Grade Six

STANDARD 1

Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.

Manipulative Skills

1.1 Volley an object repeatedly with a partner, using the forearm pass.

1.2 Strike a ball continuously against a wall and with a partner, using a paddle for the forehand stroke and the backhand stroke.

1.3 Strike an object consistently, using a body part, so that the object travels in the intended direction at the desired height.

1.4 Strike an object consistently, using an implement, so that the object travels in the intended direction at the desired height.

1.5 Dribble and pass a ball to a partner while being guarded.

1.6 Throw an object accurately and with applied force, using the underhand, overhand, and sidearm movement (throw) patterns.

Rhythmic Skills

1.7 Perform folk and line dances.

1.8 Develop, refine, and demonstrate routines to music.

Combinations of Movement Patterns and Skills

1.9 Combine relationships, levels, speed, direction, and pathways in complex individual and group physical activities.

1.10 Combine motor skills to play a lead-up or modified game.

1.11 Design and perform smooth, flowing sequences of stunts, tumbling, and rhythmic patterns that combine traveling, rolling, balancing, and transferring weight.

STANDARD 2

Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.

Movement Concepts

2.1 Explain how to increase force based on the principles of biomechanics.

2.2 Explain how impact force is reduced by increasing the duration of impact.

2.3 Analyze and correct errors in movement patterns.

2.4 Provide feedback to a partner to assist in developing and improving movement skills.

2.5 Identify practices and procedures necessary for safe participation in physical activities.

Manipulative Skills

2.6 Explain the role of the legs, shoulders, and forearm in the forearm pass.

2.7 Identify the time necessary to prepare for and begin a forehand stroke and a backhand stroke.

2.8 Illustrate how the intended direction of an object is affected by the angle of the implement or body part at the time of contact.

2.9 Identify opportunities to pass or dribble while being guarded.

Rhythmic Skills

2.10 Identify steps and rhythm patterns for folk and line dances.

2.11 Explain how movement qualities contribute to the aesthetic dimension of physical activity.

Combination of Movement Patterns and Skills

2.12 Develop a cooperative movement game that uses locomotor skills, object manipulation, and an offensive strategy and teach the game to another person.

STANDARD 3

Students assess and maintain a level of physical fitness to improve health and performance.

3.1 Assess the components of health-related physical fitness (muscle strength, muscle endurance, flexibility, aerobic capacity, and body composition) by using a scientifically based health-related fitness assessment.

3.2 Compare individual physical fitness results with research-based standards for good health.

3.3 Develop individual goals for each of the components of health-related physical fitness (muscle strength, muscle endurance, flexibility, aerobic capacity, and body composition).

3.4 Participate in moderate to vigorous physical activity a minimum of four days each week.

3.5 Measure and evaluate changes in health-related physical fitness based on physical activity patterns.

3.6 Monitor the intensity of one's heart rate during physical activity.

STANDARD 4

Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.

4.1 Distinguish between effective and ineffective warm-up and cool-down techniques.

4.2 Develop a one-day personal physical fitness plan specifying the intensity, time, and types of physical activities for each component of health-related physical fitness.

4.3 Identify contraindicated exercises and their adverse effects on the body.

4.4 Classify physical activities as aerobic or anaerobic.

4.5 Explain methods of monitoring heart rate intensity.

4.6 List the long-term benefits of participation in regular physical activity.

4.7 Compile and analyze a log noting the food intake/calories consumed and energy expended through physical activity.

STANDARD 5

Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.

Self-Responsibility

5.1 Participate productively in group physical activities.

5.2 Evaluate individual responsibility in group efforts.

Social Interaction

5.3 Identify and define the role of each participant in a cooperative physical activity.

Group Dynamics

5.4 Identify and agree on a common goal when participating in a cooperative physical activity.

5.5 Analyze possible solutions to a movement problem in a cooperative physical activity and come to a consensus on the best solution.

Glossary

adapted physical education. A physical education program designed to meet the unique needs of an individual with a disability who is unable to fully participate in the general physical education program.

adventure/outdoor activities. Physical activities centered in natural settings. Examples include orienteering, backpacking, hiking, rope activities, canoeing, cycling, skating, and rock climbing.

aerobic activity. Exercise that can be performed for a long duration because the energy required can be provided by the burning of fuel, which normally occurs in muscle cells in the presence of oxygen. Aerobic activity may help control body weight, reduce the percentage of body fat, improve the circulatory function and respiratory functions, and reduce blood pressure. Examples include aerobic dance, cycling, jogging, power walking, in-line skating, step aerobics, kickboxing, and super circuit.

anaerobic activity. Exercise of short duration that is performed at a more strenuous level, so increased respiration and heart rate cannot provide sufficient oxygen to the muscle cells. Anaerobic activity is used to build muscle mass and to improve one's ability to move quickly and to deliver force. Examples of anaerobic activity include sprinting, weight training, curl-ups, gymnastics, and some team activities, such as softball and football.

base of support. The area of the base or foundation that supports the body. The base of support may include one or more body parts and the distance between them. The ability to stabilize the body is directly proportional to the area of the base of support. For example, if the two feet are close together, the base of support is narrow and stability is limited. If the two feet are separated by some distance, the base of support is increased and provides more stability.

basic resistance principles. Resistance is the weight or force that is used to oppose a motion. Resistance training increases muscle strength by pitting the muscles against a weight, such as a dumbbell or barbell. The type of lift; intensity, volume, and variety of training; progressive overload; rest; and recovery constitute the basic principles of resistance training.

biomechanics. The study of human movement and how such movement is influenced by gravity, friction, and the laws of motion. It involves the analysis of force, including muscle force that produces movements and impact force that may cause injuries. It explains why motor skills are performed in explicit ways in order to improve efficiency and effectiveness.

body composition. The proportion of fat-free mass (e.g., muscle, bone, vital organs, and tissues) to fat mass in the body.

body management. Basic skills focusing on the ability to control the body and body parts in actions such as those involving traveling, balancing, rolling, and supporting body weight.

combative activities. A group of physical activities that utilize basic combatives—pulling, pushing, defiances, stands, and guards. Some examples include wrestling, fencing, boxing, kickboxing, martial arts, and self-defense.

components of health-related physical fitness. Muscle strength, muscle endurance, aerobic capacity, flexibility, and body composition.

cool-down exercises. Five to ten minutes of light to moderate physical activity. Cool-down exercises help the body recover from exercise. This process maintains blood pressure, helps enhance venous return, and prevents blood from pooling in the muscles.

core muscles. The abdominal, back, hip, and pelvic floor muscles.

dehydration. The loss of water and important blood salts, such as potassium and sodium, that are essential for vital organ functions.

dual activities. Physical activities that require two participants. Examples include tennis, racquetball, and badminton.

ergogenic aids. Substances, devices, or practices that enhance an individual's energy use, production, or recovery.

even-beat locomotor skills. Examples include walking, running, hopping, and jumping.

flexibility. The ability to move joints of the body through a normal range of motion.

F.I.T.T. principles/concepts. The frequency, intensity, time, and type of physical activities are interdependent principles for gaining and maintaining physical fitness.

folk dance. A dance that has been developed through the traditions of culture and has been passed down from generation to generation.

frequency. A principle of training that establishes how often to exercise.

fundamental movement skills. An organized series of basic movements that involve the combination of movement patterns of two or more body segments. They may be categorized as stability, locomotor, or manipulative movements.

group dynamics. The interactions and interrelationships of people in a group.

health. Optimal well-being that contributes to the quality of life. It is more than freedom from disease and illness. Optimal health includes high-level mental, social, emotional, spiritual, and physical wellness within the limits of one's heredity and personal abilities.

health-related physical fitness. Consists of those components of physical fitness that have a relationship to good health: body composition, aerobic capacity, flexibility, muscle endurance, and muscle strength.

hyperextension. Greater-than-normal stretching or straightening of an extended limb.

hyperflexion. Bending a joint beyond its normal range of motion.

indicators of increased capacity. Responses of the body due to changes in the intensity of, duration of, frequency of, or time spent participating in physical activity. Indicators may consist of changes in muscle fatigue, breathing, and heart rate.

individual activity. Physical activities that require only one participant. Examples

include weight training, yoga, archery, and jogging.

individuality. A principle of training that takes into account the particular needs and abilities of the individual for whom it is designed.

intensity. A principle of training that establishes how hard to exercise.

large-muscle groups. Muscles that work together and have a large mass relative to other muscle groups in the body. Examples of large-muscle groups are the muscles in the arms, back, and legs.

line dance. A dance in which individuals line up without partners and follow a choreographed pattern of steps, usually to country music.

locomotor movements. The basic patterns used to travel (walking, running, leaping, hopping, jumping, galloping, sliding, and skipping).

long-handled implement. A piece of equipment used in performing motor skills. The long handle positions the hand some distance away from the surface of the implement that comes in contact with the ball. Some examples include a hockey stick, bat, tennis racquet, and lacrosse stick.

manipulative movements. Movements in which skills are developed while using an implement. Examples include throwing, catching, punching, kicking, trapping, rolling, dribbling, striking, and volleying.

moderate physical activity. Moderate-intensity physical activity generally requires sustained rhythmic movements and refers to a level of effort a healthy individual might expend while, for example, walking briskly, dancing, swimming, or bicycling on level terrain. A person should feel some exertion but should be able to carry on a conversation comfortably during the activity.

modified/lead-up game. Active games that involve the use of two or more of the sport skills, rules, or procedures used in playing the official sport.

movement concepts. The ideas used to modify or enrich the range and effectiveness of the skills employed. They involve learning *how, where,* and *with what* the body moves.

movement patterns. An organized series of related movements.

muscle endurance. The ability to contract the muscles many times without tiring or the ability to hold one contraction for an extended period.

muscle strength. The ability of a muscle to exert force. Strength is measured as the amount of force a muscle can produce.

nonlocomotor movements. Movement that is organized around the axis of the body, including bending and stretching, pushing and pulling, raising and lowering, twisting and turning, shaking, bouncing, circling, and swinging.

overload. A principle of training that establishes a minimum threshold and requires one to exceed that threshold to benefit from the chosen physical activity.

perceived exertion index. A way of rating how hard one feels the body is working during physical activity; it is based on physical sensations experienced, including increased heart rate, increased respiration or breathing rate, increased sweating, and muscle fatigue.

physical activity. Bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure, including exercise, sport, dance, and other movement forms.

physical fitness. A positive state of well-being with a low risk of premature health problems and with the energy to participate in a variety of physical activities. It is influenced by regular, vigorous physical activity, genetic makeup, and nutritional adequacy.

plyometric exercise. A muscular activity that involves an eccentric contraction (i.e., muscle is lengthened) of a muscle, followed immediately by a concentric contraction (muscle is shortened) of the same muscle. Plyometric exercises are often used to increase power.

principle of overload. The principle of exercise that states that placing a greater-than-normal physical demand on the body will require the body to adapt to the greater load by increasing the body's efficiency and strength.

principles of training/principles of exercise. Principles to follow in planning an exercise program to effect physiological changes in the human body related to health and performance: frequency, individuality, intensity, mode/type, overload, progression, regularity, specificity, and time.

progression. A principle of training that establishes increases in the amount and intensity of physical activity needed to provide improvements over periods of time.

proprioception. The ability to sense the position, location, and orientation of the body.

rebound principles. Newton's Third Law: An object, when struck, will rebound in the opposite direction with the same amount of force with which it was hit.

recovery rate. The time necessary for an exercise-induced elevated heart rate to return to a normal resting heart rate.

regularity. A principle of training that establishes exercise on a regular schedule. A pattern of physical activity is regular if activities are performed most days of the week, preferably daily; if moderate-intensity activities are performed five or more days of the week; or if vigorous-intensity activities are performed three or more days of the week.

resistance principle. The principle that the use of an implement, a device, or the body weight as a resistance can enhance some physical characteristic, such as strength or muscular endurance.

rhythmic skills. Skills that develop an understanding of and a feeling for the elements of rhythm. Examples of physical activities that allow students to express themselves rhythmically include creative movement, folk dance, square dance, and interpretive dance.

short-handled implement. A piece of equipment used in performing motor skills. The short handle positions the hand close to the surface of the implement that comes in contact with the ball. Some examples include a racquetball racket, a paddle used in paddle games, and a modified lacrosse stick.

specificity. A principle of training that establishes a particular kind of activity for each component of physical fitness.

stability movements. Stability reflects balance and equilibrium, which are important components in performing many motor skills. Stability movements include those that are vital for the body to maintain balance while moving. Examples include moving the arms while walking or running and lowering one's center of gravity when stopping quickly.

strategies. Decisions made by individuals or a team about the overall play of the game.

striking pattern. A fundamental motor skill in which an object is hit, with or without an implement.

tactics. Individual movement of players or teams to accomplish an immediate goal or accommodate a situation. Tactics take place within the game as an ongoing part of game play and include decisions an individual makes about when, why, and how to respond to a particular situation.

target heart-rate zone. A safe range of activity intensity that can be used to enhance the level of aerobic capacity.

time. A principle of training that establishes the amount of time for each exercise period.

travel. Movement of the body from one point to another.

type. A principle of training that establishes the specific activity to use or the muscles to target during an exercise period.

uneven-beat locomotor skill. Examples include galloping, sliding, skipping, and leaping.

vigorous physical activity. Vigorous-intensity physical activity generally requires sustained, rhythmic movements and refers to a level of effort a healthy individual might expend while, for example, jogging, participating in high-impact aerobic dancing, swimming continuous laps, or bicycling uphill. Vigorous-intensity physical activity may be intense enough to result in a significant increase in heart and respiration rate.

volley. To strike a ball upward.

warm-up exercises. Low-intensity exercises that prepare the muscular/skeletal system and heart and lungs (cardiorespiratory system) for high-intensity physical activity.

weight-bearing activities. Any activity in which one's feet and legs carry their own weight. Examples include walking, running, tennis, and aerobic dancing.