
* Problem Solving

Example: When there is no one right solution to gain an offensive advantage, how can quick detection and adaptability be effective decision-making skills? Give examples.**Assessment of Learning****(Summative)*** Game situation performance rubric.

Sample Rubric4 (*Beyond what was taught)* Demonstrates consistently the correct basic offensive and defensive strategies in non-complex, modified and small-sided activities.3 (*What was explicitly taught)* Demonstrates most of the basic offensive and defensive strategies in non-complex, modified and small-sided activities.2 (*Identify basic elements)* Somewhat demonstrates most of the basic offensive and defensive strategies in non-complex, modified and small-sided activities.1 (*With help/prompts/cues)* Inadequately demonstrates the basic offensive and defensive strategies in non-complex, modified and small-sided activities. | * Offensive principles serve to create a high percentage of scoring opportunities. Offensive play begins the moment a team gains possession of the object used for scoring.
* Offensive strategies:
* Pressure: A quick player movement that forces the defender to react (e.g., adjust one’s position) more quickly than they would like; creates time and space for the attacker(s).

Accomplished by: speed/quickness of the attack.* Concentration of Attack: Any action or movement in a small, specific area which creates an offensive numerical advantage.
* Speed: Is the quickness an attack is made; this limits the reaction time of the defender and can force defensive error.
* Open space: Players move to open space to make it difficult for a defender to block.
* Control: Be able to maintain possession.
 | * Practice opportunities for offensive skills such as pivots, fakes, jab steps designed to create open space.
* Modified small-group activities that apply strategies of attacking space (cutting, dodging and feinting).
* Modified small-group activities that apply strategies of agility, coordination, balance, speed and power.
* Modified small-group activities that involve pass and receive with change of direction and speed with competency in tactical activities such as Ultimate, Tchoukball, soccer or international games.

Examples:* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1462#.V6Sohrf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=818#.V6SpX7f6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=820#.V6Spk7f6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=821#.V6Sp2bf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=8893#.V6SqL7f6vcs>
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| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://files.eric.ed.gov/fulltext/EJ795561.pdf>; <http://hooptactics.com/Free_Area_Offensive_Basketball_Strategies/>; <http://www.soccer-training-info.com/soccer_strategy_tactics.asp>;<http://learntocoachbasketball.com/sign-up/coaching-course/skill-development/level-i-tactical-skills>; <http://www.tennistips.org/tennis-technique.html>;<http://www.strength-and-power-for-volleyball.com/volleyball-strategies.html>; <http://www.usaultimate.org/assets/1/Page/Teaching%20Ultimate_beta3.pdf> <http://youth-sports-drills-cdn.teamsnap.com/tips1.pdf>; <http://www.ducksters.com/sports/footballstrategy.php>  |

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| **VA SOL: 7.1** The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities.ESSENTIAL UNDERSTANDINGS* + - * Possessing proficient motor skills and having confidence and competence in movement behavior can lead to a lifetime of involvement in organized, free play and recreational experiences.
			* Safety precautions, such as a proper warm-up and cool-down procedures, affect performance and prevent injury in recreational pursuits.

Correct techniques in outdoor activity help ensure the safety of self and others. |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 c)** Demonstrate basic abilities and safety precautions in recreational pursuits (e.g., in-line skating orienteering, hiking, cycling, ropes courses, backpacking, canoeing, rock climbing).**Suggested Learning Targets:**I can state the importance of taking personal responsibility for reducing hazards, avoiding accidents and preventing injuries during (specific recreational activity) and describe it to my partner. I can demonstrate the safety procedures associated with (specific activity) by showing my teacher. I can perform basic skills associated with (specific activity i.e. bike riding) and demonstrate it using a checklist. | **Assessment for Learning** **(Formative)*** Self/peer assess ability to participate safely in recreational pursuits.
* Skill checklist
* Journals:

Examples* Writing to learn– Gathering and organizing information about recreational pursuits.
* Writing to motivate– How adventure, curiosity and creativity are effects of recreational pursuits.
* Writing to assess, to evaluate progress– Comprehension of an individual recreational pursuit such as the basic skills, safety precautions and benefits of the activity.

**Assessment of Learning****(Summative)*** Skill rubrics: Demonstration of skills and safety.
* Cognitive assessment for knowledge, skills, strategies and safety of a selected recreational activity.
 | * Critical Elements as determined by the activity selected.
* Introduction of basic skills, safety precautions and the benefits of recreational pursuits.

Example:Tips to prepare for an outdoor adventure such as: developing trip itineraries; carrying appropriate equipment, including guides, maps and a compass; sufficient food and water; dressing in proper clothing; carrying emergency contact numbers; and preparing for access to shelter, such as tents, cabins or lean-tos.  | * Basic abilities needed for recreational activities such as: Cycling, fishing, canoeing, disc golf, hiking, kayaking, rock climbing, sailing, skiing, surfing, swimming, paddle boarding or scuba diving.
* Have experts of selected recreational pursuit provide a presentation of the activity for students.
* Quick videos/power points of recreational pursuits.

Example:<http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=9934#.V6VB2_36upo> * Create pretend situations using any available equipment that can mimic the equipment used for the recreational pursuit being introduced.

Example: Pretend a folded up mat is a canoe or kayak. Use any long handled implement to pretend it is a paddle to teach the basic skills and safety precautions of this pursuit.* Bring in and present equipment used in a recreational activity.
* Safety precautions for different recreational activities.

Examples:* Hiking: Bring a charged mobile phone, warm clothing and supplies such as water and light food or energy bars, a flashlight or headlamp, rain gear, sunscreen and matches. Travel in groups or with another person whenever possible. Lookout for challenges you may encounter in the outdoors, such as wildfires, sudden storms, muddy trail conditions and fast moving waters. Wear light-colored clothing and long pants and long-sleeved shirts to protect against ticks and other biting insects.
* Boating and paddling: wear a personal floatation device, check the weather forecast before heading out on the water and seek immediate shelter on shore if you hear thunder. If paddling in waters where there are motorboats, keep close to shorelines and out of main channels.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.fs.fed.us/recreation/safety/safety.shtml>; <http://www.cdc.gov/homeandrecreationalsafety/water-safety/waterinjuries-factsheet.html>;<http://museumofdisability.org/wp-content/uploads/2016/01/Adaptive_Sports_and_Recreational_Activities.pdf>  |

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| **VA SOL Standard:** 7.1 The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities.ESSENTIAL UNDERSTANDINGS* Dance and/or rhythms can provide opportunities for personal enjoyment, self-expression, challenge and social interaction.
* Dance in schools offers opportunities to teach appropriate social behaviors while building school support.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 d)** Create and demonstrate movements appropriate to a variety of rhythm patterns in selected folk, social, world,country, square, contemporary and line dances.**Suggested Learning Targets:**I can perform the proper sequence of steps in movement combinations for (specific dance) and present it to my teacher. I can create and perform a dance/rhythmic sequence that includes various tempos including changes in speed, direction and flow and demonstrate this through a group presentation. | **Assessment for Learning** **(Formative)*** Teacher observation: Performance of a simple dance step in keeping with a specific tempo.
* Peer assessment: Evaluate a teacher taught dance for accuracy, revise and refine.
* Peer assessment: Evaluate a peer-/peer group-created dance / rhythmic sequence.

**Assessment of Learning****(Summative)*** Rubric for creating a dance/rhythmic sequence.

Sample Rubric4 (*Beyond what was taught)* Creates and displays rhythmic movement sequence with variety of movements.3 (*What was explicitly taught)* Creates and displays a rhythmic movement sequence.2 (*Identify basic elements)* Performs critical elements of rhythmic movement sequence.1 (*With help/prompts/cues)* With teacher cues, student can demonstrate some/most of the critical elements in isolation. | * Movement: Counts of 4/8.
* Combinations: Putting two or dance moves together.
* Pattern: Repeating a sequence.
* Flow: The direction of movement.
* Transitions: When a movement, phrase or section of a dance progresses into the next.
* Leading/following: Leading or following others actions.
* Mirroring/matching: Copying another individual’s actions.
* Routine: A sequence of movements in a fixed program.
* Sequence: A particular order in which related movements follow each other.
* Beat: The basic unit of a rhythmic measure.
* Rhythm: Regular, repeated pattern of sounds or movements.
* Tempo: The speed of music or a dance.
* Line dance: (such as Electric Slide, Cha-Cha Slide, Cupid Shuffle, Cleveland Shuffle, Down South Shuffle, etc.)
* Square dances: (promenade, elbow turn, do-si-do, allemande right)
* Folk dance
* Multicultural dance
 | * Teacher presented dances that have movement combinations with/without partner.
* Teacher presented dances that have movements with a partner such as leading/following and mirroring/matching.
* Dance/rhythmic sequences done in small groups, partners or by individuals.
* Video clips of dances and rhythmic movements.

<http://www.schooltube.com/video/414938ac96bc4474ba56/Hey%20Baby%20Line%20Dance%20on%20PE%20Central> * Groups create dance/rhythmic movement sequences and perform them for others.
* Rhythmic movement activities:
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1887#.V6SXD7f6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1634#.V6SXLLf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=9638#.V6SXWrf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1307#.V6SXiLf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=9841#.V6SXvLf6vcs>
* <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1297#.V6SX7rf6vcs>

**Note**: Music for use with students should be pre-approved by the teacher for appropriate lyrics. |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes <http://www.pecentral.org/>; <http://www.humankinetics.com/excerpts/excerpts/large-group-activities-for-teaching-rhythmic-activities-and-dance>; <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=5480#.V6VEyf36upo>  |

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| **VA SOL Standard:** 7.1 The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities.ESSENTIAL UNDERSTANDINGS* + - * Stability increases in a movement with lower center of the body, larger the base of support and the closer the center of the body is to the base of support.
			* Balance is both a static and dynamic process that makes it possible for the body to maintain its center of gravity over its base of support.
			* I[ncorporating all planes of movement](http://breakingmuscle.com/strength-conditioning/5-week-sandbag-workout-program-week-3-planes-of-motion) into your activity time will increase your range of motion, prevent injuries and provide greater stability for your body.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 e)** Describe and demonstrate how movement is stabilized, to include balance (center of gravity and center of support) and planes of movement.**Suggested Learning Targets:**I can describe how balance occurs and how it is a key to all functional movements by completing an exit ticket. I can explain how stability occurs in the planes of movement through a partner discussion. I can perform stability in a variety of activities that involve the planes of movement and demonstrate it through a peer assessment. | **Assessment for Learning** **(Formative)*** Teacher observation.
* Oral: Partner discussions

Example: * Explain how changes in the center of gravity affect balance and performance in a variety of physical activities.
* Assess movement performance of self or others in a specific activity by describing balance in the planes of movement.
* Peer assessment

**Assessment of Learning****(Summative)*** Cognitive assessment for balance, stability, planes of movement:

Pick a movement to research and write how the center of gravity and center of support affect the movement. * Example: Sprinting requires losing and regaining your balance on one leg in less than 1/10th of a second.
* Peer Observation: Demonstration of stability and balance during static and dynamic movements. Observer describes where stability and balance were needed in the movements and how well they were performed.
 | * Balance: The ability to maintain the body’s center of gravity within the limits of stability as determined by the base of support.
* The lower the center of gravity to the base of support, the greater the stability.

Example – When walking a balance beam, one squats when they feel they are losing balance. * The nearer the center of gravity to the center of the base of support, the more stable the body.

Example – Kneeling position for good stability and best positioning for canoe paddling.* Stability can be increased by widening the base of support.
* An individual’s limits of stability are the distance outside of his or her base of support he or she can go without losing control of the center of gravity.
* Planes of movement:
* Sagittal Plane– Passes through the body front to back, dividing it into left and right. Movements in this plane are the up and down movements of flexion and extension.
* Frontal Plane– Divides the body into front and back. Movements in this plane are sideway movements, called abduction and adduction.
* Transverse Plane– Divides the body into top and bottom. Movements in this plane are rotational in nature, such as internal and external rotation, pronation and supination.
 | * Exercise Progressions for Balance/Planes:
* From slow to fast.
* Simple to complex.
* Known to unknown.
* Low force to high force.
* Static to dynamic.
* Two arms to one arm.
* Two legs to one leg.
* Stable to unstable.
* Eyes open to eyes closed.
* Quality before quantity.
* Exercise Programs for Balance/Planes:
* Safe and challenging.
* Stress multiple planes of motion.
* Incorporate a multisensory approach.
* Derived from fundamental movement skills that apply directly to an activity.
* Forms of External Resistance
* Tubing
* Dumbbells
* Medicine balls
* Power balls
* Proprioceptive Progression
* Floor
* Dumbbells
* Core board – Two feet to One foot
* Half (½) foam roll – one under each foot
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes <http://www.yogajournal.com/article/practice-section/plumb-perfect/>; <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Balance-Exercise_UCM_464001_Article.jsp#.V6eFYP36upo>;  |

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| **VA SOL Standard:** 7.1 The student will demonstrate competence and apply movement concepts in modified versions of various game/sport, rhythmic and recreational activities. ESSENTIAL UNDERSTANDINGS* + - * Learning a new skill or improvement of skills involves a process of attempt, analysis, correct errors, practice, reassess, practice at a higher level and reassess.
			* Self/peer assessments allow students to detect, analyze and correct errors in personal movement patterns.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.1 f)** Demonstrate the movement learning progression (practice, self or peer assess, correct, practice at a higher level and reassess) for a specific skill or activity.**Suggested Learning Targets:**I can examine physical activities critically and suggest improvements for practice at a higher level and demonstrate this through a self-assessment. I can refine skills by identifying errors in skill application, self-correcting those errors and providing feedback to others through a (selected assessment product: i.e., self-assessment, videotape, checklist, etc.). I can create and implement a practice plan to improve a skill and demonstrate it through a written plan of action.I can design evaluation/assessment sheets as a small group for a peer analysis. | **Assessment for Learning** **(Formative)*** Self/peer assessment: Students evaluate skill performance and provide feedback for improvement and/or practice.

Examples of assessment pieces:* Performer appears to be in complete control of their actions.
* Actions are refined and precise.
* Actions seem effortless, energy is not wasted.
* Dynamics of the action, degree of power/touch or speed are adapted to each situation.
* Even complicated actions appear simple.
* Skills can be linked into complex combinations with ease.
* The correct action is always selected for the situation.
* The action is applied at the correct time.
* Actions are adapted with flair and creativity to overcome opponents.
* The performer can carry out skills automatically without having to think them through.
* There is a high success rate of the outcome of their actions.
* Checklist to record/self-assess individual skill performance.
* Video: Analyze the critical skill elements of manipulative skill sequences and make suggestions for skill improvement.

**Assessment of Learning****(Summative)*** Student skill practice plan:

Evaluation of elements of the final plan; elements may include skill assessment, activities and schedule for practice, documentation of skill practice, reassessment, modification of practice activities, reassessment of skill. | * Self/peer assessments:
* Fully train students on how to assess other students (how to use a skill assessment rubric or checklist).
* Require assessors to justify their judgments.
* Create an environment that feels safe for interpersonal risk-taking so that students will feel more confident in evaluating.
* Emphasize the main focus in the assessment should be useful feedback.
* Model appropriate, constructive criticism and descriptive feedback.
* Small feedback groups so that feedback can be explained and discussed with the receiver.
* Encourage students to be as supportive as possible in critiquing the work of others.
* Stress benefits of being a peer assessor, such as it helps them evaluate their own work and become more self-directed learners.
* Train students how to interpret feedback so that they can make appropriate connections between the feedback received and the quality of their work.
* Provide exemplars for skill practice planning
* Peer assessments can be used as assessments of learning if the assessment is focused on the ability of the peer assessor to make an assessment and provide appropriate feedback/justification; not focused on how the student being observed performed.
* Whole-part-whole method:
* Whole skill is first demonstrated and practiced
* Assessed
* Skills/activity broken down into the constituent parts to practice the individual elements for improvement
* Demonstrate and practice the whole skill back together
* Reassess
 | * Teacher think aloud or demonstration of a self/peer assessment.

Examples:* Position yourself to see the critical components of the skill. Use multiple vantage points.
* Observe performance several times to identify consistent performance problems.
* Use the whole-part-whole observation method.
* Be sure to focus both on the performer and any implements.
* Evaluate the overall effectiveness of the movement.
* Use a performance checklist to guide your efforts.
* Peer assessments:

 Examples* <http://www.pecentral.org/assessment//pdf/volleyballsetpasspeerassess.pdf>
* Groups design self/peer assessments for a specific skill or activity
* Opportunities for implementation of a student-created practice plan.

Example:* Practice
* Self-assessment– Understanding of skill check list, rubric or verbal teacher cues.
* Correction
* Practice at higher level
* Re-assess
 |
| **Additional Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.teachpe.com/sports_psychology/teaching.php>  |

 Physical Education Framework for Instruction Strand: Anatomical Basis of Movement Grade Level: 7

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| **VA SOL Standard:** 7.2 The student will understand and apply movement principles and concepts and knowledge of major body structures.ESSENTIAL UNDERSTANDINGS* The body works as a whole and when certain body regions are inefficient, the body will recruit another muscle or joint in a way that was not intended in order to perform that movement.
* Core muscles are incorporated into almost every movement of the human body and act as stabilizers.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.2 a)** Identify the “core muscles” to include pelvis, lower back, hips, gluteal muscles and abdomen and explain their role in stabilizing movement.**Suggested Learning Targets:**I can describe the structure and function of the core muscles and how this muscle group is used to stabilize movement through a summary paragraph.  | **Assessment for Learning** **(Formative)*** Written: Name and label core muscles.

**Assessment of Learning****(Summative)*** Written: Labeling of the core muscles and explaining the role of core muscles in stabilizing movement.
 | * Two types of muscles:
* Movers: Large muscles that are responsible for moving the body through all planes of motion.
* Stabilizers: Muscles responsible for holding everything in place while the body is moving to prevent injury.
* Pelvis Hip flexors:
* Psoas major
* lliacus
* Tensor fasciae latae
* Adductor brevis
* Adductor longus
* Gluteal Hip extensors, abductors, external rotators
* Gluteus medius
* Gluteus maximus
* Gluteus minimus
* Lower back Spinal flexors, extensors, rotators
* Lumbar multifidus
* Transversus abdominis
* Quadratus lumborum
* Abdominals
* Rectus abdominis
* Transverse abdominis
* Pectoralis major
* External oblique
* Internal oblique
* Components of Core Stability
* Strength
* Endurance
* Flexibility
* Motor Control
* Function
* Structure and function of the muscular system as they relate to physical performance and stabilization of movement.
* Muscles pull on bones to cause movement
* Muscles work in pairs
* Muscles work by contracting and relaxing
 | * Rotate through exercise stations and write the core muscle or muscle groups that are being used.
* Use visuals to depict muscles.
* Incorporate knowledge concepts of muscles into movement activities.
 |
| **Additional Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://breakingmuscle.com/mobility-recovery/do-you-know-what-your-core-really-is-and-what-it-does> <http://www.thehealthygamer.com/2013/05/31/chapter-9-core-training-concepts/>  |

 Physical Education Framework for Instruction Strand: Anatomical Basis of Movement Grade Level: 7

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| **VA SOL Standard:** 7.2 The student will understand and apply movement principles and concepts and knowledge of major body structures.ESSENTIAL UNDERSTANDING* Balance works in conjunction, not isolation, with all movements, whether dominated by strength, speed, flexibility or endurance.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.2 b)** Apply biomechanical principles (e.g., center of gravity, base of support) to understand and perform skillful movements. **Suggested Learning Targets:**I can explain how balance and stability affects the skill performance in (selected activity) through an exit ticket.I can explain how force is generated when performing (selected activity or specific skill) and describe it to a peer.I can apply center of gravity, base of support, to (selected activity or specific skill) and evaluate the application in my journal. | **Assessment for Learning** **(Formative)*** Teacher observation
* Self/peer assessment for skill improvement.
* Journals:

Examples * Writing to learn– Gathering and organizing information about the biomechanical principles of different movements.
* Writing to motivate– How applying biomechanical principles help the performance of movements.
* Writing to assess, to evaluate progress– Comprehension of biomechanical principles of different movements and the benefits for self-assessment.

**Assessment of Learning****(Summative)*** Written: Explain the use of balance and stability on a variety of dynamic balance activities; explain how force is generated in a variety of activities/skills.
* Movement plan: Apply the principles of science to the development of an appropriate, authentic, practice plan for a variety of movement skills.

\*Note: Assessment of this standard may be incorporated into the practice plan in 7.1.f. | * Balance training is continually increasing awareness of a person’s balance threshold or limits of stability by creating controlled instability.
* An integrated balance training program requires:
* Training balance
* Core strength
* Reactive neuromuscular control
* Integrated functional strength
* Dynamic flexibility
* Speed strength
* Mechanical Principles
* Force: The effect that one object has on another.
* Production of Force: Produced by the actions of muscles; the stronger the muscles, the more force the body can produce.
* Application of Force: The force of an object is most effective when it is applied in the direction that the object is to travel.
* Absorption of Force: The impact of a force should be gradually reduced (“give with the force”) and spread over a large surface.
* Proprioception: The ability to sense stimuli arising within the body regarding position, motion and equilibrium.
 | * Teacher may wish to instruct this standard with 7.1.f.
* Perform a variety of movements that demonstrate appropriate use of balance, stability, force and form, to include ready position, reaction and body position in motion, in a variety of movement activities.
* Discussions on biomechanical principles (e.g., center of gravity, base of support).

Example:* Students are asked to think about the importance of ankle stability.
* Teacher talks about what might cause an ankle injury during physical activities. Example: Athletes in sports that require high amounts of cutting and jumping are particularly affected by ankle sprains and often find a high rate of recurrent injuries due to instability. Ankle sprains can be attributed to slow reaction times of surrounding musculature, poor proprioception, muscle imbalances and mechanical instability (ligaments lengthened, creating poor structural stability).
* Examining and applying the forces of inertia and momentum to determine their effect on a variety of dynamic balance activities.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.humankinetics.com/excerpts/excerpts/five-factors-determine-stability-and-mobility> [https://www.google.com/search?q=biomechanical+principles+(e.g.,+center+of+gravity,+base+of+support)&biw=1536&bih= 696&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjU7\_Kf6qzOAhWDbiYKHReiDG0QsAQIKQ&dpr=1.25](https://www.google.com/search?q=biomechanical+principles+(e.g.,+center+of+gravity,+base+of+support)&biw=1536&bih=696&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjU7_Kf6qzOAhWDbiYKHReiDG0QsAQIKQ&dpr=1.25)  |

 Physical Education Framework for Instruction Strand: Anatomical Basis of Movement Grade Level: 7

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| **VA SOL Standard:** 7.2 The student will understand and apply movement principles and concepts and knowledge of major body structures.ESSENTIAL UNDERSTANDINGS* Most human motion is general, with both linear and angular components; occurring in multiple planes of motion.
* By [incorporating all three planes of movement](http://breakingmuscle.com/strength-conditioning/5-week-sandbag-workout-program-week-3-planes-of-motion) into your mobility time, you will increase your range of motion, prevent injuries and provide greater stability for your body.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.2 c)** Describe the planes of motion in which movement occurs, to include sagittal plane, frontal plane and transverse plane.**Suggested Learning Targets:**I can explain the planes of motion in which specific movements occur through a group presentation.**7.2 d)** Analyze skill patterns and movement performance of self and others, detecting and correcting mechanical errors and describing balance in the planes of movement for selected movements.**Suggested Learning Targets:**I can evaluate a peer’s skill performance for errors, provide corrective feedback and describe how balance occurred in the planes of movement to my partner.  | **Assessment for Learning** **(Formative)*** Questioning:

Example – What plane does flexion and extension occur? Answer: Sagittal* Group work: Phase analysis of a movement pattern (Self/Peer)

Example – * Select a motor skill.
* Establish the phases into which the movement can be divided for analysis.
* Describe and correct mechanical errors.
* Describe the planes of motion in which the movements occur.
* Describe the biomechanical principles needed to perform the motor skill.
* Analysis:

Example Evaluate the differences and similarities between qualitative and quantitative analysis of sports movements (e.g., Imagine you are teaching catching to an individual. Which of the following factors do you think is most important in catching and why? – Readiness, vision, motivation, experience or hand and arm position.)* Compare/Contrast: The advantages and disadvantages of using a video camera as compared to the human eye for collecting observational data.

**Assessment of Learning****(Summative)*** Written: Pick a locomotor skill and describe the planes of movement and movements that occur in the performance of the locomotor skill.

Example Running: Occurs in three planes.* Sagittal: Flexion and extension are the movements. Flexion occurs in the legs at the beginning of swing phase of running, when the limb is moving forwards. Extension occurs in the stance limb, reaching its full extension.
* Frontal: Abduction and adduction are the movements. Observing the waistline, abduction is movement away from the middle line of the body and adduction is movement towards the middle line. Frontal plane movement is also seen in the rear foot when the shoe strikes the ground this is termed ankle inversion and eversion.
* Transverse: Rotation occurs in this plane between the pelvis, ribcage and shoulders.
* Student practice plan: Include activities that address the specified planes of motion for the skill included in the plan.

\*Note: This standard may be assessed with 7.1.f. and 7.2.b. as part of the practice plan. | * Sagittal plane: Vertical plane passing from the rear (posterior) to the front (anterior), dividing the body into left and right halves. It is also known as the anteroposterior plane. Most sport and exercise movements that are almost two-dimensional, such as running, long jumping, biking and rowing, take place in this plane.
* Frontal plane: Vertical and passes from left to right, dividing the body into posterior and anterior halves (front and back). When moving along this plane, we are moving toward or away from the midline. Adduction and abduction are movements along this plane.
* Transverse plane: Divides the body into top (superior) and bottom (inferior) halves. Any time we rotate a joint we are [moving along the transverse plane](http://breakingmuscle.com/strength-conditioning/3-sandbag-exercises-you-should-add-to-your-training).
* Abduction: Away from the body.
* Adduction: Back towards the body.
* Medial: Internal (into the body) rotation of the limbs.
* Lateral: External (away from the body) rotation of the limbs.
* Muscle movement example:

<http://www.teachpe.com/anatomy/muscles/soleus.php>  | * Teacher presents examples of movements in the planes of motion.

Examples * Movements that involve forward and backward motion are referred to as sagittal plane movements. When a forward roll is executed, the entire body moves parallel to the sagittal plane.
* Marching, bowling and cycling are all sagittal plane movements.
* Jumping jacks, side stepping and sidekicks in soccer require frontal plane movement at certain body joints.
* A cartwheel is an example of total-body frontal plane movement.
* Total-body transverse plane movement includes a twist executed by a diver, airborne gymnast and a dancer’s pirouette.

\*Note: Teacher may wish to instruct these standard with 7.1.f and 7.2.b. |
| **Resources:** <http://www.teachpe.com/anatomy/movements.php>; <https://www.acefitness.org/blog/2863/explaining-the-planes-of-motion> |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* + - * The risk of injury can be reduced by performing appropriate amounts of activity and setting appropriate personal goals.
			* Performing a variety of different physical activities may reduce the risk of overuse injury.
			* Choosing safe behaviors improves mental and physical health.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.3 a)** Identify safe practices for improving physical fitness.**Suggested Learning Targets:**I can recognize proper warm up/cool-down techniques and reasons for using them and explain it to my teacher/partner. I can develop a warm up and cool down that has proper techniques and apply it to my written fitness plan.I can describe the difference between dynamic and static stretches through an exit ticket.I can describe how to exercise safely in cold and hot weather conditions and tell it to a peer.I can show how to use appropriate safety equipment in (specific activity) and demonstrate it to my teacher. I can calculate my target heart rate during physical activities to determine if I am in a safe target rate range for my age and tell that number to my teacher/partner.I can explain the importance of pacing during continuous exercise and write it in my fitness journal/portfolio. | **Assessment for Learning** **(Formative)*** Questioning to check for understanding:

Example - During very hot and humid weather: How can people reduce the risks of dehydration and heat stress during physical activity? Possible Answers* Exercise in the cool of early morning as opposed to mid-day heat.
* Switch to indoor activities (playing basketball in the gym rather than on the playground).
* Change the type of activity (swimming rather than playing soccer).
* Lower the intensity of activity (walking rather than running).
* Pay close attention to rest, shade, drinking enough fluids and other ways to minimize effects of heat.
* Teacher observation
* Demonstrate safety rules for classroom safety and activity-specific safety.
* Ability to work independently, cooperatively with peers and on-task during physical education activities.
* Move in a safe and controlled manner in personal and general space.
* Research how safety has improved (e.g. how athletic shoes have changed to reduce injury).
* Research local ordinances and state safety equipment laws regarding requirements such as the use of helmets while bicycling or skating.

**Assessment of Learning****(Summative)*** Design and present fitness stations, teaching safety practices for each station.
* Create posters of safety guidelines being taught in conjunction with physical activities.
* Design and perform warm-up and cool-down sequences appropriate for a variety of different physical activities
 | * Safe: Not apt to cause harm, injury or danger.
* Proper warm-up and cool-down techniques.
* Safety precautions for exercising in cold and hot weather conditions.
* Use of appropriate safety equipment in various types of activities.
* Safety procedures while exercising outdoors (traffic laws, right of way).
* Static stretching: Consists of stretching a muscle (or group of muscles) to its farthest point and then maintaining or holding that position.
* Dynamic stretching: Involves moving parts of your body and gradually increasing reach, speed of movement or both.
* Dangers of ballistic stretching: This is stretching or "warming up", by bouncing into (or out of) a stretched position, using the stretched muscles as a spring which pulls you out of the stretched position. (e.g., bouncing down repeatedly to touch your toes.) This type of stretching can lead to injury. It does not allow your muscles to adjust to and relax in, the stretched position. It may instead cause them to tighten up by repeatedly activating the stretch reflex.
* Resistance Training: Activity that places an additional force against the muscle or muscle group.
* Interval Training: Method of training that involves alternating high intensity exercises with recovery periods.
* Pacing methods during continuous exercise.
* Target heart rates: Exercising within a range of 60 to 80% of one’s maximum heart rate.
* Workout appeal: Having the right footwear and clothing for physical activity for both comfort and safety.
* Choose the right workout clothing that is ideal for your exercise and body type for safety. Clothing that enables the right amount of movement to perform the activity correctly and comfortably. For instance, if you wear jeans and try to stretch, you won’t be able to push your body as far.
* <http://www.fitnesstipsforlife.com/workout-clothing-why-it-is-important.html>
* <https://medlineplus.gov/ency/patientinstructions/000817.htm>
 | * Students and teachers create classroom rules and expectations.
* Practice of routines and expectations for safe behavior.
* Participation in activities alone or with a partner that demonstrate safe practices.
* Assign groups to develop activities for either warm-up or cool-down. Present ideas to create a group workout.
* Discussions on safe practices such as: with physical activity equipment, being active in hot or cold weather, foot and clothing wear.
* Taking target heart rates throughout physical activities and determine if they are within a safe range.
* Practice pacing during running activities.
* Describe and demonstrate the differences between dynamic and static stretches.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.health.harvard.edu/healthbeat/10-tips-for-exercising-safely>; <http://www.earlytorise.com/10-best-practices-for-safe-workouts/>;<http://www.everydayhealth.com/fitness/basics/tips/how-to-exercise-safely.aspx>; <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Warm-Up-Cool-Down_UCM_430168_Article.jsp#.V7G32bf6vcs>  |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* + - * A well thought out strategy of applying knowledge of health-related fitness and basic training principles can improve performance.
			* SMART goal setting provides focused, realistic and measureable goals and objectives.
			* Relevant fitness data is essential to fitness planning at the beginning, to track progress and informs the need for adjustments to improve physical fitness.
			* The FITT principle is a set of guidelines to apply when developing fitness plan action steps to become or remain physically fit.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE ACTIVITIES** |
| **7.3 b)** Complete a self-assessment of health-related fitness and develop a comprehensive personal fitness plan, including SMART (specific, measurable, attainable, realistic, timely) goals, action plan that incorporates the FITT (frequency, intensity, time and type) principle, timeline, documentation of activities inside and outside of school, roadblocks/barriers and solutions, mid-year and end-of-year assessments and reflection on progress for improving at least three self-selected components of health-related fitness.**Suggested Learning Targets:**I will evaluate my fitness and analyze the results to determine areas to improve/maintain and demonstrate it through a fitness data analysis summary.I can create specific, measurable, attainable, realistic and timely personal fitness goals for at least three components of health-related fitness based on fitness test results and write them in a fitness log/journal.I can create a written fitness plan to reach my SMART goals that includes action steps and appropriate activities, aligns with the FITT principle, includes safe practices and conditioning principles, timeline and addresses challenges.I can document implementation of an individualized fitness program in my (selected assessment product: i.e., fitness log, journal and portfolio). I can reassess and reflect on progress at midyear and end of year in my (selected assessment product: i.e., fitness log, journal and portfolio).  | **Assessment for Learning** **(Formative)*** Examine elements of the fitness plan:

Example of a design brief for a personal fitness plan:* Situation: What are you trying to develop?
* Problem: What are the concerns?
* Requirements: What individual requirements must be met to complete the task?
* Resources: What resources will you use?
* Evaluation: What is the criteria by which the task will be graded?
* List 4 possible ways you can change your physical activity program based on the FITT components.
* List the essential components of a personal fitness plan (goals, FITT principle, training strategies) and discuss the impact of each component to the plan.
* Describe how family values, beliefs and availability influence a comprehensive personal fitness plan outside of school and reflect on possible solutions.
* Fitness Data Analysis– Analyze health-related fitness and body composition data comparing individual scores to established health-criterion referenced standards (Virginia Wellness fitness standards, Fitnessgram, CDC guidelines).

Example questions for each fitness test score:* What is your test score?
* Does your score fall within the healthy fitness zone?
* Write a SMART goal for this fitness test.
* List different activities that you can do to cause improvement of this fitness test*.*
* Written reflections of fitness data. Example:
* An in-depth valid comparison of the data between two fitness test periods (Pre/Post) that determines if improvement has occurred and relevant examples of goals for future fitness testing.
* An analysis of how the experience contributed to student understanding of self, others and/or course concepts of fitness.

**Assessment of Learning****(Summative)**Personal fitness plan to address at least three components of health-related fitness to improve/maintain, including intermediate (quarterly) and long-term SMART goals, action plan, reassessments and modify/alter/change plans as needed. | * Health-related fitness: Muscular Strength, muscular endurance, flexibility, cardiovascular endurance and body composition

<http://www.teachpe.com/fitness/health.php> * FITT principle: Used to guide the development of fitness plans that cater for an individual's specific needs.
* <http://www.ode.state.or.us/teachlearn/subjects/pe/curriculum/fittprinciple.pdf>
* <http://stretchcoach.com/articles/fitt-principle/>
* SMART Goals

<http://www.unh.edu/hr/sites/unh.edu.hr/files/pdfs/SMART-Goals.pdf> * Body Mass Index (BMI) <https://www.cdc.gov/healthyweight/assessing/bmi/>
* Roadblocks/barriers

<http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/StayingMotivatedforFitness/Breaking-Down-Barriers-to-Fitness_UCM_462208_Article.jsp#.V6eGEf36upo>  | * Participate in activities that help improve flexibility, muscle strength and endurance, cardiovascular endurance and body composition and have students identify which component of fitness connects to the activity.
* Groups come up with a list of physical activities they enjoy and align the activities with related fitness components. Identify which activities improve multiple components.
* Groups are assigned to a component of health-related fitness and come up with a list of activities that apply to that component. Demonstrate and lead the class in their list of activities.
* Participate independently in the implementation of a personal fitness plan inside of school.
* Evaluate (self/peer) a personal fitness plan in relation to the FITT principle.
* Complete a self-assessment of health-related fitness and interpret fitness data comparing individual scores to established Virginia Wellness fitness standards and BMI calculations to the CDC protocols and recommendations.

Retest a self-assessment of health-related fitness and reassess personal fitness plan goals |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://www.teachpe.com/fitness/training_principles.php> <http://www.ode.state.or.us/teachlearn/subjects/pe/curriculum/fittprinciple.pdf>;<http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Types-of-Fitness_UCM_462352_Article.jsp#.V6d9AP36upo>;<http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/StayingMotivatedforFitness/Identifying-Your-Fitness-Goals_UCM_462202_Article.jsp#.V6eCrf36upo>;<http://www.doe.virginia.gov/instruction/physed/index.shtml>; <http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html><http://classroom.kidshealth.org/classroom/6to8/personal/fitness/fitness.pdf>; <http://www.thephysicaleducator.com/resources/infographics/fitness_components/>  |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* + - * Selection of a measurement method depends on the purpose of the evaluation, the nature of the study and the resources available.
			* An effective monitoring and evaluation plan is to determine how well an individual is meeting its objectives.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.3 c)** Use a variety of resources, including available technology, to evaluate, monitor and record activities for fitness improvement.**Suggested Learning Targets:**I can conduct a self-assessment of a physical fitness activity using various types of assessment equipment and give my conclusions to a peer.I can self-monitor my heart rate during exercise and summarize my performance to my teacher.I can incorporate technology to enhance knowledge, improve performance and provide feedback for self-assessing and application for the development of a personal fitness plan. I can identify methods of calculating Body Mass Index (BMI) and present them in an exit ticket. | **Assessment for Learning** **(Formative)*** Questioning to check for understanding.
* Demonstration of appropriate and accurate use of technology.
* Pose/Define Problems
* Collaborate
* Conclude
* Practice
* Refine

**Assessment of Learning****(Summative)*** Monitor pulse rate while participating in cardiorespiratory endurance activity (e.g., walking, jogging, running and jumping rope).
* Develop a hypothesis on the effects of activity on heart rate
* Record how rates change as activity levels increase/decrease and reflect on the benefits of personal activity progression
* Investigate and reflect the reliability of the hypothesis.

\*This standard may be assessed within the 7.3.b. fitness plan | * Evaluation tools:
* Heart/pulse monitors: Used primarily to assess and monitor exercise intensity. Predict the energy expenditure associated with various durations, intensities and frequencies of physical activity.
* Pedometer: Tracks distance and pace.
* Computers: Internet resources such as pictures, videos and proper instruction on hundreds of exercises which can help individuals plan workouts or check their form when following recommended programs on their own. An important source of health and fitness-related information but validity of information depends on the source.
* Skin calipers: Method of determining [lean body mass](http://www.medicinenet.com/script/main/art.asp?articlekey=25887). Involves measuring the skinfold thickness of the layer of fat just under the skin in several parts of the body with [calipers](http://www.medicinenet.com/script/main/art.asp?articlekey=25894).
* Sit and reach box: Measures flexibility, specifically the flexibility of the lower back and hamstring muscles.
* Body analysis devices such as: **Bioelectrical Impedance Analyzer (BIA) – A m**ethod of measuring body fat, muscle and water.
* Stopwatches and timers: Helps individuals in developing programs that meet specific, timed objectives.
* Digital cameras and iPads: Methods of video recording for self/peer assessment.
* Active video games: Players physically interact via arm, leg or whole-body movements with images onscreen in a variety of activities.
* Accelerometers: Record body acceleration minute to minute providing detailed information about the frequency, duration, intensity and patterns of movement.
* Smartphone applications: Applications (Apps) for phones that track activity.
* Global positioning system (GPS): Accurately track a specific activity.

Example: During hiking it provides information about altitude, distance, time and average velocity. | * Define body composition and discuss with students the importance of maintaining acceptable levels of body fat and lean muscle mass.
* Introduce the various methods of measuring body composition (skin fold measurements, body analysis by electrical impedance, using BMI scales, BMI calculations) and their reliability for accurately portraying body composition.
* Monitor target heart rates during physical activities.
* Use technology to record and evaluate activities for fitness improvement.
* Time cardiorespiratory endurance activities for fitness improvement.
* Record Pedometer Steps in or out of class:
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes <http://www.doe.virginia.gov/instruction/physed/index.shtml>; <http://www.humankinetics.com/excerpts/excerpts/using-technology-to-promote-physical-activity>;h[ttp://www.shapeamerica.org/standards/pe/upload/Grade-Level-Outcomes-for-K-12-Physical-Education.pdf](http://www.shapeamerica.org/standards/pe/upload/Grade-Level-Outcomes-for-K-12-Physical-Education.pdf)<http://www.livestrong.com/article/95271-normal-pulse-rate-teenager/#ixzz1YV5chxVS>;  |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* + - * Physical activity contributes to a significant improvement in energy and macronutrient balance regulation and body functioning.
			* The amount of calories needed to maintain health is influenced by body composition, gender, age and level of physical activity.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.3 d)** Analyze the relationships among physical activity, caloric intake and body composition.**Suggested Learning Targets:**I can determine the number of calories I need daily and the level of physical activity and record it in my wellness/fitness journal/portfolio.I can list strategies to balance physical activity with caloric intake to improve or maintain body composition through an exit ticket.I can explain the relationship between physical activity and caloric intake and body composition through a summary paragraph.  | **Assessment for Learning** **(Formative)*** Describe guidelines for physical activity and caloric intake for teens.
* Describe body composition and its relationship to overall physical fitness.
* Activity Logs

 Example: * Log daily amount of moderate to vigorous physical activity and caloric intake for a week.
* Assess body composition is (e.g., from the self-assessment of health-related fitness tests).

**Assessment of Learning****(Summative)*** Determine the number of calories needed each day based on age, gender, height, weight and level of physical activity.
* List strategies to meet guidelines for physical activity and caloric intake.
* Explain the relationship between physical activity and caloric intake and body composition.
 | * Physical Activity: Any bodily movement produced by skeletal muscles that requires energy expenditure.
* Body composition: The percentages of fat, bone, water and muscle in human bodies.
* Estimated amount of calories needed to maintain energy balance for females and males at different levels of physical activity levels.

Example:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (years)** | **Sedentary** | **Moderately Active** | **Active** |
| Female | 9-13 | 1,400-1,600 | 1,600-2,000 | 1,800-2,200 |
| Female | 14-18 | 1,800 | 2,000 | 2,400 |
| Male | 9-13 | 1,600-1,800 | 1,800-2,200 | 2,000-2,600 |
| Male | 14-18 | 2,000-2,200 | 2,400-2,800 | 2,800-3,200 |

**Source: HHS/USDA Dietary Guidelines for Americans*** Activity levels:
* Sedentary: A lifestyle that includes only the light physical activity associated with typical day-to-day life.
* Moderately active: A lifestyle that includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.
* Active: A lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.
* Caloric intake: The total number of calories in a daily diet allocation.
* One pound of body weight is equal to 3,500 calories.
* CDC activity guidelines <http://www.cdc.gov/HealthyYouth/physicalactivity/guidelines.htm>
 | * Instruction about caloric intake, activity and body composition may include examples such as:
* If a person eats 150 calories more a day than is burned by the body, a person can gain 5 pounds over a 6 month period. That adds up to 10 pounds a year. To balance this, a person would need to either reduce energy in or increase energy out.

 Example strategies:1. To reduce energy in by 150 calories for a 150 pound person.

- Drink water instead of soft drinks.- Downsize medium fries to small.- Eat an egg-white omelet instead of whole eggs.- Use tuna in water instead of oil.1. To increase energy out by 150 calories for a 150 pound person.

**-** Play/practice basketball for 30 minutes.**-** Walk two miles in 30 minutes.**-** Do yard work for 30 minutes.**-** Bike ride for 30 minutes.**-** Dance for 30 minutes* Teacher may wish to include instruction of this standard with 7.3.c while working with technology to determine activity levels.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://www.nhlbi.nih.gov/health/educational/wecan/healthy-weight-basics/balance.htm><http://www.heart.org/HEARTORG/HealthyLiving/WeightManagement/BodyMassIndex/Frequently-Asked-Questions-FAQs-about-BMI_UCM_307892_Article.jsp#.V6eA0v36upo>;<http://www.heart.org/HEARTORG/HealthyLiving/WeightManagement/LosingWeight/Losing-Weight_UCM_307904_Article.jsp#.V6eCFf36upo> <http://www.heart.org/HEARTORG/HealthyLiving/HealthyKids/ChildhoodObesity/BMI-in-Children_UCM_308993_Article.jsp#.V6eCVv36upo>  |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* + - * The body responds differently based on the demands placed on it by physical activity.
			* The type of physical activity or activities chosen depends largely on personal training goals.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.3 e)** Compare and contrast aerobic and anaerobic capacity and muscle strength and endurance.**Suggested Learning Targets:**I can identify the differences between an aerobic and anaerobic workout and explain it (to a peer, through a graphic organizer).I can identify the differences between activities that focus on muscle strength and activities that focus on muscle endurance and present it (to a peer, through a graphic organizer). | **Assessment for Learning** **(Formative)*** Written

Examples: * Identify examples of activities that are aerobic or anaerobic in nature.
* Identify activities that use muscular strength or muscular endurance.
* Compare & Contrast Charts: How Similar/How Different
* Venn Diagrams: How Similar/How Different
* Oral: Partner/Teacher discussions

Example: * If you begin to run too hard in the middle of a workout or the start of a race, what happens to your body? (Answer: Your body goes into an anaerobic state, producing lactate. If you go anaerobic early in a race, you will fatigue sooner and your ability to maintain pace will nosedive).

**Assessment of Learning****(Summative)*** Explain aerobic and anaerobic capacity and muscle strength and endurance.
* Describe a workout for improving overall aerobic and anaerobic capacity. Describe the roll of muscular strength and muscular endurance activities to improve aerobic and anaerobic capacity.
* Evaluate through running tests, at what point you personally begin to pant. Research why people begin to pant or “catch their breath” after exercising and reflect on what to do when your body is in this state. (Example: Your body is trying to take in enough oxygen to reestablish a chemical state capable of cleaning up unwanted byproducts such as lactic acid that build up when oxygen is in short supply.)
* Develop a workout for improving overall aerobic/anaerobic endurance. Include exercises, sets, reps and rest periods. Reflect on how should weight training, cardio and stretching, all be combined to create a workout to help increase aerobic/anaerobic endurance.
 | * Aerobic: Exercise that improves or is intended to improve the efficiency of the body's cardiovascular system in absorbing and transporting oxygen.
* Aerobic capacity: The maximum amount of [oxygen](http://www.wisegeek.org/what-is-oxygen.htm) that the body can utilize during an exercise session, usually measured during a brief period of high-intensity exercise.
* Aerobic System (with oxygen): Provides energy at a slower rate for long-term exercise (e.g., Ironman, Marathon etc.).
* Uses oxygen to help provide fuel.
* Enables athletes to recover from tough workouts and develop the capacity to increase repetitions.
* Does not produce fatigue-producing waste products.
* Lower intensity exercises.
* Takes longer to overload than the anaerobic systems.
* Requires a minimum 20 minutes duration training period.
* Workload can be continuous or broken up into interval training.
* Burns fat.
* Anaerobic Lactic System (without oxygen): Generates energy quickly and the by-product of this system is lactic acid (e.g., sprints, weight training and interval training, at various speeds).
* Less efficient
* Hastens muscle fatigue
* High intensity level
* Body must burn carbohydrates stored in muscle
* Lactic acid must be removed—can take up to one hour
* Carbohydrates must be replaced for further activity to occur
* First ten minutes of active recovery produces greatest reduction in lactic acid
* Built by alternating periods of work and rest
* Builds on the aerobic base and challenges the athlete at the upper level of aerobic capacity
* Muscular endurance: The ability to perform a specific muscular action for a prolonged period of time (e.g., your ability to run a marathon or to pump out 100 squats with no added weight is due to muscular endurance).
* Muscular strength: A muscle’s capacity to exert force against resistance (e.g., ability to bench press a barbell weighing 200 lbs. for one repetition is a measure of your muscular strength)
 | * Participate in activities that have examples of aerobic vs. anaerobic and muscular endurance vs. muscular strength. Have students identify differences of the activities.

Examples:* Sets and Reps: Circuit training stations. Weight-training circuits use large muscle groups first and require 10 to 20 repetitions per station vs. strength-training programs that require up to five sets of one to eight repetitions.
* Rest Intervals: Circuit training targets muscular endurance by employing short rest periods of 20 to 30 seconds, between stations or sets vs. strength-training that requires maximal effort lifting during each set. Therefore, strength-training programs use rest periods of two to five minutes between sets. Longer rest periods enable full muscular recovery while shorter periods do not.
* Anaerobic endurance test: Example – Three marker cones placed 5 yards apart. The student starts from one end, runs 5 yards and back to the start, 10 yards and back, then 15 yards and finishes at the start line. A total of 60 yards is completed. The player is to touch the line or cone with their hand at each turn, for a total of five touches.
* Aerobic exercise workouts that increases your heart rate to 50 to 70 percent of your maximum heart rate. It also causes you to break a sweat and deepens your breathing, but not so much that you can't carry a conversation. Brisk walking, mowing the lawn and biking on flat terrain are some examples of moderate aerobic exercise. Intense aerobic exercise increases your heart rate to 70 to 85 percent of your maximum heart rate, causes you to break a sweat and deepens your breathing too much to converse. Running, swimming and biking uphill are some examples of intense aerobic exercise.
* Teach students how to keep themselves in an aerobic state when running: “Talk test” While running, try to speak to someone (or yourself if alone) out-loud. If you can get out a short paragraph without too much trouble (i.e. you can convey a detailed thought, but you’re not quoting Shakespeare) you’re running aerobically. If you can only get out one sentence before you start grasping for breath, you’re running too hard – slow down.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.teachpe.com/fitness/health.php>; <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/GettingActive/Get-Moving-Easy-Tips-to-Get-Active_UCM_307978_Article.jsp#.V6d8F_36upo> <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/GettingActive/Create-Your-Own-Circuit-Workout-at-Home_UCM_484683_Article.jsp#.V6d6Yv36upo>  |

 Physical Education Curriculum Framework Strand: Fitness Planning Grade Level: 7

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| **VA SOL Standard:** 7.3 The student will apply concepts and principles of training ­and fitness-planning skills to improve physical fitness. ESSENTIAL UNDERSTANDINGS* Current guidelines for physical activity can be reached by building physical activities into your daily routine.
* Establishing patterns of regular activity inside and outside of the classroom helps lead to an active healthy lifestyle.
* Fit people engage in physical activity on a regular basis.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.3.f)** Create and implement an activity plan to meet guidelines of 60 minutes a day of moderate to vigorous physical activity. **Suggested Learning Targets:**I can identify the in-school and community opportunities for activity and list them in an activity log.I will understand that fitness improvement is based upon appropriate amounts of time set aside to implement physical activity and reflect upon that in my fitness journal/portfolio. | **Assessment for Learning** * Questioning to check for understanding
* Activity Logs

Example: * Log your personal amount of daily moderate to vigorous physical activity for a week.
* Evaluate the amount of activity.
* Create a list of examples of different activities that apply to three different physical activity groups: endurance, flexibility and strength.

Example: * Endurance: Walking, cycling, skating, swimming, dancing, yard and garden work.
* Flexibility: Vacuuming, stretching exercises, Yoga.
* Strength: Lifting and carrying groceries, climbing stairs, exercises like abdominal curl ups and push-ups.

**Assessment of Learning*** Create an activity plan.
* 60 minutes a day of moderate to vigorous physical activity.
* Reflection on progress and achievement of goals.
 | * To stay healthy and keep doing the things you enjoy, health experts recommend incorporating all three types of physical activities:
* Aerobic exercise to improve the efficiency of the heart muscle. Any type of physical activity is good if it makes your muscles work more than usual.
* Strength exercises to keep other muscles of the body in good condition and help your sense of balance.
* Stretching exercises to keep muscles flexible.
 | * Teacher introduces examples of moderate to vigorous physical activities.
* Groups list physical activities they can do at home and in their communities.
 |
| **Resources**: SHAPE America National Standards and Grade-Level Outcomes; <http://classroom.kidshealth.org/classroom/6to8/personal/fitness/fitness.pdf>; <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/GettingActive/Create-Your-Own-Circuit-Workout-at-Home_UCM_484683_Article.jsp#.V6d6Yv36upo>  |

 Physical Education Curriculum Framework Strand: Social Development Grade Level: 7

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| **VA SOL Standard:** 7.4 The student will demonstrate and apply skills to work independently and with others in physical activity settings.ESSENTIAL UNDERSTANDINGS* + - * Participation in physical activities can provide an opportunity for developing an understanding and respect for differences among people.
			* Personal actions affect more than oneself.
			* To a responsible participant behaving well is as important as playing well.
			* The best leaders lead by example and encourage others to perform better.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.4 a)** Apply safety procedures, rules and appropriate etiquette in physical activity settings by self-officiating modified physical activities/games.**Suggested Learning Targets:**I can show (safe practices, follow rules, etiquette, cooperation, teamwork, ethical behavior and positive social interaction) and demonstrate it through a checklist.I can demonstrate appropriate etiquette in activity settings and give examples to a peer.I will be able to assist in officiating an activity and show respect for people officiating and demonstrate it to my teacher.I will be able to self-officiate during games and demonstrate the ability and knowledge through a peer assessment.**7.4 b)** Create guidelines and demonstrate how to solve problems and resolve conflicts in activity settings.**Suggested Learning Targets:**I can create guidelines to resolve conflict during (selected activity) and tell them to a peer.I can perform cooperation skills in (selected activity) and demonstrate it through a self-reflection summary paragraph.I can demonstrate positive strategies to resolve problems and resolve conflict when faced with a group challenge and demonstrate it through a group skit.**7.4 c)** Explain the importance of cooperating with classmates and demonstrate supportive behaviors that promote the inclusion and safety of others.**Suggested Learning Targets:**I can explain the effect of cooperative behaviors on physical activity through an exit ticket.I can show self-control during conflicts with peers or an official’s decision and demonstrate it to my teacher.I can name the safety procedures for (selected activity/game) and tell them to a peer.I can show how to support others by respecting abilities and strengths of others and demonstrate it through encouraging feedback to peers for teacher observation. | **Assessment for Learning** **(Formative)*** Observation Checklist/Rubric:

4 (*Beyond what was taught*) Consistently follows the safety procedures, rules and etiquette in a physical activity.3 (*What* *was explicitly taught*) Frequently follows the safety procedures, rules and etiquette in a physical activity.2 (*Identify basic elements*) Sometimes follows the safety procedures, rules and etiquette in a physical activity.1 (*With help/prompts/cues*) Rarely follows the safety procedures, rules and etiquette in a physical activity.* Teacher observation of students working with a variety of partners/peers.

Example: What to look for (measure/assess) during activity:* Are students accepting of all partners?
* Are students hustling to find partners?
* Are they mixing themselves up?
* Student reflection on the importance of cooperating with classmates and the importance of supportive behaviors.

**Assessment of Learning****(Summative)*** Group Collaboration/Cooperation – Example:
* Groups will work together to develop a recreational activity/game using the equipment provided and the skill techniques associated with the equipment. Create rules and guidelines for proper behavior during activity.
* Students role-play teacher-created conflicts in different activities and students use appropriate problem solving techniques to resolve the conflict.
 | * Safe: Not apt to cause harm, injury or danger.
* Cooperative is described as:
* following rules
* encouraging others
* complimenting others
* controlling temper
* wanting everyone to play well and succeed
* working together toward a common goal
* helping classmates
* playing under control
* sharing
* showing concern for classmates’ feelings
* Self-Officiate: A physical activity which is [officiated](http://en.wiktionary.org/wiki/officiate) by the players, on the "[honor system](http://en.wiktionary.org/wiki/honor_system)", rather than by an outside observer such as a [referee](http://en.wiktionary.org/wiki/referee).
* Etiquette: Proper acceptable actions, behavior or conduct within an activity.

Elements:* Be kind
* Be courteous
* Be respectful
* Problem solving skill set:
* Clarify problem
* Analyze causes
* Identify alternatives
* Assess alternatives
* Choose and implement an alternative
* Evaluate choice
* Conflict Resolution skill set
* Talk about problem without assigning blame.
* Use active listening.
* Identify and clarify issues and needs.
* Brainstorm solutions.
* Choose and apply solution.
* Evaluate solution.
 | * Students and teachers create classroom rules and guidelines for physical activities.
* Practice of routines and expectations for behavior.
* Participate in activities that demonstrate how to be gracious when winning or losing (ex. by accepting official rulings).
* Cooperative games and activities that develop positive social interaction, increase self-confidence and self-esteem.

<http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=774#.V6Sms7f6vcs> * Use cooperative games and team-building challenges to emphasize inclusion, safety, conflict resolution and problem-solving.
* Have students come up with consequences for refusing and failing to follow safety procedures.
* Participate in activities that use resistance, refusal, negotiation, collaboration and conflict resolution skills to maximize personal potential and to build and maintain healthy relationships.
* Student creation of guidelines for resolving conflicts in activity settings that may include:
* Positive strategies such as offering suggestions/assistance, leading/following others
* Providing possible solutions when faced with a group challenge
* Helping and encouraging others, avoiding negative talk and providing support to classmates
* Students self-officiate modified physical activities/games to show knowledge of rules and etiquette

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| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://www.teachpe.com/sports_psychology/attitudes.php>; <http://www.doe.virginia.gov/instruction/physed/index.shtml>; <http://lessonplanspage.com/peoempowereddecisionmaking612.htm/>;<http://classroom.kidshealth.org/classroom/6to8/personal/growing/conflict_resolution.pdf>; <http://classroom.kidshealth.org/classroom/6to8/personal/growing/getting_along.pdf>; <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=859#.V7H-Ybf6vcs>  |

 Physical Education Curriculum Framework Strand: Social Development Grade Level: 7

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| **VA SOL Standard:** 7.4 The student will demonstrate and apply skills to work independently and with others in physical activity settings.ESSENTIAL UNDERSTANDINGS* + - * Stress is necessary for creativity, learning and survival. It’s only harmful when it becomes overwhelming and interrupts the healthy state of equilibrium that the nervous system needs to remain.
* Effectively dealing with stress means to activate the body's natural relaxation response by practicing relaxation techniques.
	+ - * Physical activity has an effect on managing stress.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.4 d)** Describe and demonstrate strategies for dealing with stress, such as deep breathing, guided visualization and aerobic exercise.**Suggested Learning Targets:**I can list strategies for stress reduction through an exit ticket.I can demonstrate strategies that can aid in the relief of stress by performing relaxation techniques and telling a peer how they made me feel. I can describe the relationship between physical activity and stress management and demonstrate it through a summary paragraph. | **Assessment for Learning** **(Formative)*** Written or Pair/Share: Explain how physical activity can have a positive effect on managing stress.

**Assessment of Learning****(Summative)*** Journals

Examples:* Writing to learn- Gathering and organizing information about stress and relaxation techniques
* Writing to motivate- How stress is necessary for creativity, learning and survival.
* Writing to assess, to evaluate progress- Evaluation of personal implementation of relaxation techniques during activities.
* Writing to do- Future goals or strategies to implement relaxation techniques during activities. Considering specific needs, preferences, fitness level and the way you tend to react to stress.
 | * Stress- the body’s reaction to a change that requires a physical, mental or emotional adjustment or response.
* Symptoms of Stress
* Lack of interest in activities or school.
* Irritability and impatience.
* Frequent stomach problems or headaches.
* Anxiety.
* Activity burnout.
* Trouble sleeping.
* Weaken your [immune system](http://www.webmd.com/hw-popup/immune-system-7922), making it harder to fight off disease.
* Fight-or-flight [stress response](http://www.webmd.com/hw-popup/stress-response-fight-or-flight-response): When you are stressed, your body responds as though you are in danger. It makes hormones that speed up your [heart](http://www.webmd.com/heart/picture-of-the-heart), make you breathe faster and give you a burst of energy.
* Relaxation response: A state of deep calmness. A mentally active process that leaves the body relaxed, calm and focused.
* Stress Management:

<http://www.teachpe.com/sports_psychology/stress_management.php>  | * Practicing relaxation techniques
* Breathing meditation: deep breathing
* Progressive muscle relaxation: systematically tense and relax different muscle groups in the body
* Body scan meditation: focus on the sensations in each part of your body
* Mindfulness: staying calm and focused in the present moment
* Visualization: imagining a scene in which you feel at peace
* Yoga: moving and stationary poses, combined with deep breathing
* Tai Chi: a self-paced, non-competitive series of slow, flowing body movements
* Rhythmic exercise (such as running, walking, rowing or cycling): Engaging in the present moment, focusing your mind on how your body feels right now.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.teachpe.com/sports_psychology/anxiety.php>;<http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/PreventionTreatmentofHighBloodPressure/Stress-and-Blood-Pressure_UCM_301883_Article.jsp#.V6d-5f36upo>;<http://www.heart.org/HEARTORG/HealthyLiving/StressManagement/FightStressWithHealthyHabits/Fight-Stress-with-Healthy-Habits_UCM_307992_Article.jsp#.V6eDw_36upo> <http://www.heart.org/HEARTORG/HealthyLiving/StressManagement/FourWaystoDealWithStress/Four-Ways-to-Deal-with-Stress_UCM_307996_Article.jsp#.V6eEG_36upo>  |

 Physical Education Curriculum Framework Strand: Social Development Grade Level: 7

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| **VA SOL Standard:** 7.4 The student will demonstrate and apply skills to work independently and with others in physical activity settings.ESSENTIAL UNDERSTANDINGS* + - * When done in the right way and with the right intentions, feedback communication is the avenue to performance greatness.
			* How feedback is communicated is based on an individual’s communication skills.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.4 e)** Demonstrate effective communication skills by providing feedback to a peer, using appropriate tone and other communication skills.**Suggested Learning Targets:**I can recognize appropriate feedback for (personal or partner’s) activity performance and demonstrate it by giving appropriate comments to peers during activities for teacher observation. I can recognize appropriate feedback from a peer assessment and demonstrate it by giving back comments to the presentation of their assessment.  | **Assessment for Learning** **(Formative)*** Demonstration of providing feedback to others.
* Peer Assessments
* Pair/Share discussions
* Game play interaction

**Assessment of Learning****(Summative)*** Have students complete a peer assessment of another peer doing a peer assessment. Base your rubric on the characteristics of good feedback.
 | * Feedback: Supports the development of self-regulated learning, critical thinking and reciprocal learning.
* Two corrections at the most should be identified for feedback.
* Should be specific and meaningful.
* When specific to motor skills:
* It causes improvement by providing error detection, reinforcement of correct skill performance and motivation.
* Is based on the critical elements for each skill.
* Characteristics of good feedback:
* given with the goal of improvement
* timely
* honest
* respectful
* clear
* issue-specific
* objective
* supportive
* motivating
* action-oriented
* solution-oriented
* Peer assessment can:
* Empower students to take responsibility for and manage, their own learning.
* Enable students to learn to assess and to develop life-long assessment skills.
* Enhance students' learning through knowledge diffusion and exchange of ideas.
* Motivate students to engage with course material more deeply.
 | * Modeling of effective feedback with multiple opportunities for practice in skill and/or activity settings.
* Clarity: Be clear about what you want to say to the other person.
* Emphasize the positive: Remember that if there is a mix of positive and negative comments, most people will screen out the positive, so it may need re-emphasizing.
* Be specific: Avoid general comments and clarify pronouns such as “it,” “that,” etc.
* Be descriptive rather than evaluative (e.g., “Did you know you are not stepping with the opposite foot when you throw the ball?” rather than “It was really bad the way you threw that ball.”).
* Focus on behavior rather than the person. (e.g., “On a number of occasions you started speaking before I had finished” rather than “You are clearly a bully who is totally uninterested in other people’s points of view”!)
* Acknowledge that all behavior can be changed.
* Own the feedback -- Use ‘I’ statements. (e.g., “I noticed”; “I saw” ;“I heard”)
* Use positive language that suggests that any problems are time-limited, situation specific and capable of solution. (e.g., Just at the moment you don’t….; in this instance you seemed; you haven’t yet worked out a way of…... next time you might want to…..)
* Be very careful with advice: People rarely struggle with an issue because of the lack of some specific piece of information; often, the best help is helping the person to come to a better understanding of exactly what they need to improve.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://sydney.edu.au/education_social_work/groupwork/docs/SelfPeerAssessment.pdf>  |

 Physical Education Curriculum Framework Strand: Social Development Grade Level: 7

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| **VA SOL Standard:** 7.4 The student will demonstrate and apply skills to work independently and with others in physical activity settings.ESSENTIAL UNDERSTANDINGS* + - * The intrinsic values and benefits of participating in physical activity that provides personal meaning.
			* Physical activity provides opportunities for self-expression and social interaction and can be enjoyable, challenging and fun.
			* Physical activity can be creative, enjoyable and individually rewarding by providing opportunities for self-expression and social interactions.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.4 f)** Identify positive mental and emotional aspects of participating in a variety of physical activities.**Suggested Learning Targets:**I can list positive mental and emotional aspects of participating in physical activity through an exit ticket.**7.4 g)** Describe how participation in physical activities creates enjoyment.**Suggested Learning Targets:**I can describe why my favorite physical activity is fun in a summary paragraph.**7.4 h)** Identify specific safety concerns associated with at least one activity that includes rules, equipment and etiquette.**Suggested Learning Targets:**I can list safety concerns for participating in (selected activity) and explain how the rules, etiquette and equipment help keep participants safe and explain it to a peer. | **Assessment for Learning** **(Formative)*** Oral questions

Example: What are the safety protocols and concerns during a group or family bike ride and how does this activity create enjoyment.* Written

Example: What are the intrinsic and extrinsic motivators that keep people involved in physical activity?**Assessment of Learning****(Summative)*** List physical activities that are enjoyed and evaluate the positive mental and emotional aspects of participating in each activity.
* For a selected activity, list safety concerns for participating in (selected activity) and explain how the rules, etiquette and equipment help keep participants safe.
 | * Eustress: “Good stress”. Stress that is deemed healthful or giving one the feeling of fulfillment.
* Intrinsic vs Extrinsic motivation
* Intrinsic motivations for exercise: Performance done for the satisfaction gained in the activity itself. Motivations are commonly those of competency, interest and enjoyment. Sports participation has been shown to be more likely to be motivated by intrinsic motivators such as fun and enjoyment.
* Extrinsic motivations for exercise: Performance done for external rewards such as getting fitter, improving appearance, weight loss or ‘toning up’. Exercise is more often linked to extrinsic motivators such as weight loss, appearance and stress management.
* Benefits of physical activities:
* Release of Chemicals: Exercise releases endorphins, which create feelings of happiness and euphoria.
* Improve Self-Confidence: Regardless of weight, size, gender or age, exercise can quickly elevate a person’s perception of his or her attractiveness or [self-worth](http://zenhabits.net/25-killer-actions-to-boost-your-self-confidence/).
* Alleviate Anxiety: The chemicals that are released during and after exercise can help people with [anxiety disorders](http://www.adaa.org/living-with-anxiety/managing-anxiety/exercise-stress-and-anxiety) calm down.
* Helps Prevent Cognitive Decline: Regular physical activity boosts memory and ability to learn new things.
* Increase relaxation.
 | * Participation in activities for health, enjoyment, challenge, self-expression and/or social interaction.
* Give out a list of many different activities and have students write next to each activity whether their motivation for each activity was intrinsic or extrinsic. Group students and have them discuss their answers.
* Develop stations that have different pieces of equipment. When groups rotate to a new station, they discuss safety concerns and then decide what rules and etiquette the group must follow before beginning the physical activity.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <https://www.acsm.org/public-information/articles/2011/10/04/mental-health-benefits-of-exercise-for-adolescents>;<http://www.helpguide.org/articles/exercise-fitness/emotional-benefits-of-exercise.htm>  |

Physical Education Curriculum Framework Strand: Social Development Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance. ESSENTIAL UNDERSTANDINGS* + - * The RPE scale is used to measure the intensity of your exercise.
			* The RPE scale relies on bodily sensations during exercise, such as muscular fatigue, increased sweating and increased breathing rate and heart rate.
			* While RPE is a useful tool for estimating heart rate, it is only an approximation because physical conditioning and age vary between individuals.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 a)** Describe a Rate of Perceived Exertion (RPE) scale.**Suggested Learning Targets:**I can explain the RPE scale to a peer. | **Assessment for Learning** **(Formative)*** List and describe the Rate of Perceived Exertion scale.
* Describe exercises/activities that may be involved at each level of the RPE Scale.
* Documentation of activity and the RPE of the activity (may be included with personal fitness planning instruction 7.3.b.)

**Assessment of Learning****(Summative)*** Perform the physical activities listed:
1. Stretch high in the air and then touch your toes (if they can) 5 times
2. Jog in place for one minute
3. Life a backpack filled with books as many times as possible
4. Do 10 jumping jacks two minutes
5. Stand on one foot for 30 seconds
6. Walk quickly around the room
7. Smile

 Afterwards, answer the following:* Describe how each one makes you feel.
* Identify differences in the amount of energy the activities used.
* Which used a medium (moderate) amount of energy? Which used the least amount of energy?
* Evaluate where each one falls on the RPE scale.
* What all of those challenges have in common? (Example: They are all different types of physical activity and they all use energy.)
 | * The [Rate of Perceived Exertion](http://www.acefitness.org/fitfacts/fitfacts_display.aspx?itemid=48) or RPE, is a way to measure your exercise efforts. A 1-10 scale that is used to monitor exercise intensity when doing cardio workouts.
* How to use it:

|  |  |
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| RPE |  What It Means |
| 0-1 | No exertion. The only movement you're getting is pushing buttons on the remote.--------------------------------------------- |
| 2-3 | Light exertion. This is how you should feel when you're warming up, cooling down and stretching.--------------------------------------------- |
| 4-5 | Medium exertion. You're breathing a little faster. Your heart is pumping a little faster. You're feeling a little warmer.--------------------------------------------- |
| 6-7 | Moderate exertion. You're breathing pretty hard now, you're probably sweating. You can talk, but it's getting tougher.---------------------------------------------- |
| 8-9 | Hard exertion. You're breathing really hard and you can only say a few words at a time. You're wondering how long you can go on like this.---------------------------------------------- |
| 10 | Hardest exertion. You cannot keep this pace for more than a minute. Speaking is impossible. This is your limit. |

 Note: There are many RPE scales. | * Students use the "Talk Test" (reciting something familiar) as a tool for determining work out level during physical activity.

 The Talk Test

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| **Zone 1** | If you can sing the entire way through your workout, you are working out at Zone 1. |
| **Zone 2** | In this zone you should be able to talk comfortably while working out. This is where a beginner should start working out. Zone 2 is generally 60 - 70% of Maximum Heart Rate. |
| **Zone 3** | If you are working out at zone 3, the aerobic zone, you should be able to say a few words, catch your breath and then say a few more words. When working out in the Aerobic Zone, you are probably working at 70 - 80% of Maximum Heart Rate. |
| **Zone 4** | The Anaerobic Zone, is considered performance training. If you are gasping for air, you are working out anaerobically. For a person who is just starting to work out, this is too hard a workout. |

* Participate in physical activities that cause the body to change and record or talk about the changes.
* Create activities that cause students to move through the different intensity levels and take target heart rates throughout.
* Teach how the RPE scale can be used to determine workout intensity.
 |
| **Resources:**  SHAPE America National Standards and Grade-Level Outcomes; [www.choosemyplate.gov](http://www.choosemyplate.gov)  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* The heart rate is a gauge by which to assess the intensity of your workout to make sure you’re not overexerting or overextending yourself.
* To maximize your aerobic workout, you need to stay in your working heart rate range for at least 20 to 30 minutes continuously.
* Using the RPE scale helps you recognize your body's signs of exertion and modify your normal workout intensity.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 b)** Explain the connection between an RPE scale and heart rate and the body’s response to physical activity.**Suggested Learning Targets:**I can describe how the RPE scale can be used to determine the perception of the work effort or intensity of exercise through a summary paragraph.I can describe how the RPE scale can be used to adjust workout intensity during physical activity and tell it to peer. | **Assessment for Learning** **(Formative)*** Questioning to check for understanding

Examples:* Why it is necessary for the heart rate to increase during exercise? (Answer: Undertaking activities with increasing energy demand has an effect on the volume of blood pumped from the heart “left ventricle” and on the pulse rate. This increase brings more oxygen and glucose to the muscles which results in faster removal of carbon dioxide and lactic acid.)
* How does the amount of carbon dioxide in your breath change after exercise? (Answer: There is more carbon dioxide in your breath after exercise, whether aerobic or anaerobic, than at rest. Caused by an increase of respiration which produces more carbon dioxide.)
* Training Journal

Example:* Write an RPE number down next to each set in your training journal. How hard was the workout on a scale of 1-10?”

**Assessment of Learning****(Summative)*** Given a variety of activities, explain what level of RPE is described, what effort the heart is working and how the body is responding to the level of effort in the activity.
 | * “The RPE scale is a psychophysiological scale, meaning it calls on the mind and body to rate one’s perception of effort…The RPE scale measures feelings of effort, strain, discomfort and/or fatigue experienced during both aerobic and resistance training.” \*The American College of Sports Medicine (ACSM)
* **RPE’s allow you to customize each and every training session to get the most out of what your body can give you by** dialing up or scaling back intensity over the course of a training cycle **based on how you feel.**
* Heart Rates/Training Zones: To train at the right intensity, you will need a way to monitor exercise intensity and one of the best ways is monitoring target heart rates.
* As you get more fit your RHR will get lower because the heart pumps more blood per beat and therefore doesn't have to beat as fast to pump the same amount of blood as it did before.
* After determining your resting and maximum heart rates you can now establish “training zones”. Each of the training zones uses different energy systems, different fuel supplies and different muscle fiber types.
* Depending on the objective of the training session, the main part of the training session should be in a certain zone or that you shift from zone to zone in a set way. If done correctly, this stresses specific features of that system, resulting in improvement and better performance.
* By varying the training zones from day to day you challenge the body to improve as well as allowing your body to recover.
* Body’s response to physical activity
* Heart rate increases to supply the muscles with more oxygen to produce extra energy.
* Blood vessels in the skin dilate, increasing blood flow to the skin resulting in a red appearance of the face.
* Heat dissipates through the skin into the air which appears as sweat.
* Breathing becomes faster and heavier.
 | * Physical activities that cause the body to change and record or talk about the changes.

Examples:* Increased heart rate
* Increased respiration or breathing rate
* Increased sweating
* Muscle fatigue
* After each physical activity students are asked to show, by the amount of fingers raised on both hands, what intensity level they are working.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://www.teachpe.com/physiology/energy_systems.php>;<http://www.cdc.gov/physicalactivity/basics/measuring/index.html>;<http://www.heart.org/HEARTORG/Educator/FortheClassroom/MiddleSchoolLessonPlans/Middle-School-Lesson-Plans_UCM_304280_Article.jsp#.V685ijiYbIU>  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* Anaerobic and aerobic respiration are ways your body converts food into energy so that your brain, muscles and other organs can function normally.
* To exercise, your body needs to break down sugar and convert it to glycogen, so it can be used as energy or fuel.
* Energy for movement comes from the food we eat (animal and plant sources), which provides energy-rich nutrients in the form of carbohydrates, fats and proteins.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 c)** Define and describe the anaerobic and aerobic energy systems. **Suggested Learning Targets:**I can define anaerobic and aerobic to a peer.I can list activities that are aerobic (uses oxygen) and that are anaerobic (do not use oxygen through an exit ticket.I can describe how the anaerobic and aerobic energy systems work to provide energy for movement through a summary paragraph. | **Assessment for Learning** **(Formative)*** Oral Questioning to check for understanding

Examples: * Which system (aerobic or anaerobic) does the body rely on for the first couple of minutes during physical activity?

Answer: The aerobic energy system produces the largest amounts of energy, although at the lowest intensity. So at the start of exercise the body cannot deliver oxygen to the muscles fast enough to initiate the complex chemical reactions which occur during aerobic metabolism. Therefore the body relies on anaerobic processes for the first couple of minutes.* Explain the anaerobic and aerobic energy systems.

Answer: The aerobic energy system, meaning 'with oxygen' which is used for long-term, steady paced exercise and day-to-day activities. Anaerobic energy system or 'without oxygen' produces fast bursts of energy for short, powerful bursts.**Assessment of Learning****(Summative)*** Define anaerobic and aerobic and list activities that are aerobic (uses oxygen) and that are anaerobic (do not use oxygen.
* Activity Logs: As we approach and pass our metabolic threshold intensity, we start to breathe harder and exercise simply becomes uncomfortable. Record the heart rate at which you sense these symptoms of developing over-exertion. Reflect on the significance of this change and what is taking place in the body.

Example:* You then know that heart rates below this value occur when you're in your aerobic zone and heart rates above this value reflects an increasing anaerobic contribution. (Addition comment samples are found within the **Content Information** section of this page.)
 | * Aerobic energy systems: Aerobic processes in cellular respiration can only occur if oxygen is present. When a cell needs to release energy it initiates a chemical exchanges that launches the breakdown of [glucose](http://www.diffen.com/difference/Fructose_vs_Glucose). This sugar is carried through the blood and stored in the body as a fast source of energy. The breakdown of glucose releases carbon dioxide, a byproduct that needs to be removed from the body.
* Aerobic exercise conditions enable you to exercise for long periods of time, potentially benefiting from the sustained energy expenditure (i.e., calories burned).
* With aerobic training, you become much more efficient at using fat as an energy source for exercise. This allows muscle and liver glycogen to be used at a slower rate.
* Aerobic exercise conditions enable you to exercise for long periods of time, potentially benefiting from the sustained energy expenditure (i.e., calories burned).
* With Aerobic training, you become much more efficient at using fat as an energy source for exercise. This allows muscle and liver glycogen to be used at a slower rate.
* Anaerobic energy systems: Anaerobic processes do not use oxygen. Lactic acid, which builds up in muscles' cells as aerobic processes fail to keep up with energy demands, is a byproduct of an anaerobic process. Such anaerobic breakdowns provide additional energy, but lactic acid build-up reduces a cell's capacity to further process waste; on a large scale in a human body, this leads to fatigue and muscle soreness. Cells recover by breathing in more oxygen and through the circulation of blood, processes that help carry away lactic acid.
* In anaerobic exercise glycogen is used as fuel.
* Anaerobic exercise is helpful for weight management in that it helps to burn more calories even in a body at rest.
* Activity Levels
* High energy activities that require lots of energy are called vigorous. Vigorous activity burns more than 7 calories per minute.
* Medium energy activities that require a moderate amount of energy are called moderate.
* Moderate activities burn between 3.5 and 7 calories per minute.
* Any activity that burns less than 3.5 calories per minute is low energy.
* Energy is derived from the breakdown of carbohydrates and fats, the two main energy nutrients used during exercise.
 | * Presenting examples of aerobic and anaerobic energy systems.
* Aerobic: Activities that are long-term, steady paced exercise and day-to-day activities; usually last longer than 5 minutes; aerobic capacity activities, muscular endurance activities.
* Anaerobic: Activities that require fast bursts of energy for short, powerful bursts; usually last less than 5 minutes– sprint, muscular strength activities.
* Presenting the terms aerobic and anaerobic as transitions in metabolism, where the proportion between aerobic and anaerobic metabolism changes depending on exercise intensity.

Example:* Running: When the body has an adequate supply of oxygen for this process, we call it aerobic respiration. When there is not enough oxygen, for example when you are running hard at the end of a 5k, this is called anaerobic respiration.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes;<http://www.teachpe.com/physiology/energy_systems.php>; <http://www.teachpe.com/anatomy/anaerobic_respiration.php>; <http://www.teachpe.com/anatomy/aerobic_respiration.php>  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* + - * To build strength and lean muscle, you need to fuel your body properly before and after your training session.
			* Dietary Supplements are used to either supplement or replace lost or insufficient nutrients.
			* Energy intake includes 3 major macronutrient groups—carbohydrate, protein and fat.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 d)** Identify the nutrients needed for optimal aerobic and anaerobic capacity and for muscle strength and endurance.**Suggested Learning Targets:**I can describe what nutrients the body needs/uses during aerobic and anaerobic capacity and for muscle strength and endurance and demonstrate it through a graphic organizer.**7.5 e)** Create a snack plan including foods and beverages consumed before, during and after a self-selected vigorous physical activity addressing nutrition needs for each phase and explaining the impact on and relationship to RDA, portions, macronutrients, vitamins, minerals, hydration, sugar and salt.**Suggested Learning Targets:**I can create a snack plan that meets nutrition guidelines and physical activity needs and demonstrate it through laying out nutrition cards for teacher observation.  | **Assessment for Learning** **(Formative)*** Written: Investigation of nutrients needed for aerobic and anaerobic capacity and for muscle strength and endurance; and examples of food and beverages that meet the requirements.

**Assessment of Learning****(Summative)*** Creation of a snack plan:
* Selection of a vigorous physical activity.
* Snack foods and beverages consumed before, during and after the selected physical activity.
* Analysis on the nutrition needs for each phase of the physical activity and how the snack foods and beverages consumed before, during and after meet those needs in relationship to RDA, portions, macronutrients, vitamins, minerals, hydration, sugar and salt.
 | * Pre workout: A good supply of protein for tissue repair 1-2 hours before workout. A cardio session requires more carbohydrates than protein. Carbohydrates are metabolized into glucose (energy) very quickly so they should be consumed 30-60 minutes before a workout.
* During workout: Add protein and fiber to deliver a steadier supply of energy throughout the workout.
* After an intense workout: Go for carbohydrates to replace the energy in depleted muscles. Protein, though, is almost equally important in sealing in your workout's benefits and promoting recovery.
* Macronutrients
* Carbohydrates: Found in starchy and sugary foods and are the main source of energy.
* Protein: Is essential for growth, repair and maintenance of body tissue.
* Fats: Provide energy and when stored, provide protection to our vital organs.
* Recommended dietary allowance (RDA): The recommended minimum amount of a nutrient needed for good health.
* Vitamins: Organic substances need in small amounts to enable the body to complete chemical reactions.
* Minerals: Inorganic compounds needed in small amounts.
* Milk – for calcium
* Red meats – for iron
* Vegetables – for phosphorus
* Salt and sugar
* Salty foods can disrupt the delicate fluid-balance required for optimal workouts.
* Sugary foods and drinks are high in calories.
 | * Have students bring in empty containers as examples of different foods for each phase of a workout.
* Develop individually or with a group, lists of foods and beverages to consume for different phases of a workout.

Examples:* Pre workout – Egg omelet with spinach, whole grain toast and skim milk. Greek yogurt with banana, walnuts, apples and honey.
* After – Take 10-20 grams of protein within 2 hours after strength training. Whole grain, veg., fruits and beans.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; [www.choosemyplate.gov](http://www.choosemyplate.gov); <http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Food-as-Fuel---Before-During-and-After-Workouts_UCM_436451_Article.jsp#.V6d9Vf36upo>; <http://www.teachpe.com/training-fitness/sports-nutrition/> <http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/How-to-Eat-Healthy_UCM_307257_Article.jsp#.V6d_h_36upo>;<http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/Nutrition-Basics_UCM_461228_Article.jsp#.V6eAH_36upo>;<http://www.shape.com/healthy-eating/diet-tips/20-foods-can-ruin-your-workout>  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* Monitoring your heart rate will allow you to track the changes taking place in your cardiovascular system as you move towards aerobic fitness.
* Resting heart rate is a valuable measure of not only determining your fitness level, but also your cardiovascular health.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 f)** Calculate resting heart rate (RHR) and describe its relationship to aerobic fitness and an RPE scale.**Suggested Learning Targets:**I can calculate my resting heart rate and tell a peer.I can explain the connection between resting heart rate, aerobic fitness and an RPE scale using a graphic organizer. | **Assessment for Learning** **(Formative)*** Oral: Describe when/how to take resting heart rate.

Answer – Resting heart rate should be measured first thing in the morning and it indicates cardiovascular health.* Identify factors that can affect resting heart rate.

Examples: Physical size of your heart, body size, activity level, fitness level, temperature, body position, emotions and medication use.**Assessment of Learning****(Summative)*** Record resting heart rate every morning for a week. Analyze what your resting heart rate is telling you in regard to your fitness level. Reflect upon the importance of maintaining or lowering your resting heart rate.
 | * Heart rate is an indicator of the level of cardiorespiratory fitness. As one becomes more fit, your heart muscle becomes stronger and is able to pump more blood with each heartbeat. Therefore, a person who is fit has a lower heart rate than an unfit person.
* As fitness levels improve, resting heart rate (RHR) will decrease. Working out at an aerobic level will cause your heart to be more efficient at pumping blood, therefore it will need to beat less often. If your heart needs more beats to do the same amount of work, over time this can lead to cardiovascular disease and/or heart attacks.
* Measuring resting heart rate along with one measurement during activity will help you ensure that your workouts are effective, both in burning fat and developing your cardiovascular fitness.
 | * Record target heart rates while resting and participating in different activities that move up the RPE scale.
* Students determine a range of heart rates that represents their desired workout intensity. Students will keep their heart rates in their zone during activities. They will monitor their workout intensity level.
* Teacher discussions on resting heart rates and what they reveal.

Example: * A higher than usual resting heart rate can be a sign of over-training or illness. Therefore, if in the morning you have a higher resting heart rate than usual, your body is still in a state of repair and you should adjust your workout regimen accordingly to prevent over-training or injury.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes<http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/Target-Heart-Rates_UCM_434341_Article.jsp#.V6d8bP36upo>  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* + - * Getting enough quality sleep at the right times can help protect your mental health, physical health, quality of life and safety.
			* In teens, sleep helps support growth and development.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 g)** Explain the importance of sleep for energy balance.**Suggested Learning Targets:**I can give reasons why sleep is important for energy balance through an exit ticket.  | **Assessment for Learning** **(Formative)*** Oral: Describe why sleep is important. Answer – Sleep is a powerful regulator of appetite, energy use and weight control.
* Investigate how sleep affects body function.
* Sleep Logs

Example: * Log your personal amount of sleep each night for a week
* Calculate the average amount of sleep you are getting each night
* Evaluate how you feel based on the amount of sleep you are getting and any concerns that keep you from getting a good night’s sleep
* Reflect on the importance of sleep for energy balance
* Develop a plan to improve or maintain your sleep habits
* Reassess how the plan is working and any improvements you can make for yourself

**Assessment of Learning****(Summative)*** Explain the importance of sleep for energy balance (may use reflection from sleep log)
 | * Importance of sleep
* Brain Function: While you're sleeping, your brain is preparing for the next day. It's forming new pathways to help you learn and remember information. Studies show that a good night's sleep improves learning.
* Physical Health: Sleep is involved in healing and repair of your heart and blood vessels. Ongoing sleep deficiency is linked to an increased risk of [heart disease](http://www.nhlbi.nih.gov/health/health-topics/topics/cad), kidney disease, [high blood pressure](http://www.nhlbi.nih.gov/health/health-topics/topics/hbp), diabetes, [stroke](http://www.nhlbi.nih.gov/health/health-topics/topics/stroke) and it increases the risk of [obesity](http://www.nhlbi.nih.gov/health/health-topics/topics/obe). The right amount of sleep also reduces heart rate and blood pressure.
* Productivity/Safety: Getting enough sleep helps you function well throughout the day. People who are sleep deficient are less productive at work and school. They take longer to finish tasks, have a slower reaction time and make more mistakes.
 | * Discussions on the signs of a lack of sleep.

Example: Even if you think you're getting enough sleep, you might not be. Here are some of the signs that you may need more sleep:* Difficulty waking up in the morning.
* Inability to concentrate.
* Falling asleep during classes.
* Feelings of moodiness and even depression.
* Discussions on how to get more sleep.

Example: * Set a regular bedtime.
* Exercise regularly.
* Avoid stimulants.
* Relax your mind.
* Unwind by keeping the lights low.
* Don't nap too much.
* Avoid all-nighters.
* Create the right sleeping environment.
* Wake up with bright light.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; <http://www.nhlbi.nih.gov/health/health-topics/topics/sdd/why>;<https://newsinhealth.nih.gov/issue/apr2013/feature1>; <http://www.nhlbi.nih.gov/health/health-topics/topics/obe/causes>  |

 Physical Education Framework for Instruction Strand: Energy Balance Grade Level: 7

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| **VA SOL Standard:** 7.5 The student will describe rate of perceived exertion and nutrients (energy) needed for a variety of activities and explain the importance of sleep for energy balance.ESSENTIAL UNDERSTANDINGS* Everything we do, from sleeping to running, requires energy.
* The relationship between the amount of calories we eat in the diet and the amount of energy we use in the body determines our body weight and overall health.
* Balancing calorie consumption & calorie expenditure is the key to maintaining healthy body weight.
 |
| **VDOE Standard(s)****Student Friendly Language**What will the student know and be able to do | **SUGGESTED / SAMPLE****ASSESSMENTS** | **Terms (Vocabulary) and Content Information** | **SUGGESTED / SAMPLE** **ACTIVITIES** |
| **7.5 h)** Explain energy balance and how it leads to a healthy body.**Suggested Learning Targets:**I can explain what energy balance is and why it is important for good health and demonstrate it through a summary paragraph. | **Assessment for Learning** **(Formative)*** Oral Questioning

Example: How does the body balance energy intake with expenditure? * Define energy balance.
* Investigate the effects of energy balance on the body.

**Assessment of Learning****(Summative)*** Individual assessment: Explain what energy balance is and why it is important for good health
* Group assessment: Hand out six index cards to each student group. Read each activity on the cards to students, making sure that they understand what each activity is. Ask students to think about whether each activity is Energy, More Energy or Most Energy. Have them write an H, an M or an L on each index card to correspond with how much energy they think each activity would require. (Hint: 2 are High Energy, 2 are Medium Energy and 2 are Low Energy).

 Activities:* Doing Arts and Crafts (L)
* Karate (H)
* Shooting Baskets (M)
* Playing the Piano (L)
* Walking (M)
* Playing Soccer (H)

After reviewing answers, ask students to rank the activities from highest to lowest related to the specific number of calories a 65-lb. person would burn if doing the activity for 15 minutes.  | * Energy balance: The relationship between “energy in” (food calories taken into the body through food and drink) and “energy out” (calories being used in the body for our daily energy requirements).
* When it comes to “energy out,” the body’s energy needs to include the amount of energy required for maintenance at rest, physical activity and movement and for food digestion, absorption and transport.
* Energy balance also has to do with what’s going on in your cells. When you’re in a positive energy balance (more in than out) and when you’re in a negative energy balance (more out than in), everything from your metabolism, to your hormonal balance, to your mood is impacted. Negative energy balance can lead to:
* Decline in metabolism.
* Decreases in bone mass.
* Reductions in thyroid hormones.
* Reductions in testosterone levels.
* Inability to concentrate.
* A reduction in physical performance.
* Physical activity means moving the body to use energy. The more vigorous the activity, the more energy is used.
* Energy comes from what we eat and what we drink.
* Calories are a measurement of the potential energy contained in what we eat or drink.
* Three nutrients carbohydrate, protein and fat contain calories. When we eat or drink something that contains carbohydrate, protein or fat, the body breaks down the nutrients to release energy. That energy can then be used to do all the physical activities we want to do.
* Even when we're at rest, our body needs energy for all its "hidden" functions, such as breathing, circulating blood and growing and repairing cells.
 | * Discussion on the role of calories in relationship to giving us energy.
* Groups are given cards with different foods and beverages. Students will rank the cards by the amount of energy we get from each food or beverage.
* Discuss as a class or have student’s research changes in society over the last 30 years that caused a shift in the relationship between energy balance and a healthy body.

Example:* Thirty years ago: More students walked to and from school. Children played outside when they came home from school. Meals were more likely to be home-cooked with reasonable portion sizes and there was always a vegetable on the plate. Eating fast food was rare and snacking between meals was an occasional treat.
* Today: Walks to school are replaced by car or bus rides. After school activities include TV, video games and the internet. Families eat fewer home-cooked meals and snacking between meals is common. Portion and beverage sizes are two to five times bigger. We now eat 31 percent more calories, 56 percent more fats and oils and 15 more pounds of sugar a year.
 |
| **Resources:** SHAPE America National Standards and Grade-Level Outcomes; [www.choosemyplate.gov](http://www.choosemyplate.gov); <http://www.education.com/reference/article/what-energy-balance/>; <http://www.precisionnutrition.com/all-about-energy-balance>;<http://www.nhlbi.nih.gov/health/educational/wecan/healthy-weight-basics/balance.htm>; <http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/The-American-Heart-Associations-Diet-and-Lifestyle-Recommendations_UCM_305855_Article.jsp#.V6eAWf36upo>  |