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# Introduction

This example curriculum is intended as a supplement to the Connecticut Healthy and Balanced Living Curriculum Framework (HBLCF).

HBLCF, which is based on the National Physical Education Standards, sets the framework for Health and Physical Education curriculum development in Connecticut’s public schools. This example curriculum is intended for districts to use in building a more complete curriculum document.

The objectives articulated here are not requirements. Teachers may edit, change, move or alter these in any way to match their school’s schedule and educational philosophy.

Additionally, this document does not offer learning activities. There are many resources available for classroom activities.

We would like to keep this up to date and as varied as possible. If the users have any suggestions for changes, updates or additions please send them to Joe Velardi at jvelardi@casciac.org.

# Grades K-2

Standard 1: Students will demonstrate competency in a variety of motor skills and movement patterns.

Standard 2: Students will apply knowledge of concepts, principles, strategies, and tactics related to movement and performance.

Standard 3: Students will demonstrate the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

Standard 4: Students will exhibit responsible personal and social behavior that respects self and others.

Standard 5: Students will recognize the value of physical activity for health, enjoyment, challenge, self-expression, and social interaction.

## Motor Skills and Movement Patterns

### Movement Concepts

1. Apply the concept of general and personal space.
2. Travel safely using slow and fast speeds in designated boundaries.
3. Demonstrate high, medium, and low levels using different body parts.
4. Change speeds in response to tempos, rhythms, and signals while traveling in different pathways using various locomotor movements such as: walking, running, leaping, hopping, jumping, skipping, sliding, and galloping.
5. Move in different directions in response to a signal.
6. Explore and adapt fundamental movement skills in a variety of dynamic environments.
7. Learn traditional dances, variations and new dances. (Hokey Pokey, Chicken Dance, Get Funcy, Body Boogie, Go Bananas, The Twist, Cha Cha Slide, Electric Slide, Conga Line)
8. Learn dances they can use in social events.

### Locomotor Movement

\* Movements can be demonstrated through a variety of dance, games, tumbling or freestyle movements.

1. Demonstrate hopping, jumping, skipping, galloping, leaping, jumping, running, sliding.
2. Jump over a stationary rope several times in succession, using a variety of movement patterns.
3. Jumping in and out of objects.
4. Change space and directions while moving.
5. Change speeds while moving.
6. Jumping a moving rope (long ropes).
7. Turning long ropes.
8. Timing the turn of a long rope (chants)
9. Jump a moving rope while changing directions and levels to best of ability.
10. Jumping – increasing duration
11. Introduce jumping a moving rope (ex. long rope activities)
12. Introduce using a self-turning object (skip-its)
13. Lead up to individual ropes
14. Introduce using a self-turning object (skip-its)
15. Lead up to individual ropes
16. Jumping over stationary and low level objects
17. Jumping self turned rope
18. Develop spatial awareness games involving chasing, fleeing, dodging
19. Implement fundamental movement skills in a variety of age appropriate games
20. Demonstrate slow and fast movement speeds, straight, curved, and zigzag pathways.

### Non-Locomotor Movement

1. Demonstrate curling, twisting, balancing, bending
2. Hold posture and balance at a variety of levels
3. Display adequate strength to hold body weight in a variety of poses
4. Move the major joints of the arms, legs, and trunk through a full range of motion.
5. Identify selected body parts, actions, and planes.
6. Travel in forward, sideways, and backward directions, and change direction quickly and safely.
7. Travel while changing speeds and directions in response to a variety of rhythms.
8. Make both large and small body shapes.
9. Demonstrate a variety of relationships with objects (e.g., over, under, behind, alongside and through).
10. Demonstrate high, middle and low levels.
11. Combine shapes, levels, and pathways into simple sequences.

**Manipulative Skills**

\* Objects for manipulatives can include but are not limited to the following; bean bags, scarves, hula hoops, fleece balls, yarn balls, scooter boards, playground balls, comet balls, moon hoppers, ribbon sticks, frisbees, balloons, skip-its, beach balls, buddy-walkers, bowling pins, parachutes, rhythm sticks, striking skills (batting/hitting), wands, jump ropes, pillow polo sticks, foam shapes, foxtails, hacky sacs, balancing feathers, spider balls, and circus equipment.

1. Watch an object as it travels through the air (“keep eyes on it”).
2. Roll or spin an object on the ground while tracking it.
3. Demonstrate the proper underhand and overhead patterns for throwing.
4. Attempt proper form in catching a self-tossed ball.
5. Kick a stationary object.
6. Kick a rolled ball from a stationary position.
7. Strike a stationary object using arms, hands, and feet.
8. Students will demonstrate their ability to successfully dribble a ball, using their hands or feet.
9. Progress from bouncing and catching a ball with two hands, to bouncing a ball with one hand, to dribbling in a variety of patterns.
10. Progress from kicking, to manipulating a ball with their feet, to dribbling around objects in patterns.
11. Direct a ball with various body parts toward a target. (Kick, throw, push, hit toward a target.)
12. Progress from volleying a light (safety ball or balloon) from one hand to two hands, to continuously keeping it up.
13. Vary forces and pressure on a variety of objects.
14. Manipulate a variety of objects to change directions.
15. Begin to learn to stop, trap catch objects with hands and/or feet.
16. Ball control with self and general space at various speeds, directions, and pathways
17. Turning (ex. long rope activities)

### Body Management and Movement

1. Create shapes by using non-locomotor movements.
2. Balance on one, two, three, four, or more body parts.
3. Maintain balance on a variety of bases of support.
4. Demonstrate the relationship of under, over, behind, next to, through, right, left, up, down, forward, backward, and in front of by using the body and an object.
5. Use objects to create shapes.
6. Demonstrate a safe two-foot landing after taking off of one or two feet.
7. Perform a variety of rolls on a mat – e.g., pencil, log, egg and barrel.
8. Support, lift and control body weight in a variety of activities/movements.
9. Have the option of experimenting with different gymnastic apparatus to enhance balance, flexibility and muscular strength.
10. Transition from one skill to another (Transition between movement, non-movement, locomotor, non-locomotor and Manipulative skills.)
11. Accomplish skill transition through challenges or games.
12. Transfer weight from one foot to another.
13. Transfer weight and balance between different body parts.
14. Be able to change movements to change in rhythms.
15. Travel at a variety of levels.
16. Travel over, under, around and through a variety of objects.
17. Perform shapes, levels and pathways into simple travel, dance and gymnastics sequences.
18. Demonstrate simple applications combining locomotor, non-locomotor and manipulative skills to participate in developmentally appropriate movement and fitness activities.
19. Individual rhythmic activities focusing on body space awareness while following a beat
20. Individual Rhythmic activities focusing on body awareness (stationary)
21. Individual rhythmic activities focusing on traveling to a beat
22. Rhythmic activities while using equipment (lummi sticks, scarves, ribbons)
23. Explore and adapt fundamental movement skills in a variety of dynamic environments
24. Participate in a variety of modified games, developmentally appropriate tasks, activities, creative movement, dance and play
25. Introduction to tumbling (forward, log, pencil, straddle, egg rolls, partner rolls, consecutive rolls and sequences)
26. Variety of low level gymnastics equipment
27. Introduce traveling words (on, off, over, under, through, across, around)

### Games

1. Apply basic strategies.
2. Use physical and performance skills and apply to games.
3. Experience several different types of games (eg. tag, races, ball, partner, contests).
4. Explore and adapt fundamental movement skills to meet a variety of challenges.
5. Demonstrate simple applications combining locomotor, non-locomotor and selected manipulative skills to accomplish developmentally appropriate play and fitness activities.
6. By the end of 2nd grade, demonstrate developmentally mature form in the fundamental movement skills;  (e.g., walk, jump, skip); non-locomotor (e.g., bend, twist, swing); and selected manipulative skills (e.g., throwing, kicking, striking).
7. Apply basic skills to age appropriate activities and games.
8. Participate in a variety of modified games, developmentally appropriate tasks, activities, creative movement, dance and play
9. Demonstrate knowledge of rules, safety practices and procedures of specific activities

## Physical Activity

### Enjoyment

1. Finds activities that they personally find enjoyable.
2. Discuss how to play with others in a friendly, respectful way.
3. Describe ways in which physical activities are enjoyable to them.
4. Express which activities they enjoy and how they make them feel.

### Knowledge

1. Demonstrate safety while participating in physical activity.
2. Understands in concept that play and exercise helps the body stay healthy.
3. Understand that play and activity should be done at home.
4. Understand that play and activity should always be part of their lives.

### Fitness

1. Participate in physical activities that are enjoyable, challenging, and improve students’ well-being.
2. Participate in several activities related to each component of health-related fitness (e.g., respiratory efficiency, muscular strength and endurance, and flexibility) necessary for a healthy lifestyle.
3. Identify the location of the heart and explain that it is a muscle.
4. Identify the location of the lungs and explain their function.
5. Identify that drinking water is essential for a healthy body.
6. Explain that nutritious foods provide energy for physical activity.
7. Explain why strong muscles are important for a healthy body.
8. Explain that warming up and stretching are important before being active.
9. Enjoys the challenge of a variety of activities.

### Benefits of Physical Activity

1. Experience enjoyment while participating in physical activity of their choice.
2. Understand that practicing activities will increase their skill level.
3. Interact/cooperate with peers while participating in group or partner activities.
4. Identify feelings that result from participating in physical activities.
5. Develop an appreciation of individual and team activities.
6. Identify ways to increase time for physical activity outside of school.
7. Develop an understanding of the importance of family and lifetime activities.
8. Identify and understand how physical activity provides personal enjoyment, challenge, self-expression and social interaction.

## Nutrition

1. Understand that food provides energy for their body.
2. Understand that water helps their body move easier, keeps body temperature, and eliminates waste.
3. Categorize foods into fruits, vegetables, grains, and meat.
4. Identifies healthy and unhealthy food.

## Social Interaction and Cognitive Learning

1. Take turns when playing with others.
2. Wait their turn.
3. Share equipment and supplies.
4. Include everyone.
5. Be nice to others.
6. Use physical activity as a positive opportunity for social and group interaction
7. Demonstrate knowledge of rules, safety practices and procedures of specific activities
8. Participate in a variety of activities and games with partners and in small groups
9. Follow game and participation rules independently and demonstrate fair play.
10. Identify guidelines and behaviors for the safe use of equipment and apparatus.
11. Recognize and implement fundamental strategies used in simple games and activities.
12. Identify the purpose of rules in games.
13. Appreciate and enjoy the benefits that result from participation in physical activities.
14. Enjoy participation in physical activities along with others.
15. Appreciate benefits that accompany compassion, cooperation, honesty, and perseverance.
16. Recognize and demonstrate the ability to resolve conflict.

# Grades 3-5

## Locomotor/Movement Skills

1. Demonstrates leaping using a mature pattern.
2. Demonstrates a combination of locomotor skills to participate in a variety of developmentally appropriate movement and fitness activities.
3. Demonstrates mature patterns of locomotor skills in dynamic developmentally appropriate movement and fitness activities.
4. Apply all locomotor skills from K-2 in a more complex way, using locomotor skills in a variety of activities, games, exercises, dance and challenges.
5. Apply requisite locomotor skills on demand to fit the task.
6. Maintain spacing in a variety of age appropriate games and activities.
7. Change direction, speed, and levels during play.
8. Transition from one locomotor pattern to another. (Transition between walking, running, skipping, hopping, galloping, sliding, leaping)

## Non-Locomotor Skills

1. Apply all non-locomotor skills from K-2 in a more complex way, using non-locomotor skills in a variety of activities, games, exerises, dance and challenges.
2. Apply requisite non-locomotor skills on demand to fit the task.
3. Move safely in space while participating in age appropriate games and activities.

## Coordination Skills

1. Throw overhand or underhand toward a target.
2. Redirect a ball using varying body parts. (volleying)
3. Redirect (volley) a modified ball over a target.
4. Strike a ball using various pieces of equipment.
5. Strike a ball using various pieces of equipment in an age appropriate game or activitity.
6. Catch a modified ball when tossed softly.
7. Apply catching skills in age appropriate games and activities.
8. Juggle various objects (scarves, balls)
9. Apply throwing skills in age appropriate games and activities.
10. Apply modest dribbling skills while engaged in age appropriate games and activities.
11. Dribbling focusing on directions, pathways, and locations using hands or feet.
12. Beginning passing skills with hands or feet.

## Games and Sports

Students will apply relevant concepts and strategies by…

1. Successfully participate in modified, age appropriate sports by applying strategies, rules and requisite skills. (Examples: whiffle ball, basketball, flag football, lacrosse, pillo polo, soccer, volleyball, field hockey, volleyball, badminton, softball, team handball, tennis)
2. Successfully participate in recreational games and activities by applying strategies, rules and requisite skills. (Examples: hop scotch, frisbee, bocci, capture the flag, horseshoes, four square, jump the creek, cooperative games, juggling, parachute, scooters, obstacle races, swimming, jogging, bowling, orienteering, roller skating, snow shoeing, weight training, dance, meditation)
3. Successfully participate in modified individual games and sports by applying strategies, rules and requisite skills. (Examples: badminton, pickle ball, tennis, track and field,
4. Demonstrate knowledge of rules, safety practices and procedures of specific activities.

## Exercises and Fitness Activities

1. Successfully demonstrate a variety of fundamental body weight exercises and fitness activities. (Examples: sit-ups, push-ups, jogging, air squats, lunges, sit and reach, calf raises, leg raises, burpees)
2. Successfully demonstrate basic yoga poses. (Examples: downward facing dog, upward facing dog, child’s pose, triangle pose, mountain pose, chair pose)
3. Successfully demonstrate basic, age appropriate, gymnastics/tumbling movements. (Examples; log roll, front roll, back roll)
4. Successfully perform basic jump rope patterns. (More advanced students will attempt more complex jump rope patterns as a challenge.)

## Rythms and Dance

1. Apply locomotor, non-locomotor and manipulative skills to basic dances.
2. Demonstrate courtesy and consideration to dance partners.
3. Apply rhythmic activities using equipment such as scarves, hoops, ribbons, lummi sticks, tinikling
4. Successfully participate in a variety of traditional and modern dances.
5. Successfully participate in a variety of line dances (Cha cha Slide, Cotton Eyed Joe, Electric Slide)

## Physical Fitness/Exercise Science

### MUSCULAR DEVELOPMENT

Enduring Understandings:

* You can make muscles stronger.
* A muscle can be improved by the Training Principles.
* A healthy level of fitness is to be able to do daily activity without injury.
1. Compare the sizes and functions of different muscle groups.
2. Explain the relationship between muscles and the skeletal system.
3. Show where there are large, small and mid-sized muscles on their bodies.
4. Compare different types of muscular training.
5. Define muscular strength as the ability to move heavy things.
6. Define muscular endurance as the ability to repeat movements over a long period of time.
7. State that physical activity helps muscles develop in size and strength.
8. Predicts that activity in which you assert more strain on your muscles than normal movement increases your strength.
9. Perform activities that assert more strain on your muscles than normal movements. (resistance)
10. Generalize that all muscles can be made stronger.
11. Predict which muscle groups become stronger with each of a variety of activities (specificity).
12. Define progression as slowly being able to lift more and work harder.
13. Explain how resistance training improves muscles only when done several days a week (frequency).
14. Gauge how quickly their muscles become fatigued (intensity).
15. Rank a group of tasks according to how much strength is needed to perform them (intensity).
16. Understand that the stronger your muscles are the easier you can move your body.
17. Understand that the stronger your muscles are the more weight you can move.
18. Demonstrate how muscles help us move and move other things.

### BODY COMPOSITION

Enduring Understandings:

1. Food can be used for energy or stored as fat.
2. All physical activity burns calories, even at rest.
3. Weight control requires a balance of calories eaten and calories burned.
4. Define body composition.
5. Define calorie.
6. Distinguish that people have different sizes and shapes. (Focus Question: Why do people grow differently?)
7. Understand that the body is made up of muscle, bone, fluids, fat, facia and tissue, and internal organs
8. Define a calorie
9. Understand that activity burns calories and that you need calories for energy.
10. Understand that calories can be good or bad based on the nutrients in the food.
11. Identify that stored body fat is used in the body for energy, warmth, and transportation of vitamins and provides protection for internal organs.
12. Explain that everyone needs some body fat.
13. Identify that too much or too little fat is a health risk. (Focus Questions: Is it possible to have too much fat? Is it possible to have too little fat?)
14. Identify the health hazards of excessive fat.
15. (Focus Questions: Do you need body fat? How much? Is it possible to have too much fat? Is it possible to have too little fat? What is the relationship between body fat and being healthy? What health risks are associated with having too much body fat? What is the relationship between fat and being healthy? What health risks are associated with having too much or too little body fat? What is the relationship between body fat and being healthy?)
16. Explain that to lose body fat, you can decrease caloric intake, increase caloric expenditure, or use a combination of the two.
17. If you eat more food than you use your body becomes heavier.
18. Discuss that exercise can control the amount of body fat because exercise burns calories and/or fat for energy. (Focus Question: How can you change your activity to burn more calories? Can you control how much you weigh?)
19. Explain that it is difficult to accurately count calories or to accurately account for calories expended.
20. Understand that food is burned for energy or it becomes part of your body. (Focus Question: What happens to food after you swallow it? How can you control the amount of body fat? How can you change activities to burn more calories?)
21. Understand that without energy from food people wouldn’t be able to work, play or move.
22. Understand that children grow until they are teenagers then they stay about the same for the rest of their lives.
23. Understand that there is a difference between healthy growth and too much fat.
24. Identify that heart disease is a health hazard of excessive fat. (Focus Questions: What happens to your heart and arteries if you have too much fat?  How can you create an effective way to burn calories for a given food? What is the relationship between body fat and being healthy? )
25. Create an effective way to burn calories for a given food.
26. Explain how being overweight may affect one’ health.
27. Explain how being underweight may affect one’s health. (Focus Questions: What are the health risks of being overweight? What are the health risks of being underweight?)

### CARE AND PREVENTION OF INJURIES

Enduring Understandings:

* Dress/Attire can contribute to or prevent climate related injuries.
* Appropriate muscular conditioning can decrease the chance of sprains and strains.
* Protective equipment prevents injuries.
* Application of First Aid Principles may reduce severity of injuries.
1. The more fit you are, the less likely you are to get injured. (Focus Questions: Why would being fit help prevent injuries?
2. Identify the importance of dressing warmly when playing in cold weather such and snow.
3. Discuss the need to drink a lot of water and dressing cool when exercising in hot weather.
4. Identify the importance of drinking water to replace the sweat they lose when exercising.
5. Explain why sun screen should be applied to exposed skin on sunny days.

(Focus Questions: How does water help your body? Should you dress differently for changes in weather? Why do you sweat? When should you start drinking water? Why?)

1. Articulate that ice should be placed on a body part that is twisted during activity and rest until the pain goes away. (Focus Question: What does ice do for an injury?)
2. Articulate that covering cuts can prevent infection. (Focus Question: Why should you clean and cover a cut?)
3. Identify that exercise intensity should be modified to match the existing weather conditions.
4. Articulate that regular exercise and conditioning may prevent injuries (frequency). (Focus Question: How and why should you adjust your activity level to prevent injuries?)
5. Identify that helmets should be worn when bike riding.
6. Recognize that helmets, wrist guards, knee and elbow pads should be worn when in-line skating, skate boarding, and scooter riding.
7. Explain why certain types of footwear should be worn for specific activities.

(Focus Questions: Why is it important to wear protective gear? When should protective gear be worn? What could happen if you don’t wear the proper footwear?

### SKELETAL FITNESS

Enduring Understandings:

* The combination of consuming calcium and regular weight bearing exercises improves skeletal strength.
1. State that calcium is essential for building strong bones and teeth.
2. Give examples of foods rich in calcium.
3. Identify a variety of foods that contain calcium.
4. (Focus Questions: What is calcium? How does calcium help your body? What foods have calcium? Why is it important to have calcium in your diet and at an early age? How does calcium affect your bones later in life?)
5. State that physical activity and nutrition can affect the health of your skeletal system.
6. Define the term “weight bearing”.
7. Demonstrate types of weight bearing exercises and activities.
8. (Focus Questions: How can you make your bones strong? What does weight bearing mean?Why is it important to do both, exercise and eat food containing calcium?)
9. Demonstrate specific activities that are weight bearing
10. Explain why bones are different shapes and sizes.
11. Understand that tendons attach bones to muscles.
12. Explain that when muscles pull on bones, your body moves.
13. State that your body is able to stay upright because of the strength of your bones.
14. Define the function of bones. (Like steel girders in a building, bones serve as a framework to give support.  Bones serve to support the body and they also provide protection for certain internal organs.)
15. (Focus Questions:What would happen to your body if you had no bones? Why are bones shaped differently?What do your bones do for your body? What is the relationship between muscles and bones.)
16. Define the term Density.
17. Identify that increasing overload will help to increase bone density.
18. Articulate that proper progression of weight bearing activities can help promote bone density.
19. Identify that specificity can help increase bone density.
20. (Focus Questions: What are some examples of weight bearing activities for your legs? What are some examples of weight bearing activities for your arms?)
21. Demonstrate how to gradually increase how much weight bearing exercises you       do.

### RESPIRATORY BENEFITS OF EXERCISE

Enduring Understandings:

* Through physical activity, the respiratory system delivers oxygen to the body more effectively.
* Physical Activity increases lung capacity.
1. Define inhaling and exhaling.
2. Identify lungs and their purpose.
3. Articulate that they use the oxygen in the air as fuel for muscles.
4. Discuss the reasons why you breathe faster when you are physically active.
5. (Focus Questions: What does it mean to inhale? What does it mean to exhale? Where does oxygen come from? What are your lungs used for? Inhaling and exhaling together is called respiration. Why do we breathe faster when we are physically active? Which activities would most benefit the lungs and why? )
6. Identify that the longer you perform respiratory activity, the healthier the lungs become (Time, Progression).
7. Identify that long periods of physical activity is good for the lungs (Specificity).
8. Articulate that daily physical activity is good for the lungs (Frequency).
(Focus Questions: How many days a week should you be physically active to benefit your lungs? How many minutes a day should you be active to benefit your lungs? What makes an activity good for your lungs? How can you tell if the activity you are doing is beneficial to your lungs? How can you tell if your lungs are working hard enough?)

### CARDIO  FITNESS

Enduring Understandings:

* Pulse rate is an indication of how hard you are working.
* The heart pumps blood to all parts of your body.
* Cardio activities strengthen your heart.
1. State that the heart is a muscle that pumps blood to your muscles and body.
2. Identify that the heart is a muscle approximately the size of your fist.
3. Locate the heart in the middle of the chest.
4. (Focus Questions: How big is your heart? Where is your heart located? What does “cardio” mean? What is the heart? What does the heart do? What is cardio activity? Why is activity good for your heart?)
5. Explain that pulse changes with activity.
6. Define heart rate as the number of beats per minute.
7. Understand that your heart rate tells you how hard you are working.
8. Demonstrate taking their pulse.
9. Locate two areas to find your pulse rate.
10. Define Rate of Perceived Exertion.
11. Can identify how hard they are working based on how they feel.
12. (Focus Questions: What makes your heart beat faster? What is pulse rate and how do you calculate it? Why is it important to know how hard you are working? How does activity effect your pulse rate. What is Rate of Perceived Exertion and how is it used?)
13. Identify that the longer you perform cardio activity, the healthier your heart will become.
14. Identify that long periods of physical activity is good for your heart.
15. Articulate that daily cardio activity is good for your heart.
16. (Focus Questions: How many days a week should you be physically active to benefit your heart? How many minutes a day should you be active to benefit your heart? What makes an activity good for your heart? How can you tell if the activity you are doing is beneficial for your heart? How can you tell if your heart is working hard enough?)

FLEXIBILITY

Enduring Understandings:

* Stretching helps prevent injury.
* Flexible muscles enhance performance.
* Training principles improve flexibility.

1. Identify that a way to increase flexibility is to stretch.
2. Identify that stretching produces elastic elongation that increases the extensibility of muscles.
3. Identify that stretching helps your muscles get ready for exercise.
4. Perform flexibility exercises as a part of the warm-up and cool down segments of class.
5. (Focus Questions: What is flexibility? What is a warm-up? What is a cool down? What are you stretching? What should proper stretching feel like? What is the best way to increase flexibility? How does stretching and warm-up help you get ready for exercise? Why are some people more flexible than others? What should proper stretching feel like? What is the best way to increase flexibility? How does stretching and warm-up help you get ready for exercise? What should proper stretching feel like?)
6. State some of the reasons for stretching to increase flexibility and to reduce the risk of injury, reduce the chance of low back pain, and help relieve emotional tension.
7. Identify the following safety rules for stretching:
8. Ballistic stretching has the potential for causing injury.
9. Using partners to help you get extra stretch can cause injury because they do not know how much pain you are in and may force your body part too far.
10. Start at a proper level and know when to increase the frequency, intensity, or amount of time of flexibility exercises.
11. Stretch according to what you feel not according to what others do.
12. Include flexibility with cardiovascular and muscular strength training programs to prevent muscle imbalance from occurring.
13. (Focus Questions: What are the safety rules for stretching? What are the reasons for improving your flexibility? Why is it important to have flexibility when playing sports? )
14. Discuss that to increase flexibility one must engage in a deliberate training program.  This could be in the form of a separate flexibility program or combined with the warm-up and cool-down phases of your overall fitness program.
15. State that proper stretching should contain the following elements:
16. Method – use static stretch
17. Frequency – stretch each muscle group daily if possible, but at least three days a week.  Stretch before and after work outs.
18. Intensity – stretch muscles beyond their normal length.  They should feel stretch sensations in the muscles and not in the joint.
19. Time – hold each stretch 15-30 seconds to feel the tightness release.
20. (Focus Questions: What do you need to do before you stretch? How often should you stretch to improve your flexibility? How long should you hold each stretch? What do you need to do before you stretch? How often should you stretch to improve your flexibility? How long should you hold each stretch?)

### NUTRITION/BODY COMPOSITON

Enduring Understandings:

* Your body needs nutrients and fluids to function and to remain healthy.
* The quality of the food you eat impacts your health and the quality is determined by its nutrient content.
* Foods vary in quality based on nutrient value and on whether or not they stimulate the growth of body fat.
* Sugar and other simple carbohydrates have no nutrients, suppress satiation, are addictive and stimulate the growth of body fat.
* The quality of the food you eat impacts your health and the quality is determined by its nutrient content.
* Food processing diminishes food quality and nutrient density.
* Sugar and other simple carbohydrates have no nutrients, suppress satiation, are addictive and stimulate the growth of body fat.
* The quality of the food you eat impacts your health and the quality is determined by its nutrient content.

1. The body is comprised of lean body mass and body fat mass. Your body is made up of different components (bone, muscle, fat, internal organs, fluids).
2. Body fat and the fat you eat from foods are two different things with the same name.
3. People need food in order to stay healthy because food has vitamins and minerals in it that help your body grow, fight disease, give you energy and repair injuries.
4. People choose the specific food they eat for taste, for energy, to prevent hunger, to get vitamins and minerals, to grow healthy, and during social events.
5. How food tastes influences what you eat. People tend to eat food that tastes the best to them not necessarily food that is the healthiest.
6. Food can be categorized into different groups. (Fruits, vegetables, grains, dairy, meat, legumes and oil)
7. Just because food tastes good doesn’t mean it is good for you.
8. Fiber is good. It helps you to feel full longer. Foods with high fiber generally are fruits and vegetables.
9. There are processed foods and real food. Processed food has a lot of different ingredients mixed in. Real food grows and is usually fruits and vegetables. Real food has more vitamins and minerals. The difference between good and bad food is whether or not the food has vitamins and minerals.
10. Sugar is a bad food. Sugar does not contain any vitamins and minerals therefore it does not help your body to stay healthy. Sugar makes you feel continually hungry and therefore makes you want to keep eating (usually more simple carbohydrates).Eating sugar makes you crave more sugar. Added sugar is ‘hidden’ in many foods, especially processed foods. People generally think that desert foods have sugar but sugar is added to other foods (bread, cereal, catsup, crackers) that are not considered deserts. Soda is one of the worse foods for these reasons.
11. People cannot just exercise off body fat from a poor diet because you ingest more than you can possibly work off.
12. People need some body fat. Body fat is used in the body for energy, warmth, transportation of vitamins and provides protection for internal organs.
13. You can have too much body fat, not enough body fat or just the right amount. Too much body fat can lead to serious diseases. Having too much body fat so that it can cause disease is called “obesity”. Some of the serious diseases that result from obesity are diabetes, cardio-vascular disease, liver disease, stress and kidney disease, all of which can be life threatening. In addition, physical injuries can result from too much body fat such as joint injuries (hip and knee).
14. Food can be categorized into fat, protein and carbohydrates. Each varies in the nutrients they have. The difference is whether or not the food has nutrients and minerals or not.
15. There are two types of carbohydrates; Bad (sugar, flour, white food) and Good (Fruits and vegetables). Good carbohydrates, such as fruit and vegetables, contain fiber in them. The fiber makes them harder to digest.
16. Food with fiber keeps you feeling full longer even though high fiber food may taste sweet and have carbohydrates. Foods with high fiber generally are fruits and vegetables. Therefore fruits and vegetables do not stimulate the body to grow body fat. Fiber is good.
17. Processed foods are manipulated to change the taste, ingredients, nutritional value and shelf life. Processed foods frequently contain preservative chemicals. Processed foods are manipulated to change the texture (crunchy chips) and color (golden fries) to make them more desirable to eat. Food companies favor processed food over whole food because they have a longer shelf life.
18. Athletes cannot just exercise off body fat from a poor diet because you ingest more than you can possibly work off.
19. The body is comprised of lean body mass and body fat mass. Your body is made up of different components (bone, muscle, fat, internal organs, fluids).
20. Body fat and the fat you eat from foods are two different things with the same name.
21. You can have too much body fat, not enough body fat or just the right amount. Too much body fat can lead to serious diseases. Having too much body fat so that it can cause disease is called “obesity”. Some of the serious diseases that result from obesity are diabetes, cardio-vascular disease, liver disease, stress and kidney disease. If you continue to eat poorly in your life you can have health problems. In addition, physical injuries can result from too much body fat such as joint injuries (hip and knee).
22. Food can be categorized into fat, protein and carbohydrates. Each varies in the nutrients they have. The difference is whether or not the food has nutrients and minerals or not.
23. There are two types of carbohydrates; Bad (sugar, flour, white food) and Good (Fruits and vegetables). Good carbohydrates, such as fruit and vegetables, contain fiber in them. The fiber makes them harder to digest.
24. Food with fiber keeps you feeling full longer even though high fiber food may taste sweet and have carbohydrates. Foods with high fiber generally are fruits and vegetables. Therefore fruits and vegetables do not stimulate the body to grow body fat. Fiber is good.
25. Sugar and bad carbs prevent you from burning body fat and tells your body to grow more fat.
26. Processed foods are manipulated to change the taste, ingredients, nutritional value and shelf life. Processed foods frequently contain preservative chemicals. Processed foods are manipulated to change the texture (crunchy chips) and color (golden fries) to make them more desirable to eat. Food companies favor processed food over whole food because they have a longer shelf life.
27. Sugar is a bad food. Sugar does not contain any vitamins and minerals therefore it does not help your body to stay healthy. Sugar makes you feel continually hungry and therefore makes you want to keep eating (usually more simple carbohydrates). Eating sugar makes you crave more sugar. Eating sugar and other sweet food and drinks makes you want to eat more sugary foods. Food companies put sugar in many different foods to enhance the taste.
28. Added sugar is ‘hidden’ in many foods, especially processed foods. People generally think that desert foods have sugar but sugar is added to other foods (bread, cereal, catsup, crackers) that are not considered deserts. Soda is one of the worse foods for these reasons.
29. Sugar is addictive. The bad carbs act as sugar in your body. That is why it is hard to give up bad carbs and sugars. And that is why when you eat them you want to continue to eat more. It’s not just because they taste good it’s also because they make you crave more bad carbs.
30. You should know what food contains good and bad protein, carbs and fats.
31. The basic message on nutrition is: Eat real food. Not too much. Mostly vegetables.

## Benefits of Physical Activity To Health and Life

Enduring Understandings:

* Good personal health and fitness may help to prevent certain diseases.
* The more often you are active, the more fit you become.
* People can become healthy by being active.
* Children should try to get at least one hour per day of exercise.
1. List as many different sports, activities and means of exercise as possible.
2. Survey two adults who exercise regularly and describe the types of exercise the adults do and when they are able to fit exercise into their daily routine. (Focus Questions: What is activity? What is physical activity? What physical activities can be done throughout your lifetime and why?)
3. Articulate that regular exercise helps to keep you healthy.
4. Give examples of certain diseases that regular exercise may help you prevent. (Focus Questions: What does healthy mean? Describe what being healthy means to you. What is disease and what can it do to your body? How can regular exercise help prevent disease? What are some diseases that regular exercise may help you prevent?)
5. Define “regular exercise as being active each day (frequency).
6. Practices a lifestyle of getting an hour of physical activity each day (time).
7. Understand that people can exercise hard or easy (intensity). (Focus Questions: Why would some people choose lower intensity physical activity? Why would some people choose higher intensity physical activity?)
8. Understand the training principle of Frequency.
9. Understand the training principle of Intensity.
10. Understand the training principle of Time.

(Focus Questions: Why is following the training principles essential to attain a positive outcome from regular exercise? Why would some people choose an easier physical activity? How often, how long, and how hard should you be continuously active? Why would some people choose higher intensity physical activity?)

1. Justify how each person is responsible for their own fitness.
2. (Focus Questions: Where, outside of school, can you be active?  What do you like about physical activity? What do you dislike about physical activity? Whose job is it to keep you fit? Why can’t someone else keep you fit? Where, outside of school, can you be active? Why isn’t it someone else’s responsibility to keep you fit? How can you become more responsible for your fitness level?

# Grades 6 to 8

## Rhythms and Dance

Enduring Understandings:

Dance beneficial for both; social interaction and for physical activity.

(Focus Questions: How can I make movement more interesting, fun, and enjoyable? How can understanding movement concepts improve my performance? How does my use of movement influence that of others?)

1. Create and demonstrate a rhythmic routine/dance of smooth flowing sequential movement patterns.
2. Demonstrate a synchronized group rhythmic activity that engages students in moderate to vigorous physical activity.
3. Explain and engage in a game, activity, or dance from a variety of different cultures and historical periods. (i.e. cricket, salsa, line dance, Just Dance Now, Happy, Tinikling)
4. Be willing to dance with others.
5. Identify various dance steps.
6. Understand cultural information related to various dances.
7. Compare and contrast features of dances already performed from different countries.
8. Explain how dance relates to various cultures.
9. Analyze the function and development of dance in past and present cultures throughout the world, noting human diversity as it relates to dance and dancers.
10. Demonstrate the ability to coordinate movement with different musical rhythms and styles
11. Demonstrate an ability to cooperate and collaborate with a wide range of partners and groups
12. Strive to complete patterns of steps on the beat.
13. Incorporate 3 or more movements into a dance pattern.
14. Work toward refining dance movements in a dance pattern.
15. Apply choreographic principles, processes, and skills to create and communicate meaning through the improvisation, composition, and performance of dance.
16. Utilize axial movements will be introduced to improve alignment, increase flexibility and balance. May include plies, lunges, leg swings, side stretches and releves.
17. Incorporate locomotor movements to develop coordination and spatial awareness. May include walks, skips, prances, leaps, and triplets.
18. Use creative activity to develop experimentation, exploration and application of dance principles.

## Games and Sports

NOTE: It is difficult to hold students responsible for acquiring specific sport skills. Mature technique in sports skills requires many hours of specific training and participation that is often not possible through physical education programs that are limited in time and facilities. In addition, each individual has a variance of physical talent, which affects their success in specific sports. There are a broad variety of abilities and that means that students should have the option to participate in modified games that are competitively appropriate for them.

Districts may have the philosophy that the best approach, as students get older, is to expose kids to the rules and participation in a variety of games or sports in an effort to encourage them to find activities they enjoy and can pursue outside of school.

Participation in games and sports for lifelong activity often varies from sport to sport and many are difficult to access as people age. Therefore it is important to expose students to lifelong activities.

Most importantly, districts should use sports and games for older students to emphasize the inherent physiological benefit of each specific activity and to teach the exercise science principles that can be transferred to other lifelong activities as they grow older.

Enduring Understandings:

Sports are appealing for students who are motivated toward physical activity by athletic competitiveness.

Sports are a vehicle for applying the concepts of teamwork, sportsmanship and fairness.

1. Applies rules and strategies unique to a variety of sports.
2. Recognize situations, in a variety of games/sports, which requires either an underhand or overhand throw.
3. Exhibits the correct decision in determining where (or who) to throw a ball during a competitively appropriate game/sport.
4. Attempts to throw a ball with the appropriate force, given different situations, during a competitively appropriate game/sport.
5. Adjusts to catch a ball approaching at a competitively appropriate force, coming at different angles, by adjusting their palms to face the ball.
6. Attempts to catch a ball approaching at a competitively appropriate force, by ‘giving’ with their hands.
7. Identifies a variety of specific equipment which is used to receive, strike, manipulate objects and the sports they are used in.
8. States the reason for the need to lead a receiver.
9. Incorporates locomotor movement patterns into a variety of competitively appropriate games.
10. Practice pivots, fakes, jab steps and screens to enhance their ability to participate successfully.
11. Practice the following offensive skills during small-sided game play: pivot, give and go, and fakes.
12. Learn techniques for controlling a ball in a variety of sports that they can practice.

## Physical Activity

Enduring Understandings:

Physical activity benefits improved health of all body systems.

Physical activity, when engaged for life, improves and maintains health for a lifetime.

Regular physical activity improves and maintains fitness.

Physical fitness is improved by applying the training principles across all types of activity.

### Knowledge

1. Understand that fitness and wellness can be broken into categories of strength, endurance, body composition, stress, cardio-respiratory fitness, skeletal fitness and flexibility
2. Identify the benefits of exercise which include: disease prevention, improved mood, improved athletic performance, enhanced self-esteem, better sleep, reduced stress, reduced joint pain, improved muscular development, stronger bones, improved flexibility, improved athletic performance, and overall fitness (improved muscular development, stronger bones, improved flexibility, reduced risk of injury).
3. Define/assess Frequency, Intensity, Time, Type, Overload, Progression, Specificity
4. Review the benefits of exercise and the training principles with which they are associated
5. Apply the concepts of frequency, intensity, time and type to maintain and improve fitness.
6. Understand that regular exercise benefits athletic performance and overall fitness.
7. Apply an understanding of the connections between the purpose of movements and their effect on fitness.
8. Apply F.I.T.T. to a variety of activities.
9. Improve my athletic performance through the use of F.I.T.T.
10. Apply the concepts of overload, progression, and specificity is essential to maintain and improve fitness.
11. Apply Overload, Progression and Specificity to various activities.

### Skeletal Fitness

1. Define the following terms: Weight Bearing Exercises, Types of Bones (Long, Short, Flat, & Irregular)
2. Identify the functions of bones (Storage of Calcium, Protection, Movement, Production of blood cells)
3. Define ‘bone density’.
4. Differentiate between ligaments and tendons.
5. Give examples and demonstrate a variety of weight bearing exercises.
6. Distinguish between the different kinds of bones in the skeletal system.
7. Demonstrate where bones are in various areas of the body.
8. Understand the importance of good nutrition and activity as you age so that you do not lose bone density.
9. Articulate that calcium is a critical nutrient in building bones
10. Identify food sources of Calcium.
11. Understand that a combination of weight bearing activity and ingesting calcium improves bone density.
12. Understand that in order to improve bone density you need to exercise with weight bearing activity almost every day.
13. Know how to vary activities so that you are not over straining your bones (overuse injuries).
14. Identify which weight bearing activity and activities are overloading which bones.
15. Understand how weight-bearing exercises increase bone density and strengthen your skeletal system.
16. Define osteoporosis.
17. Understand how to lower the risk of osteoporosis by application of the training principles.
18. Understand why you need to build strong bones during adolescence, since it is difficult to build bone density later in life.
19. Understand that ingesting calcium and regular weight bearing exercises improves bone density.
20. Understand that bone density can be increased through nutrition and activity during adolescence.
21. Understand that there is a relationship between bones, bone marrow and blood.
22. Identify foods rich in calcium and vitamin D.

### Cardio-Respiratory Fitness

1. Define Max heart rate, resting HR, elevated HR, Exercise HR zone.
2. Find target heart rate zone and how to figure your THR zone out.
3. Implement cardiovascular training into activities of their choice.
4. Identify activities that they enjoy which improves their cardio-respiratory fitness.
5. Identify the different heart rate zones.
6. Take heart rate in the different zones.
7. Self reflect on cardio activities that are enjoyable to each individual and identify activities outside of school to participate in.
8. Explain that different zones identify how hard you are working.
9. Explain that exercising in higher intensity zones will increase your cardiovascular fitness.
10. Intentionally exercise in a target heart rate zone.
11. Understand that exercise leads to an increased heart rate.
12. Explain that when you are fit, your resting heart rate decreases and therefore works less hard which is a sign of good health.
13. Alter activities to increase or decrease heart rate.
14. Work for a frequency at least 3 times a week.
15. Explain that when you increase your heart rate for a minimum of 20 minutes daily your heart will become stronger.
16. Clarify the difference between aerobic vs. anaerobic activity.
17. Identify which activities aerobic and which are anaerobic and why.
18. Identify the types of activities that benefit cardiovascular fitness
19. Understand that if you consistently train in cardiovascular exercise you will improve.
20. Understand that pushing past their comfort zone will improve their cardiovascular fitness.
21. Develop a cardio fitness plan.
22. Take their pulse.
23. Participate in a variety of aerobic/anaerobic activities.
24. Determine their resting, normal, target, and max heart rates.
25. Use a variety of different methods to monitor their intensity level.
26. Manipulate the training principles to strengthen the heart and lungs.
27. Define: Cardio-respiratory, Frequency, Intensity, Time, Type (Aerobic and Anaerobic), Rate of Perceived Exertion, Resting Heart Rate, Normal Heart Rate, Target Heart Rate, Max Heart Rate, Pulse, Carotid Artery, Radial Pulse
28. Explain the effect the training principles have on the heart and lungs
29. Engage in an increased variety of moderate to vigorous developmentally appropriate physical activities on a regular basis.
30. Assess physiological responses to exercise associated with one’s level of physical fitness and nutritional balance.
31. Analyze the results of one or more components of the fitness assessment.
32. Participate in a variety of cardio-respiratory activities
33. Monitor heart rate during activities.
34. Monitor intensity at a variety of levels while engaged in a variety of activities.
35. Understand how cardio-respiratory fitness affects wellness.
36. Define the physiological changes that occur with a stronger heart.
37. Strengthening the heart and lungs can improve a person’s overall well-being.
38. Define the following: well-being, blood pressure, stroke volume, resting heart rate, pulse, lung capacity
39. Stroke volume is the amount of blood the heart pumps with each beat.
40. Blood pressure is the measure of the blood forced against the walls of the arteries
41. A conditioned person has a lower resting heart and higher stroke volume than someone who is not conditioned.
42. Explain the relationship between cardio-respiratory exercise and blood pressure.
43. Explain relationship between lung capacity and oxygen levels.
44. Understand that increasing heart rate through cardio-respiratory exercise strengthens the heart muscle.
45. Explain the impact of cardio-respiratory health throughout a person’s life.
46. Justify how a healthy cardio-respiratory system affects wellness.
47. Explain physiological changes to the heart and lungs as a result of regular exercise.
48. Identify activities and behaviors that can either be helpful or harmful to the heart and lungs.
49. Explain the changes of the heart and lungs that occur with regular cardio-respiratory exercise
50. Access community resources related to cardio-respiratory activities.
51. Analyze the factors influencing cardio-respiratory activity selection and defend the choice.
52. Make a decision about participating in different cardio-respiratory activities based on feelings and interests.
53. Participate in a variety of cardio-respiratory activities.
54. Associate that respiration and cardiovascular exercises are strongly connected.
55. Understand that your respiratory system improves when you exercise, especially cardio exercises, you should do these kinds of exercise at least three time per week.
56. Understand that you breathe harder in your activity you are improving your respiratory system.
57. Associate that as in cardio, you should try to exercise at least 20 minutes continuously to improve your respiration.
58. Associate that as you improve your respiratory system, you will breathe more efficiently even while you are at rest or not exercising.
59. Understand that deep breathing can overload your lung capacity and improve your respiration. This can be done through cardio activities or in meditation or yoga.
60. Identify activities that elevate the respiratory system.
61. Understand that asthma is a condition that makes it hard for your body to pull in oxygen to your body
62. Understand that air pollution hurts your ability to breathe especially when you are exercising.
63. Understand that smoking damages your heart, lungs and cardio-respiratory system which is vital to life and health.

### Muscular Fitness

1. Specificity, demonstrate what exercises would affect a variety of muscle groups.
2. Differentiate between strength and endurance.
3. Understand that they can train muscles differently to train for strength, hypertrophy, endurance.
4. Articulate how they would train differently for strength or endurance.
5. Understand that ingesting protein is necessary for muscle growth.
6. Differentiate and perform compound strength movements and isolated training.
7. Understand how compound muscle movement benefits athletic performance.
8. Understand that recovery and rest are critical to improving musculature.
9. Understand that makes your muscles sore after activity
10. Understand that participation in a variety of physical activities (not only resistance training) will result in an increase in muscle capability.
11. Adhere to proper form and safety practices when resistance training to help prevent injuries.
12. Varying activities will not lead to overuse of specific muscles and help to prevent injuries.
13. Application of the training principles (F.I.T.T.O.P.S.) contributes to muscular development.
14. Non-use of a muscle group results in muscular atrophy.
15. Training a muscle group results in muscle growth or hypertrophy.
16. Definitions: Training Principles, Sets and Repetitions, Muscle Fibers, Atrophy, Hypertrophy, Upper, Lower and Core Muscle Groups
17. Explain that muscles increase and decrease in size.
18. Manipulate the training principles to improve muscular development.
19. Distinguish which muscle groups are being strengthened in a wide variety of activities.
20. Understand that the principles of training affect muscular capacity.
21. Understand that the muscles that are contracting during activity are the muscles being trained.
22. Understand that muscle fibers adapt to specific training
23. Definitions: F.I.T.T.O.P.S., agonist, antagonist, muscular strength (fast twitch), muscular endurance (slow twitch fibers)
24. Understand that resistance exercise enhances muscular fitness and that there are a variety of types of resistance.
25. Resistance training for a specific physical activity or sport improves performance in that sport or physical activity.
26. Define: agility, balance, speed, endurance, strength, power, fast and slow twitch,
27. Participate in a variety of muscular development activities.
28. Identify a training method that will help increase agility, balance, speed, endurance, strength and power in their own sport.
29. Differentiate between slow vs. fast twitch movements.
30. Differentiate between agility, balance and speed.
31. Define power as Strength x Speed = Power

### Safety

1. Explain the relationship between positive health behaviors and prevention of injury, illness, disease and premature death.
2. Use appropriate strategies to prevent/reduce risks and promote well-being
3. Know the safety practices and rules and form for each activity and sport you play.
4. Don’t hide injuries, you should tell an adult when you are hurt and discontinue playing.
5. Understand that being physically fit reduces your chance of injuries and aids in recovery after you are injured.
6. Proper conditioning and training can help reduce the risk of injury.
7. Wearing proper safety equipment (always!) is critical in preventing injuries.
8. Differentiating between pain and discomfort.
9. Warm-ups and cool-downs are critical to maintaining flexibility which is a large factor in preventing injury.
10. Overtraining, over exertion and overuse can lead to injury.
11. Using proper form in each sport or activity is important to prevent injuries.
12. Strengthening muscles are related to reducing injuries.
13. Helmets, and proper form will reduce the risk of concussions.
14. Cross training means varying different activities and through cross training you can prevent overuse injuries.
15. Rest, Ice, Compression, Elevation aids in recovery from strains, sprains and bruises.
16. Staying hydrated replaces lost fluids and prevents cramps.
17. Wearing proper footwear is critical to participating safely.
18. Dressing for weather conditions (and wearing sunscreen when appropriate) makes it safer to participate in outdoor activities.
19. Good flexibility reduces the chance of injury.
20. Appropriate muscular conditioning can decrease the chance of sprains and strains.
21. Reducing local fluid swelling to an injured area aids in recovery.
22. Define the acronym RICE and articulate its relation to sprains and strains.
23. Understand why swelling and discoloration occurs.
24. Identify muscle, tendons, and ligaments as the stabilizers of joints and the role strengthening plays in joint injury prevention.
25. Articulate that long bones are more susceptible to fracture because of their function and hollowness.
26. Understand why it is important to strengthen the muscles, tendons, and ligaments in relation to joints and injury prevention.
27. Distinguish between pain and discomfort.
28. Predict what would happen if you did not properly dress for the weather conditions.
29. Explain the importance of wearing non-constricting multilayered clothing, including gloves, hats, masks, and socks, to prevent cold injuries from occurring.
30. Explain why it is important to hydrate prior to exercise.
31. Predict what injuries may occur in a variety of sports if you are a “weekend athlete”. (Frequency)
32. Vary the intensity to decrease the risk of injury. (Intensity)
33. Predict how varying the time of an activity can affect the chance of injury from over use. (Time)
34. Explain the relationship between overloading a body system during a workout and how that can help to improve fitness and reduce the risk of injury. (Overload)
35. Reduce the risk of injury by gradually increasing the intensity of their workout. (Progression)
36. Apply both strength and flexibility conditioning to a variety of muscle groups in order to prevent injury to those muscles. (Specificity)
37. Create and demonstrate a proper warm-up specific to a variety of activities.
38. Draw a conclusion of the risk of injury if they don’t follow each of the training   principles.
39. List a variety of protective equipment, the body parts they protect and how they work.

### Flexibility

1. Understand the difference between dynamic and static stretching.
2. Define range of motion as the amount one can move a joint.
3. Know when to use different types of stretch (dynamic before, static after)
4. Stretching before and after activities leads to greater overall flexibility.(Frequency)
5. Apply specific stretches for targeted muscle groups.(Specificity)
6. Incorporate different tools, equipment or partners to assist in stretching activities.
7. Proper stretching improves performance and decreases the potential for causing injury.
8. Explain and demonstrate the kind of motion the joints in the body allow.

• Pivot - such as in the neck - rotating motion

• Hinge joint - Such as in the knee - permits back and forth motion

• Ball and socket - Such as the hip and shoulder - allowing for movement in many different directions

• Gliding joint - such as wrists and ankles - allow bones to slide over one another

1. Identify the type of joint, and where it is located.
2. Connect a type of joint(s) to an exercise.
3. Demonstrate: Where are the neck, chest, shoulder, lower back, hamstrings, groin, quadriceps, calves, and Achilles tendon?
4. Explain and demonstrate the difference between static and dynamic stretches.
5. Explain how proper stretching helps avoid injury and discomfort.
6. Demonstrate how to stretch specific muscles.  Repeat with variety of muscles.
7. Demonstrate dynamic and static stretches using proper form for each of the following areas: neck, shoulders, back, hips, hamstrings, thighs, and calves.
8. Articulate that flexibility is the lengthening of the muscles and if you do not use the range of motion available in a joint, muscles begin to shorten and you lose flexibility.
9. Full range of motion promotes safe and effective stretching.
10. Discuss: How can you measure range of motion in different joints? What consequences can occur through inflexibility? How is flexibility related to lower back pain? How do you maintain flexibility through out your life? How can you improve flexibility through out your life?
11. Identify and participate in activities that are good for improving flexibility.

## Stress

Enduring Understandings:

Regular exercise enhances the body’s ability to respond to stressors.

Stress is increased by negative lifestyle behaviors

Good lifestyle decisions can reduce stress.

People can cope with their stress or seek help.

1. Articulate that a stressor is something that causes stress.
2. Identify that stress can have harmful effects on the quality of life.
3. Articulate that both good events and bad events can be stressors.
4. Articulate that perceptions are based on past experiences, influenced by personality traits and are difficult to unlearn.
5. Recognize what you can and cannot control.
6. Discuss: What are stressors? What kinds of events can be stressors? How can stress have a harmful effect on your life? What are some good events that can cause stress? What are some bad events that can cause stress?
7. What are constructive and harmful responses to stressful situations?
8. Define the term “perception”.
9. Discuss: How are our perceptions influenced by our personalities? What are the major experiences that we have in our lives that could influence our perceptions? Why do past experiences have impact on who we are now?
10. Identify things in your life that are causing you stress.
11. Discuss: Is stress self imposed or does it come from other people and events?
12. Monitor their own stress and take steps to keep it in balance with the rest of their lives.
13. Articulate that limiting caffeine is beneficial to the nervous system and assists in combating the effects of stress.
14. Understand that junk food and refined sugars low in nutritional value and high in calories can leave us feeling out of energy and sluggish.
15. Understand that when some people get stressed they overeat junk food, they feel some immediate gratification but in the long run overeating, unhealthy eating and being overweight can stress our bodies by increasing blood pressure, body weight and effect sleep.
16. Understand that a good night's sleep makes you able to tackle the day's stress more easily.
17. Understand that electronics, particularly at bedtime, can be over stimulating, effect sleep and increase stress levels.
18. Be able to perform exercises and relaxation methods that reduce stress.
19. Relate how regular exercise enhances the body’s ability to respond to stress. (Releases endorphins.)
20. Plan time to relax and exercise.
21. When stress levels become intolerable individuals should seek guidance.
22. Discuss: Are TV and video games stimulating or relaxing?  Why? How is being over-weight stressful? How can regular exercise and physical fitness help you to cope with stress? How does a good night’s sleep help you cope with stress? How are stress and sleep related? Why is it up to each person to take responsibility for their own stress? How do certain foods help us deal with stress? What are some signs that you need to seek guidance to help manage your stress? How does stress effect blood pressure, body weight and sleep? How can you fit relaxation into your daily routine? What are some relaxation methods that you can do?
23. Perform deep breathing exercises.
24. Describe why breathing helps to relieve stress.
25. Perform stretching exercises that help to relieve stress.
26. Participate in activities that are designed to increase relaxation and focus.
27. Why does deep breathing help you to relieve stress?  (slows HR., oxygenation, muscle relaxation, mental clarity, calming, moves focus away from worries.)
28. Demonstrate breathing techniques.
29. Define stress in their own terms.
30. Identify on an individual basis what signs do they exhibit when they are stress.
31. Identify an adult that they can trust to talk to about difficult problems.
32. Differentiate that the signs of stress can be physiological or physical. Stress can be from good or bad events.
33. Understand that stressors are different for different people.
34. Understand that how you handle stress is critical to your well being.
35. Understand that constant stress without intervention can lead to more serious problems.
36. Understand that physical activity reduces stress.
37. Understand that deep breathing that occurs through activity and meditation can relieve stress.
38. Identify an adult that they can trust to talk to about difficult problems.
39. Be able to self-check their stress levels regularly.
40. Recognize stressors and how you can and cannot control them.
41. Discuss: What are perceptions and how can they effect your stress? How do you monitor your own stress? Sleep is important to repair your body. What interfere with your own ability to sleep well? What stressors interfere with your own lack of sleep.

## Nutrition

Enduring understandings:

The body needs nutrients to remain healthy and fuel energy.

Understanding the factors that influence eating can assist in managing a healthy body.

A balance of nutrients combined with a healthy lifestyle enhances health and wellness.

1. Understand that your body needs nutrients and fluids to function and to remain healthy.
2. Understand that the quality of the food you eat impacts your health and the quality is determined by its nutrient content.
3. Understand that being informed about the nutritional value of food allows you to make better decisions.
4. Understand that foods vary in quality based on nutrient value and on whether or not they stimulate the growth of body fat.
5. Understand that processing diminishes food quality and nutrient density.
6. Understand that eventually everyone makes personal choices of the food they eat but those choices can be influenced by other factors.
7. Understand that carbohydrates stimulate insulin. Insulin stimulates fat. Insulin inhibits the body from using fat as energy.
8. Understand that sugar and other simple carbohydrates have no nutrients, suppress satiation, are addictive and stimulate the growth of body fat.
9. People need food in order to stay healthy because food has vitamins and minerals in it that help your body grow, fight disease, give you energy and repair injuries. Recognize when a food has vitamins and minerals and what those words look like. Discuss some familiar vitamins and minerals and their benefits.
10. People choose the specific food they eat for taste, for energy, to prevent hunger, to get vitamins and minerals, to grow healthy, and during social events. People may also over eat because of psychological reasons.
11. How food tastes influences what you eat. People tend to eat food that tastes the best to them not necessarily food that is the healthiest.
12. Just because food tastes good doesn’t mean it is good for you. Food that tastes good but doesn’t have vitamins or minerals may do you harm by increasing your body fat.
13. The body is comprised of lean body mass and body fat mass. Your body is made up of different components (bone, muscle, fat, internal organs, fluids). One cannot change into the other (muscle doesn’t turn into fat) but each can grow or not grow. You can build muscle through physical activity. Physical exercise and training cannot completely compensate for a poor diet of junk food.
14. Body fat and the fat you eat from foods are two different things with the same name. There is a difference between healthy growth and too much body fat. Children grow in height until they are teenagers then they stay about the same for the rest of their lives.
15. Muscle weighs more than fat, and body weight is different than body composition. Each person has a set number of fat cells. Fat cells grow in the first couple of years of life and in early teen years. After that, there are a set number of body fat cells that can grow or shrink.
16. You can have too much body fat, not enough body fat or just the right amount. Too much body fat can lead to serious diseases. Having too much body fat so that it can cause disease is called “obesity”. Some of the serious diseases that result from obesity are diabetes, cardio-vascular disease, liver disease, stress and kidney disease, all of which can be life threatening. In addition, physical injuries can result from too much body fat such as joint injuries (hip and knee).
17. People have different body types. Some people have the propensity to grow fat easier than others. Obesity is generally developed over years of eating poorly.
18. Food can be categorized into fat, protein and carbohydrates. Each varies in the nutrients they have. There is unhealthy fat and healthy fat. There are unhealthy carbohydrates and healthy carbohydrates. The difference is whether or not the food has vitamins and minerals.
19. Carbohydrates and fat provide energy for the body. Simple carbohydrates create ‘quick’ energy that the body stores in the blood and can be quickly used by the muscles. Protein builds muscles. Body fat is ‘stored’ in your body and takes longer to convert into energy.
20. There are two types of carbohydrates; Simple (sugar, flour, white food) and Complex (Fruits and vegetables). Complex carbohydrates, such as fruit and vegetables, contain fiber in them. The fiber makes them harder to digest.
21. Simple carbohydrate (also called refined carbohydrate) thickens your blood (raises blood sugar), which stimulates insulin. Insulin keeps your blood thickness consistent and healthy. (If your blood is too thick it would clog your veins and arteries and that is not good.) BUT… insulin prevents you from using body fat for energy and also stimulates your body to grow additional fat.
22. Complex carbohydrates release insulin more slowly and are less likely to increase body fat. Simple carbohydrates digest quickly, raise insulin levels quickly and stimulate body fat growth. Therefore food fat does not make body fat, simple carbohydrates make body fat.
23. Simple carbohydrates give you quick energy but then you quickly “crash” and feel sluggish. Food with fiber slows down digestion and therefore does not raise blood sugar as much even though high fiber food may taste sweet and have carbohydrates. Foods with high fiber generally are fruits and vegetables. Therefore fruits and vegetables do not stimulate the body to grow body fat. Other carbohydrate foods turn into sugar in your body (bread, cereal, fries, pasta, rice, chips, crackers, fruit juice.). None of these has fiber to slow down digestion. The term “junk food” means the food has no nutrients or fiber.
24. Being hungry can stimulate your body fat to grow. So try to eat when you feel hungry. (Don’t starve yourself.) Simple carbohydrates make you feel hungry quicker. Try to eat to be satisfied but not over full. Eating only when you feel hungry is hard because people are busy during the day and meal times are set. Stopping eating is hard because people feel they need to finish their serving and because food looks, smells and tastes good. If body fat does not supply your cells with nutrients and energy then you will still feel hungry and want to eat more, therefore being fat makes you hungrier.
25. Be careful when you are hungry because highly processed, simple carbohydrate foods are usually “snack” food that can be unhealthy. Plan your snacks ahead of time so that you will eat healthy snacks. Understand what it means to feel satisfied. “Satiation” is the term used to describe when you feel satisfied. Changing eating habits is hard and takes planning. Try to eat low GI and GL foods so you won’t get hungry quickly. If you eat properly your body will regulate food intake for you (because you won’t get so hungry so quickly).
26. Processed foods are manipulated to change the taste, ingredients, nutritional value and shelf life. Processed foods frequently contain preservative chemicals. Processed foods are manipulated to change the texture (crunchy chips) and color (golden fries) to make them more desirable to eat. Food companies favor processed food over whole food because they have a longer shelf life. (Chips don’t go bad as quickly as fruit.) Therefore it saves the food companies money because they don’t throw out spoiled food. Food companies study what makes people want food. They try to get their processed food to reach what they call a “Bliss Point”. Bliss Point is the amount of salt, sweetness and texture that the food has which makes people crave more.
27. Sugar is a bad food. Sugar is a simple carbohydrate. Sugar does not contain any vitamins and minerals therefore it does not help your body to stay healthy. Sugar makes you feel continually hungry and therefore makes you want to keep eating (usually more simple carbohydrates).Eating sugar makes you crave more sugar. Eating sugar and other sweet food and drinks makes you want to eat more sugary foods. Food companies put sugar in many different foods to enhance the taste and to stimulate you to crave more. Sugar is the highest level of glycemic load and has no nutritional value.
28. Added sugar is ‘hidden’ in many foods, especially processed foods. People generally think that desert foods have sugar but sugar is added to other foods (bread, cereal, catsup, crackers) that are not considered deserts. Often, food is marketed at kids but is not healthy for kids. Soda is one of the worse foods for these reasons. Food companies deceive people by taking out the fat but replacing it with added sugar to make it taste good (low fat yogurt). Read the ingredients.
29. Sugar is a highly processed food. It comes from sugar cane, which is a tall fibrous plant that looks like bamboo. The sugar is processed out of the sugar cane to form a high glycemic, nutrient vacant, body fat producing, addictive substance; which is added to most processed foods. High fructose corn syrup is a sugar. Fruit juice is a sugar. Don’t be fooled by wording on food packaging that says “Pure Cane Sugar”, “No High Fructose Corn Syrup Added”, or “All Natural”. Even food that says “No sugar added” can contain sugar (fruit juice is an example). These are all foods with sugars.
30. People like food that tastes sweet because sweetness tastes better that sour or bitter food. A scale called “Glycemic Index” measures how quickly the food is released into the blood. It is on a scale of 0-100.
31. The effect food has on raising blood sugar is on a scale called ‘Glycemic Load’ which measures how well the food stimulates insulin. It takes into account how much fiber is in the food which slows digestion. The lower the ‘Glycemic Load’ the lower your blood sugar and insulin. Glycemic Load is on a scale from 0-60. The higher the number the worse the effect the food has on raising blood sugar. So the lower the glycemic load, the lower the insulin, which allows your body to burn body fat for energy.
32. Glycemic Load and Glycemic Index are not listed on food labels. Therefore you have to look them up.
33. Your body has plenty of energy stored as fat. The problem is if high insulin levels won’t let you use that fat for energy and creates a craving for more simple carbohydrates. Another problem is where your body stores fat. If the fat in your body is in your belly, around your heart or in your liver it poses serious dangers to your health. The toxic chemicals released from these fats around your organs are a danger to your cardio-vascular system. It can result increased blood pressure, plaque in your arteries, cancer, stroke, arthritis, diabetes, loss of sleep and other negative physical ailments. Simple carbohydrates damage the cells in your body. For these reasons some scientists say that sugars are toxins (poisonous).
34. Proteins and fats do not stimulate insulin and have a low Glycemic Load and therefore do not stimulate the growth of body fat as readily as simple carbohydrates.
35. Nutrients and minerals are listed on food labels. Ingredients are listed on food labels. Fiber is not listed on food labels. Glycemic load is not listed on food labels. You have to look for the nutrients on the food label, then look for the ingredients, then look up the fiber and glycemic load.
36. Fruits and vegetables have no food labels because they are whole foods. (The ingredient for an apple is an apple.) So you have to look up the vitamins, minerals, fiber and glycemic load for whole foods.

## Social Responsibility

Enduring Understanding

All people have a responsibility to treat others with respect, tolerance and acceptance.

Participation in sport and play is made enjoyable by relating positively to others.

1. Demonstrate proper sportsmanship, sharing, cooperation and teamwork before, during, and after game play.
2. Demonstrate respect for their players, officials, equipment and rules.
3. Demonstrate proper etiquette at all times.
4. Work cooperatively with their peers.
5. Have an appreciation for individual differences.
6. Maintain a positive self-concept.
7. Display a healthy attitude in competitive situations.
8. Maintain self-direction and decision making skills especially in emotional situations.
9. Acquire skills for everyday living.
10. Develop skills needed for resolving conflict in a physical activity setting.
11. Engage in physical activity at a level to which they will derive a health benefit.
12. Internalize an understanding that to engage in physical activity they need plan and to be prepared to participate.

## Health, enjoyment, challenge, self-expression, and social interaction.

1. Demonstrate willingness to attempt a variety of new physical activities.
2. Define wellness and well-being.
3. Clarify the factors they take into consideration when choosing an activity.
4. Choose a physical activity that fits your lifestyle and is right for you.
5. Explore the social factors that determine activity levels: income, emotion, stress, physical health, personality, age, capabilities, friends, adult support, time, rewards, enjoyment, knowledge of health benefits, past participation
6. Explore the environmental factors that determine activity levels: location, facilities
7. Make decisions about participating in different physical activities based on feelings and interests
8. Examine the characteristics of physical activities that may influence activity: exercise intensity/duration, team vs. individual programs, competition
9. Make a decision about participating in different activities based on feelings and interests.
10. Research available community resources and create an action plan for activities.
11. Demonstrate the ability to locate and use resources from home, school and community that provide valid health information, products and services.
12. Examine factors that may influence the personal selection of health information, products and services
13. Analyze how family, school and peers influence personal health.
14. Use a decision-making process to enhance health.
15. Encourage and support others in making positive health and fitness choices.

# Grades 9-12

The focus of high school physical education should be to develop students’ independent competencies so that they are able to sustain a lifetime of physical activity. There are a variety of scheduling structures for Connecticut’s school districts. Schools should strive to allow for student choices of activities and for students to take responsibility for planning their own lifestyles and plan for activities that meet their interests and personalities. In planning 9-12 physical education curriculum, departments should identify where, in their own programs, students will demonstrate the following learning objectives.

## Lifetime Activities

Enduring Understandings:

Remaining physically active for life has far reaching benefits for mental, physical and social health.

1. Choose activities that fit their interests and personalities.
2. Identify the types of activities that can be carried out throughout their lives.
3. Identify the characteristics of team sports that may prohibit one from continuing a specific activity as you age.
4. Identify the specific physiological benefits for remaining active throughout life.
5. Identify the social benefits of remaining active and engaging in enjoyable recreational activity.
6. Recognize that individual sports are lifetime activities that are easily entered because they don’t require assembling teams of people.

## Dance and Rhythms

Enduring Understandings:

Engaging in dance has social and physical benefits.

Dance, as an art form, should be appreciated.

Engaging in dance requires some level of physical capability.

1. Demonstrate the competency in being able to engage in a few social dances.
2. Realize the social benefits of dance.
3. Appreciate the artistry and athleticism in good dancing.
4. Are kind and considerate to others in social situations that include dance.
5. Recognize the cultural value of dance.
6. Explore the history of dance and its influence on cultures
7. Recognize that individuals have different preferences for styles of dance
8. Identify specific dance movements that enhance flexibility.
9. Associate the lack of flexibility to possible risk of injury.
10. Share prior dance knowledge with others. (for advanced dancers)
11. Demonstrate basic dance moves, rhythm and beat.
12. Participate in a simple to complex rhythmic dance.
13. Work in groups.
14. Appreciate the history, characteristics and significance of specific dance styles.
15. Collect and share information on the specific dance style.
16. Share several steps of the specific dance style with class.
17. Peer teach and learn various dance steps.
18. Teach parts of a dance.
19. State that weight-bearing exercises such as dance are beneficial to skeletal health.
20. Participate in weight bearing dance activities in class.
21. Make connections between dance and healthy living.
22. Create a fitness routine using dance steps.
23. Participate in a variety of dance activities.
24. Participate in a line dance to music.
25. Explore various types of dance.
26. Recognize dance as an outlet for stress.
27. Recognize dance as a social outlet.
28. Identify how muscular strength, flexibility, cardio-respiratory systems improve with dance.

## Engages in Fitness Activities

1. Demonstrates activities and exercises that improve cardio-respiratory fitness, muscular strength, muscular endurance, flexibility, skeletal fitness, body composition, and stress management.
2. Adjusts their perspective on lifestyle to include regular physical activity as a necessary part of remaining physically and mentally healthy.
3. Demonstrates basic body weight exercises as defined by the coursework and the instructor.
4. Demonstrates basic weight resistant exercises (weight training) as defined by the coursework and the instructor.
5. Can plan when they will engage in physical activity in their lives.
6. Articulate personal fitness goals that are for them personally.
7. Can plan the types of activities that match their fitness goals.

## Movement Concepts, Principals, Knowledge

Enduring Understandings:

Attaining a minimal level of fundamental movement competency enhances success and enjoyment of physical activity.

Everyone should seek to find the activity that they enjoy and thus increase the likelihood that they will engage in activity regularly.

People need to accept their physical ability and enjoy activity for itself and for the social, and physical benefits.

1. Identify activities and exercises that can be done in water besides swimming laps.
2. Demonstrate movements in the water contribute to improving fitness.
3. Demonstrate how the water and surrounding environments be used to prevent injuries or rehabilitate injuries.
4. Identify the health benefits from water training and/or swimming.
5. Consider water training as a variant in your workouts.
6. Participate in shallow water workouts
7. Demonstrate various shallow water locomotion activities
8. Use equipment such as dumbbells, noodles, kickboards, aqua jogging belts, and more to increase resistance and movements towards exercise.
9. Participate in swimming exercises across the width of the pool.
10. Design and demonstrate a shallow water workout routine.
11. Recognize basic swim strokes and attempts to execute them.
12. Implement, to the best of their ability, basic movement and coordination skills into games and sports.
13. Evaluate their own competitiveness and connect their personality to activities that they may enjoy.
14. Understand that enjoyment and social interaction are significant contributors to remaining motivated to stay active.
15. Search for activities that are available to them in their community.
16. Research how they can engage in activities that they are interested in, in their community.
17. Put into perspective their athletic performance ability and develop the maturity to realize the value of engaging in their choice of activity regardless of their performance talent.
18. Students will attempt to understand the proper techniques for performing skills in activities/sports they choose.
19. Associate practice with skill improvement.
20. Learn strategies and rules as articulated in the coursework and defined by the instructor.
21. Demonstrate general knowledge of the rules for basic game play.
22. Identify basic safety considerations specific to the activity or sport.
23. Engage in practice drills specific to the activity or sport.
24. Learn the terminology of specific activities and sports that they are learning about.
25. Identify safety precautions and equipment specific to activities and sports they are engaged in.
26. Identify the muscular, skeletal, flexibility, cardio-respiratory, stress, body composition, benefits of the specific activities and sports they are engaged in.

## Physical Activity Knowledge

Enduring Understandings:

Understanding the physiological benefits to activity enhances motivation to continue being active.

Understanding the specific benefits to various activity types allows people to plan for a comprehensive exercise program.

An exercise program that incorporates safety allows individuals to continue activity consistently without disruption due to injury.

1. Understand that muscle fibers adapt to specific training.
2. Understand that aerobic exercise can reduce controllable heart health risk factors.
3. Recognize the signs and symptoms of heat-related injuries.
4. Explain how to protect themselves from heat-related injuries.
5. Explain that hyperthermia can become a life-threatening condition.
6. Recognize the signs and symptoms of cold-related injuries.
7. Explain how people alter their activities and interests for the safety of their activity environment.
8. Explain how physical conditioning is an important factor in injury prevention.
9. Explain why warm-ups and cool down essential in preventing injuries.
10. Explain how proper warm-ups and cool downs affect your performance.
11. Explain the advantages of a dynamic warm-up.
12. Analyze how behaviors can affect health maintenance and disease prevention.
13. Understand that drinking water is considered the most important factor in heat illness prevention.
14. Understand that injuries affect frequency of exercise and overall conditioning.
15. Understand basic First Aid and CPR. (This is a state mandate. Detailed techniques for first aid and CPR should be taught by an instructor who is trained in a recognized program.)
16. Engage in conversations about the usefulness of predetermined workout programs produced on a mass scale.
17. Assess if mass produced workout routines effectively address each fitness component on an individual level.
18. The validity of marketing claims, fads, and myths can help determine the authentication of certain products and services.
19. What is the most powerful tool in combating consumer fraud?
20. What are examples of unsound and worthless fitness products?
21. Why are advertisements claiming fast weight reduction and spot reduction fraudulent schemes?
22. Culture, media, technology and other factors can influence consumer product selection.
23. What influences people to buy certain products?
24. How can a fitness center be evaluated?

## Engages in Physical Activity

Enduring Understandings:

Being able to design and engage in a physically active lifestyle enhances the likelihood that people will remain physically active for life through intrinsic motivation.

Seeing activity as something that is for you personally enhances your motivation toward physical activity.

1. Design and implement a personal wellness program based upon information obtained from a fitness assessment and in accordance with appropriate training and nutritional principles.
2. Utilize a variety of community resources for participation in individual sports.
3. Create a dynamic warm-up that prepares the body for all body parts and movements that relate to an activity.
4. Create a personal workout that includes a dynamic warm-up and a cool-down to perform and demonstrate.
5. Describe researched information on minimum requirements of cardiovascular, muscular strength, muscular endurance and flexibility training for health benefits
6. Articulate their personal fitness goals.
7. Identify factors they should consider before engaging in a fitness program.
8. Identify the steps in designing a personal fitness program.
9. Assess which components of fitness need to be addressed in a potential individualized routine.
10. Design and individualized workout that addresses the components of fitness and incorporates a variety of fitness training tools.
11. Adjust their warm-up and cool down routines to better align with their workout programs.
12. Use individually designed programs to perform a workout for fitness.
13. Identify personal motivational strategies to assist in the successful adherence to a fitness program
14. Plan for a progressive increase in workout intensity as their program continues.
15. Strategize individually and with a small group about possible adjustments that can be made to their fitness programs.
16. Assess areas of success with their individualized routine.
17. Assess areas of weakness with their individualized routine.
18. Assess the importance of assuming responsibility for personal health and fitness.

## Fitness Knowledge

Enduring Understandings:

People who are healthy and fit improve their quality of life.

Understanding and implementing the training principals increases your ability to improve fitness.

Understanding how to train improves one’s comfort level in physical activity settings.

Understanding the physiological principles of training increases the effectiveness of planning one’s exercise program.

People who understand how to train effectively eliminate the need to spend money on trainers.

1. Identify the types of activities that are best for developing cardiovascular fitness.
2. Participates in regular cardiovascular fitness activity in order to maintain a healthy lifestyle.
3. Applies the principals of training principles (FITTOPS) to improve cardiovascular fitness.
4. Definitions: Pulse, Aerobic fitness, Aerobic endurance, Cardiovascular fitness, Levels of intensity, Anaerobic, Target heart rate, Maximum heart rate, Resting heart rate, Recovery heart rate, FITTOPS (Frequency, Intensity, Time Type, Overload, Progression, Specificity), Risk factor
5. Demonstrate participation in an activity of their choosing and remain in their target zone.
6. Use self, peer, teacher and technological resources as tools to calculate and measure pulse in a variety of situations (resting, active, target and recovery) in self and others .
7. Are able to measure/gauge workout intensity using their selected process.
8. Measure heart rate while participating in a variety of activities.
9. Design goals for cardiovascular fitness and develop an aerobic exercise program that demonstrates cardiovascular progression based on their current fitness level and target heart rate range.
10. Summarize how cardiovascular fitness improves with training.
11. Categorize and compare the risk factors for cardiovascular disease.
12. Participate in training methods (continuous training, fartlek training, circuit training, interval training, PACER) for cardiovascular fitness.
13. Participate in a wide variety of activities, including dance, games, sports and lifetime physical activities.
14. Complete a reflection comparing and evaluating different cardio training methods.
15. Complete a personal heart history project.
16. Understand that increased flexibility improves movement and overall wellness.
17. Understand how a person loses flexibility.
18. Use the training principles to improve flexibility.
19. Relate the importance of flexibility to overall fitness.
20. Demonstrate an understanding of stretches, using proper technique for the major areas of the body.
21. Compare different methods of stretching and use this information to design a stretching program for a sport or activity.
22. Describe the interrelationship of flexibility and the other components of fitness
23. Definitions: Joint, Ligament, Muscle groups, Tendon, Training principles, Types of stretching (dynamic/static/ PNF stretching)
24. Identify the minimum amount of cardiovascular training a person needs each week to promote health.
25. Identify the minimum amount of flexibility training a person needs each week to promote health.
26. Understand that regular exercise affects your physical fitness throughout your life. And that people of all ages can and are active.
27. Lists the controllable risk factors and identify the uncontrollable risk factors.
28. Describe researched information on treatment for sprains, strains, and broken bones
29. Describe researched information on risk factors (controllable, uncontrollable, and what can be controlled for lifetime).
30. Define a “set”.
31. Define a “rep”.
32. Demonstrate how to apply the principle of “overload”.
33. Demonstrate how to apply the principle of “progression”.
34. Demonstrate the principle of “specificity” towards your goal in the workout you create.
35. Identify the three types of muscles.
36. Describe the health benefits result from muscle training.
37. Define micro tears.
38. Identify the minimum amount of muscle training someone can do to promote health and functionality.
39. What are the benefits of multi-joint (complex) exercises over single-joint exercises.
40. Attempt a variety of exercises focusing on different muscles using different equipment, and creating a workout sheet along the way of personal favorite exercises.
41. Identify and note the location of the muscles on the body as they attempt different exercises for the same muscle group.
42. Identify numerous ways that they can use home equipment to train.
43. Explain the different training techniques between muscular strength and muscular endurance.
44. Recognize that individuals need to participate in regular muscular fitness activities in order to maintain a healthy lifestyle.
45. Students should know the following definitions: Atrophy, Hypertrophy, Steroids, Slow twitch muscle fibers, Fast twitch muscle fibers, Resistance, Repetition, Sets, Muscular strength, Muscular endurance, Symmetry, FITTOPS.
46. Predict the immediate and long-term impact of health decisions on the individual, family and community in regards to steroids.
47. Use and evaluate safety techniques to avoid and reduce injury during resistance training.
48. Demonstrate the ability to access and evaluate resources that provide valid health information and services for themselves and others when investigating myths about weight training.
49. Create and Evaluate a muscular fitness programs for themselves.
50. Predict how muscular development enhances resting metabolic rate.
51. Identify the time frame in which muscular gains occur (4-6 weeks) and when those gains become visible (6-8 weeks).
52. Participate in a wide variety of  resistance training activities.
53. Demonstrate proper form and safety techniques for all exercises.
54. Understand that a variety of fitness training types has a greater impact on the individual than one specific training style.
55. Understand that addressing each component of fitness is vital for the balance and development of the whole physical body.
56. Understand the importance of having a quality warm-up and cool down as part of their workout routine.
57. Design an individual warm-up and cool down routine.
58. Understand that the body balances itself due to muscular engagement.
59. Describe safety precautions that should be taken when using exercise equipment.
60. Identify benefits that are derived from participation of cardiovascular circuit training.
61. Identify myths about weight training.
62. Identify a variety of activities that can be combined in a circuit to promote muscular strength and endurance.
63. Identify how circuit training can impact body composition.
64. Participate in low, medium, and high intensity circuit training endeavors.
65. Understand the physiological concepts of isometric training.
66. Perform a number of different isometric exercises in order to gain experience manipulating the fitness method.
67. Identify precautions to be taken when their body is under different climate related conditions or new workout stresses.
68. Find ways to incorporate the flexibility component into workout routines.
69. Address how their fitness program can assist in stress management.
70. Progressively increase workout intensity as needed.
71. Continue to work on developing their musculature through their individually designed fitness programs.
72. Understand that a combination of resistance training, aerobic exercise and adjusting caloric intake effectively manages weight.

 High intensity workouts increase resting metabolism.

 Metabolism can be increased during exercise and while at rest.

 skeletal health is measured by bone density.

 Aerobic activity increases lung capacity.

1. Articulate that regular exercise allows you to breathe easier during daily activity.
2. State that aerobic activities condition the heart.
3. Design an aerobic workout.
4. Identify major cardiovascular risk factors; describe how the heart, lungs, blood and blood vessels work together.
5. State that the purpose of aerobic training is to improve the body’s ability to deliver oxygen to the muscles and expire carbon dioxide.
6. Understand that training and conditioning provide opportunities for enjoyment, challenge, self-expression and social interaction.
7. Define that weight-bearing exercises are those that force you to work against gravity and “load” the skeletal system.
8. Explain the need to build strong bones in your teen years.
9. Calculate their heart rate at various stages of a workout.
10. Calculate their resting, and training heart rate.
11. Demonstrate an understanding of how the circulatory and respiratory systems work together and the effects of aerobic exercise on these systems.
12. Train within their target range.
13. State importance of using a variety of training methods to prevent injuries.
14. State that injuries can be from overtraining, improper form, overextending yourself, poor warm-up or cool-down.
15. Participate in a variety of aerobic programs as part of class.
16. Understand that weight bearing exercises and proper nutrition as a means of developing or improving bone density.
17. Analyze the relationship between nutrition, aerobic exercise, weight training, and weight management.
18. Investigate exercise classes in their community

## Assessment and Program Planning

1. Design and implement a personal wellness program based upon information obtained from a fitness assessment and in accordance with appropriate training.
2. Predict how families can influence the c-v health of individuals.
3. Understand that the combination of sound nutrition and regular physical activity the most desirable method for permanent weight control.
4. List the factors that would influence weight loss, weight gain or weight maintenance.
5. Explore how media promotes an unattainable body image.
6. Definitions: Endomorph, Mesomorph, Ectomorph, Body composition, Lean body mass, Obesity, Anorexia, bulimia, Metabolism
7. Predict which activities will raise metabolic rate the most.  Justify your prediction.
8. Change the activity to increase metabolic rate.
9. Participate in a wide variety of activities, including dance, games, sports and lifetime physical activities.
10. Identify the steps necessary for goal setting.
11. Discuss the importance of belief in oneself in attaining goals.
12. Discuss the importance of goal setting.
13. Identify how to use the goal-setting process to improve their health and fitness.
14. Discuss how goal setting is a process that can provide guidance to improve oneself and often leads to achievement of success.
15. Demonstrate various strategies when making goal-setting decisions to enhance health.
16. Identify the steps of goal setting.
17. Differentiate between long and short-term goals.
18. Become familiar with SMART goal format.
19. Identify personal obstacles.
20. Definitions: Desire, Belief, Analyze, and Timeline.
21. Participate in the SMART goal setting process.
22. Identify obstacles that may prevent them from achieving their goals.
23. Participate in discussions about methods of monitoring one’s progress.
24. Assess effectiveness of their program based on the fitness components.
25. Identify a short-term goal, incorporate  the smart goal process and design an action plan to achieve success.
26. Goal Setting Guidelines
	1. -What is a goal?
	2. -Specific
	3. WHAT- are you going to do? Use action words such as direct, organize, develop, plan, build etc.
	4. WHY- is this important to do at this time? What do you want to ultimately accomplish?
	5. HOW- are you going to do it?
	6. \*Measurable - Choose a goal with measurable progress, so you can see the change occur and establish checkpoints that will keep you on track.
	7. \*Attainable - A goal needs to stretch you slightly so you feel you can do it and it will need a real commitment from you.  The feeling of success that this brings helps you to remain motivated.
	8. \*Realistic - This is not a synonym for “easy.” Realistic, in this case, means “do-able.” Set the bar high enough for a satisfying achievement!
	9. \*Timely - Putting an end point on your goal gives you a clear target to work towards.  Time must be measurable, attainable and realistic.
27. Reflect on the success of their goals.
28. Anabolic steroid use can have negative effects on health and wellness
29. Identify some negative consequences and dangers of steroid use.
30. List how steroid use affects an individual’s well being.
31. List some reasons why people take anabolic steroids.
32. Define what anabolic steroids are and the dangers of their usage.
33. Differentiate between facts, fads, and myths as related to physical fitness.
34. Determine the validity of marketing claims promoting physical fitness products and services.
35. Identify consumer issues related to product selection
36. Definitions: Consumer, Advertising, Fraudulent, Diuretics, Edema, Anabolic steroids, Personal Trainer

## Nutrition

Enduring Understandings:

The quality of the food you eat impacts your health and the quality is determined by its nutrient content.

Foods vary in quality based on nutrient value and on whether or not they stimulate the growth of body fat.

1. Carbohydrates stimulate insulin. Insulin stimulates fat. Insulin inhibits the body from using fat as energy.
2. Sugar and other simple carbohydrates have no nutrients, suppress satiation, are addictive and stimulate the growth of body fat.
3. The body is comprised of lean body mass and body fat mass. Your body is made up of different components (bone, muscle, fat, internal organs, fluids). One cannot change into the other (muscle doesn’t turn into fat) but each can grow or not grow. You can build muscle through physical activity. Physical exercise and training cannot completely compensate for a poor diet of junk food.
4. You can have too much body fat, not enough body fat or just the right amount. Too much body fat can lead to serious diseases. Having too much body fat so that it can cause disease is called “obesity”. Some of the serious diseases that result from obesity are diabetes, cardio-vascular disease, liver disease, stress and kidney disease, all of which can be life threatening. In addition, physical injuries can result from too much body fat such as joint injuries (hip and knee).
5. Food can be categorized into fat, protein and carbohydrates. Each varies in the nutrients they have. There is unhealthy fat and healthy fat. There is unhealthy protein and healthy protein. There are unhealthy carbohydrates and healthy carbohydrates. The difference is whether or not the food has nutrients and minerals or not.
6. Carbohydrates and fat provide energy for the body. Simple carbohydrates create ‘quick’ energy that the body stores in the blood and can be quickly used by the muscles. Protein builds muscles. Body fat is ‘stored’ in your body and takes longer to convert into energy.
7. Your body has plenty of energy stored as fat. The problem is if high insulin levels won’t let you use that fat for energy and creates a craving for more simple carbohydrates. Another problem is where your body stores fat. If the fat in your body is in your belly, around your heart or in your liver it poses serious dangers to your health. The toxic chemicals released from these fats around your organs are a danger to your cardio-vascular system. It can result increased blood pressure, plaque in your arteries, cancer, stroke, arthritis, diabetes, loss of sleep and other negative physical ailments. Simple carbohydrates damage the cells in your body. For these reasons some scientists say that sugars are toxins (poisonous).
8. Antioxidants, which are found in fruits and vegetables, help the body get rid of the toxins and rebuild the body’s cells.
9. Proteins and fats do not stimulate insulin and have a low Glycemic Load and therefore do not stimulate the growth of body fat as readily as simple carbohydrates.
10. Other carbohydrate foods turn into sugar in your body (bread, cereal, fries, pasta, rice, chips, crackers, fruit juice.). None of these has fiber to slow down digestion. The term “junk food” means the food has no nutrients or fiber.
11. Sugar is addictive and can be categorized as a drug because of its addictive nature.
12. Each individual is responsible for finding nutritional information and making good nutritional decisions.
13. The food industry and the government have significant influence on the quality of our food.
14. Individuals have the responsibility to properly store and clean food.
15. Good nutritional habits enhance the quality of life.
16. Explain weight loss, weight gain, and weight maintenance and the difference between being overweight and obese.
17. Explain why permanent weight control is best achieved by a combination of diet and physical activity.
18. Articulate that food is used as fuel and the number of calories used varies at different intensities.
19. Define and list the medical problems associated with excess amounts of body fat.
20. Definitions: Ectomorph, Body composition, Lean body mass, Overweight, Obese, Ideal body weight, Creeping obesity, Anorexia nervosa, Bulimia, Spot reduction, Somatotype, Endomorph, Mesomorph
21. Define that body fat relates to the amount of fat in your body as compared to muscles, bones and organs.
22. Identify the factors that play a role in caloric consumption.
23. Consuming the proper proportion of the six main nutrients, combined with exercise can ensure a healthy body fat and weight
24. Explain why repeated dieting unsuccessful for many people.
25. A combination of resistance training, aerobic exercise and adjusting caloric intake effectively manage weight
26. Explain why it is beneficial to increase resting metabolic rate.
27. Explain how high intensity exercise can improve one’s metabolism even at rest.
28. Explain what is meant by a “balanced diet”.
29. Explain how caloric consumption relates to weight loss.
30. Identify the factors that play a role in caloric consumption.
31. Explain why eating nutritious food help you delay hunger.
32. Explain why a proper calorically balanced diet can help with weight control and prevent malnutrition.

## Stress Management

Enduring Understandings:

Stress negatively affects many aspects of health.

Stress can be managed through, relaxation, sleep, exercise and diet.

1. Explain that relaxation techniques and meditation can relieve stress by increasing blood flow and relaxing tense muscles.
2. Discuss the benefits of relaxation and meditation techniques in relation to the controllable health risk factors.
3. Understand the meaning of stress, its causes, and how to manage it.
4. Explain how the benefits of stress management affect the quality of performance in all aspects of life as well as defending against health problems.
5. Identify stress management techniques, such as, sleep and rest affect recovery and balance of the body.
6. Identify the components of a stress management program.
7. Describe several negative and positive stressors in their life.
8. Describe how stress affects their life.
9. Explain how lack of sleep and stress are related.
10. Identify stress diversion activities and how are they helpful.
11. Understand that stress and lack of sleep can have many negative effects on the body.
12. Identify the illnesses that are brought about as a result of lack of sleep.
13. Identify the factors lead to lack of sleep.
14. Explain the relationship that exists between sleep problems and physical fitness.
15. Explain how stress is related to various diseases, such as cardiovascular disease.
16. Explain how positive and negative stresses affect your emotions and how you behave.
17. Explain how culture, media, technology and other factors can influence behavior which has an effect on  stress management.
18. Identify negative coping techniques and why should you avoid them.
19. Define stress and explain why different people react differently to a specific situation.
20. Identify the common causes of stress and describe the effects of it on the body.
21. Identify the components of a stress management program and explain how the diversion activities help people.
22. Definitions: Stress, Positive stress (eustress), Negative stress (distress), Stressor, Homeostasis, Fight-or-Flight response, General adaptation syndrome, Stimulus, Adrenaline, Time Management, Positive Coping Strategies, Stress-diversion activities, Negative coping techniques

## Resources:

East Grand Rapids Physical Education Curriculum

<https://www.egrps.org/documents/Curriculum/PE%20DOCUMENT.pdf>

Madison, CT Public Schools Physical Education Curriculum:

<https://www.madison.k12.ct.us/uploaded/docs/CurriculumGuides/PHYSICAL_EDUCATION_CURRICULUM_GUIDE.pdf>

Monroe Public Schools Physical Education Curriculum

Pomperaug Regional School District 15 Physical Education Curriculum

SHAPE America, “Dance in the Elemenatary School” Dr. Theresa Purcell Cone
Dr. Stephen L. Cone