

# **PHYSICAL EDUCATION STUDY GUIDE**

## **Fitness test**

**There are four health-related components that are important to training and improving fitness levels. Each component is specific to improving how the body functions independently and dependently to improve physical and mental wellness.**

### **FOUR COMPONENTS OF FITNESS TRAINING**

#### **1. CARDIOVASCULAR TRAINING**

**Cardiovascular training has two parts that helps build endurance capacity: (see definitions below)**

- **Aerobic capacity**
- **Anaerobic capacity**

**Your fitness level is determined by how often, how long and the type of exercise you perform.**

- **There are 3 training zones for cardiovascular training: Each zone represents a fitness level, from low to high. The zones are low, medium and high.**

**A percentage of your maximum heart rate is used to determine these training zones.**

#### **MAXIMUM HEART RATE**

**Your heart rate is determined by subtracting 220 from your age.**

- **$220 - \text{age} = \text{MHR}$**

#### **TRAINING ZONES**

- **Zone 1: (low) 65% of your maximum heart rate is used to set the of heart beats/minute that will be safe for you to exercise and gain cardiovascular benefit from the workout.**

**A zone 1 person is usually just beginning a workout routine and works out 1-2 times a week for 20-30 minutes.**

- **Zone 2: (medium) 70-75% of your maximum heart rate.**

**A zone 2 person is someone who works out 3-5 days a week for 20-30 minutes during each workout.**

- **Zone 3: (high) 80-85% of your maximum heart rate.**

**A zone 3 person is someone who works out 6-7 days a week for an hour or more each time.**

- **Limits in cardiovascular training refer to the intensity of the exercise that must be reached to get to the low zone but not to exceed the high zone when working out.**

The low and high limits are considered safety zones for cardio training and help to prevent exercise exhaustion and or injury.

### **WORKING HEART RATE**

Another method of finding a safety Zone when limits can not be determined is to use a working heart rate.

**Working heart rate can be found by subtracting your MHR from your resting heart rate (RHR).**

- **MHR-RHR= Working Heart Rate**

## **2. MUSCULAR STRENGTH AND ENDURANCE**

**Muscular strength and endurance has three components for training.**

- **Strength training = .75% of max wt. and reps of 4-6.**
  - **Endurance training =.25% of max wt. and reps of 15-20.**
  - **Both (strength and endurance) =.50% of max and reps of 10-15.**
- 
- **TO FIND YOUR MAX WEIGHT: Lift a weight 10 xs's in a row, if the 10<sup>th</sup> one is hard this is your max weight. If the 10<sup>th</sup> lift is easy continue to go up the weight stack until the 10<sup>th</sup> lift is hard.**
  - **TO FIND YOUR TRAINING WEIGHT: Once you find your max weight decide if you want to improve strength, endurance or both. Choose the % that goes with your choice and take that % of your max lift to determine your training weight.**

**For example: Your max wt. for bicep curls is 100 lbs., I want to train to improve my endurance. 25% of 100 are 25 lbs. My training wt. is 25 lbs. Select the reps from 15-20.**

**Each weight training exercise will have strength, endurance and both components filled out during the unit. Remember to round up or down when your training weight is a fraction.**

<b>Exercise:</b>	<b>max</b>	<b>S (.75)</b>	<b>E (.25)</b>	<b>B (.50)</b>
<b>Bicep curl</b>	<b>100</b>	<b>75lb</b>	<b>25lbs</b>	<b>50lbs.</b>

**When I train I will know how much weight I will need to use for each component.**

- **When lifting weights Breath out when pushing or pulling weight and in when lowering weights.**

### **3. BODY COMPOSITION**

**Body composition = % body fat compared to lean muscle mass.**

### **4. FLEXIBILITY**

**Flexibility: 10-15 minutes of warm-ups and cool down after exercise could help to prevent injuries and improve flexibility.**

### **Terms and Definitions:**

**Repetition: A repeated action/motion**

**Set: A group of exercises**

**Aerobic: 50 minutes or more of a rhythmic activity, dance, running, swimming, Tae Bo, PX90, step aerobics examples of aerobic activities.**

**Anaerobic: An activity or exercise that requires great intensity for a short period of time. Examples are: any form of sprinting or activity that requires short hard spurts of energy.**

### **MUSCLE GROUPS:**

<b>1. Chest</b>	<b>Pecs.</b>
<b>2. Back</b>	<b>Trapezium; Latissimus</b>
<b>3. Leg (thigh)</b>	<b>Front: Quads; back: Hamstrings</b>
<b>4. Shoulder</b>	<b>Deltoids</b>
<b>5. Stomach</b>	<b>Front: Abs; Side: Obliques</b>
<b>6. Calf (lower leg)</b>	<b>Gastro</b>
<b>7. Arm</b>	<b>Front: Biceps; Triceps</b>

### **Goals Setting**

**SMART**, an acronym is steps that are taken to help set goals. These steps help determine how and when goals are successful.

**S= be specific, give details about what you want to happen**

**M= goals should be measurable, when, how**

**A= achievable, am I willing to do what is needed to accomplish the goal**

**R= realistic, is the goal reasonable, within my capabilities**

**T= set a time when the goal will be achieved**

Divide large goals into small steps: There are three (3) parts to goals setting; each step will lead to the next until the goal is reached.

- 1. Short term: what I will do immediately to begin this goal (1-2 weeks/months)**
- 2. Medium term: What I will do consistently to meet my goal, this will take a longer time to achieve. (3-4 weeks or months)**
- 3. Long term goals: Goals you set for the distant future (Months or years or to achieve).**