**NorthEastSchool Division**



**Unpacking Outcomes**

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| **Outcome (stated in its entirety) to be unpacked** | | |
| **5.1 Health-related Fitness - Create and implement, with guidance, as a class, a health-related fitness plan targeting the health-related fitness component of cardiovascular endurance that includes setting a personal goal for improvement, applies the F.I.T.T. principle (Frequency, Intensity, Type of activity, and Time), and incorporates daily moderate to vigorous movement activity.** | | |
| **Outcome Unpacked** (circle the verb and underline the Nouns/Qualifiers) | | |
| **Create health related fitness plan targeting cardiovascular endurance**  **Implement health related fitness plan targeting cardiovascular endurance** | | |
| **KNOW** | **UNDERSTAND** | **BE ABLE TO DO** |
| * **F.I.T.T. Principle** * F = Frequency * I = Intensity * T = Time * T = Type * **Cardiovascular System** * The [circulatory system](http://www.medterms.com/script/main/art.asp?articlekey=2738) which comprises the [heart](http://www.medterms.com/script/main/art.asp?articlekey=3668) and blood vessels. The system carries nutrients and [oxygen](http://www.medterms.com/script/main/art.asp?articlekey=10690) to the tissues of the body and removes carbon dioxide and other wastes from them. * **Cardiovascular Endurance (C.E.)** * the ability of the heart to provide oxygen to muscles during physical activity for a prolonged period of time. * **Heart Rate** * # of heart beats per minute (bpm) * **Resting Heart Rate** * a person's heart rate when they are at rest: awake but lying down, and not having immediately exerted themselves. Typical healthy resting heart rate in adults is 60–80 bpm * **Maximum Heart Rate** * Your true MHR is the highest pulse rate you can attain during all-out effort. To estimate your MHR is to subtract your age from 220. * **Target Heart Rate Zone** * a desired range of heart rate reached during [aerobic exercise](http://en.wikipedia.org/wiki/Aerobic_exercise) which enables one's [heart](http://en.wikipedia.org/wiki/Heart) and [lungs](http://en.wikipedia.org/wiki/Lungs) to receive the most benefit from a workout. The THR can be calculated as a range of 65%–85% intensity of your maximum heart rate. * **Intrinsic Benefits of C.E.** * Enjoyment * enhanced health * level of success * increased energy level * reduced stress level * Connection to others * **Extrinsic Benefits of C.E.** * Awards * Media * sport heroes * family * Peers * **Aerobic Exercise -** physical [exercise](http://en.wikipedia.org/wiki/Exercise) that intends to improve the oxygen system. Aerobic means "with [oxygen](http://en.wikipedia.org/wiki/Oxygen)", and refers to the use of oxygen in the body's metabolic or [energy](http://en.wikipedia.org/wiki/Adenosine_triphosphate)-generating process. Many types of exercise are aerobic, and by definition are performed at moderate levels of intensity for extended periods of time and can include: * Walking * Snowshoeing * Running * Skipping * Hiking * Cycling * Swimming * Dancing * paddling   **How To:**   * **Find a Pulse (Neck and Wrist)** * **Carotid Artery (Neck)**. Your carotid artery runs vertically along both sides of your neck. To find your carotid pulse, place your fingers at the top of your neck, just under your jaw at about the mid-point between your earlobe and chin. * **Radial Artery**. The radial artery is the pulse point most commonly used to determine someone's heart rate. Face either hand palm up and use the fingers from your other hand to locate your pulse. Your radial artery is on the thumb's side (or outside) of your wrist when the palm of your hand is facing you. Place your fingers half way between the tendons that run down the center of your forearm and the edge of your arm, on the thumb side, right at your wrist. Make sure one finger is closer to your palm than the other, so they appear "stacked"; your fingers should be vertical on your wrist, not side-by-side. You should feel a strong pulse here. * **Determine Heart Rate** * Count beats per 6 seconds and multiply by 10. * **Use a pedometer** * **Analyze own level of cardiovascular fitness.** * **Create and Implement a plan to improve cardiovascular endurance according to F.I.T.T. Principle:** * **Frequency** * 3-5 days a week * **Intensity** * 65%-85% MHR * **Time** * 20-30 min. * **Type** * Aerobic | * That there are intrinsic and extrinsic benefits of cardiovascular endurance. * That I improve my cardiovascular endurance by focusing on: * FITT * Train in Target heart range of 65%-85% MHR * That I will know I have improved by: * Greater distances achieved * More difficult intensity levels worked at * Lowered resting heart rate * That plans are important because they: * Help you to set a goal * Help you to monitor your progress * Provide motivation * Help you to know you have followed through | a. Explain a variety of factors (e.g., planning, regular participation, effort, adequate information, motivation, commitment, regular monitoring) that affect personal fitness development.  b. Sustain participation in moderate to vigorous movement activities (e.g., walking, snowshoeing, running, skipping, hiking, cycling, swimming, dancing, paddling) that increase heart rate and respiration rate, towards nine consecutive minutes on a consistent basis.  c. Sustain participation in lead-up games (e.g., three-on-three soccer, outdoor obstacle course races) that increase heart rate and respiration rates in a progression towards nine consecutive minutes on a consistent basis.  d. Engage willingly in a variety of movement activities at a moderate to vigorous level of effort.  e. Determine the intrinsic (e.g., enjoyment, enhanced health, level of success, increased energy level, reduced stress level, connection to others) and extrinsic (e.g., awards, media, sport heroes, family, peers) factors that motivate participation for fitness development.  f. Make connections between the terms associated with the function of the cardiovascular system (including heart rate, pulse, resting heart rate, maximum heart rate, target heart rate zone) and health-related fitness plans.  g. Demonstrate and practice ways to find pulse (e.g., pulse point location and proper finger positions on wrist and neck) and to determine heart rate (e.g., counting beats for 10 seconds and then multiplying by six; use of heart monitors) before, during, and after exercise.  h. Describe how heart rate is used to monitor exercise intensity and its connection to cardiovascular fitness.  i. Monitor personal level of activity by using a pedometer to count the number of steps taken or the distance traveled and make connections to benefits for cardiovascular endurance.  j. Create a visual representation of the key components of the F.I.T.T. principle and how they apply to personal fitness.  k. Record and reflect own fitness results after participation in simple health-related fitness appraisals.  l. Apply, with guidance, methods to analyze own level of cardiovascular fitness, including the use of fitness appraisals and health-related fitness standards as identified in research-based resources [e.g., Fitnessgrams, Activitygrams (Meredith &Welk, 2007)].  m. Discuss the positives and negatives of using standardized information related to fitness levels as a means of judging own performance.  n. Set and work towards challenging yet obtainable individualized goals for cardiovascular fitness improvement.  o. Share responsibility for the development and implementation of a class cardiovascular fitness plan. |
| **ESSENTIAL QUESTIONS** | | |
| 1. **Why should cardiovascular endurance be important to me?** 2. **How do I improve my C.E.?** 3. **How do I know if I have improved my C.E.?** 4. **Why do I need to create a plan in order to develop my C.E.?** | | |