

7th Grade Fitness Study Guide

A. Definitions

Physical Fitness—the ability to handle the physical work and play of everyday life without becoming overly tired.

Anaerobic Exercise—Exercise that is done at a fast pace for a short period of time. (EX. Sprints)

Aerobic Exercise—Exercise that is done at a slow or moderate pace for a long period of time. (EX. Jogging, Biking, Swimming)

Cardiovascular System—keeps the body working well by delivering essential materials (oxygen) to body cells and removing waste materials from the cells. Consists of the following four parts:

Heart—Pumps Blood to the muscles and lungs.

Lungs—Places Oxygen into the bloodstream.

Blood—Carries materials to the muscles.

Blood Vessels—Serve as a transport system for blood. (You have 80,000 miles of blood vessels)

Arteries—Carry blood away from the heart. (High in Oxygen)

Veins—Carry blood towards the heart.

(Low in Oxygen)

Frequency—how often one must exercise to improve one's fitness level (Minimum of 3X a week)

Duration—how long one must exercise to improve one's fitness level (Minimum of 30 minutes)

Intensity—how hard one must exercise to improve one's fitness level (70-85% of your maximum heart rate)

Heart Rate—the number of times your heart beats in one minute.

Target Heart Rate—the heart rate you want to achieve during exercise. (70-85% of your maximum heart rate)

Resting Heart Rate—your heart rate at rest. Best if taken when you first wake up in the morning. The lower your resting heart rate the better!!!!

Recovery Heart Rate—your heart rate returning to a “normal” heart rate level after you have exercised. The quicker your heart rate recovers the better shape you are in.

Checking Your Heart Rate—the two easiest places to check your heart rate are your carotid artery (In your Neck) and your radial artery (On Your Wrist).

B. Calculating Target Heart Rate

Your target heart rate should fall between 70-85% of your maximum heart rate. To figure out target heart rate, subtract the age of the individual from 220 and multiply that number by .70 (70%) to get the lower range of your target heart rate zone. To get the upper range, subtract the age from 220 and multiply that number by .85 (85%).

EX:

$220 - \text{age} = \text{Maximum Heart Rate}$

$220 - 13 = 207$ (Max. Heart Rate for a 13 year old Person)

$207 \times .70 = 145$ (Lower Range) $207 \times .85 = 176$ (Upper Range)

This means that a 13 year old individual should have a heart rate between 145-176 bpm during exercise.

C. Physical Fitness Areas

Primary Fitness Areas

Cardiovascular Endurance—the ability of your heart, lungs, blood vessels, and blood to supply oxygen to your muscles for a long period of time allowing a person the ability to perform a task over several minutes. (30 min. or more) *Fitness Tests—Pacer and Mile Run. Other activities would include biking, and swimming.*

Muscular Strength—the ability of a muscle to produce a maximal force against a resistance. *Fitness Test—Pull-ups (Deltoid Muscle) Other activities would include weight lifting and football.*

Muscular Endurance—the ability of the muscles to work for a long period of time before tiring. *Fitness Tests—Sit-Ups/Curl-Ups for the Abdominal Muscles and Pushups for the Pectoral Muscle. Other activities would include Canoeing and Gymnastics.*

Flexibility—the ability to move a joint through a full range of motion. *Fitness Test—Sit and Reach for Hamstrings Muscle. Other activities would include Yoga and Figure Skating.*

Body Composition—the percentage of body fat a person has in comparison to his/her total body mass (Not that important for middle school aged individuals). *Fitness Test—Body Mass Index.*

Secondary Fitness Areas (Motor Fitness)

Eye-Hand/Eye-Foot Coordination—the ability to use your hands and feet in relation to your vision to perform tasks efficiently. *Activities would include ping pong and shooting a basketball.*

Power—the ability of muscles to put out a lot of force in a short period of time. *Fitness Test—Standing Long Jump and Vertical Jump. Other activities would include throwing a shot put.*

Agility—the ability to change directions quickly and fluidly. *Fitness Test—Shuttle Run. Other activities would be running a ball in football.*

Speed—the ability to move very fast for a short distance. *Fitness Test—50 yard dash.*

D. Why Do People Exercise??

Lowers Resting Heart Rate

Lowers Blood Pressure

Lowers Cholesterol

Decreases Depression

Decreases the Chance of a Stroke, Diabetes, and Heart Disease

Reduces Stress For Fun To Socialize

Lose Weight

Look Better

Sleep Better

Increases your Energy Level

Live Longer

Get sick less

Improves Athletic Performance

E. Did You Know??

If you are 120 lbs. running one 8 min. mile will not even burn off the calories taken in by drinking one soda.

Girls in general have smaller hearts than boys.

A person who is lean but unfit has twice the risk of death as a person who is lean and fit.