ANATOMICAL ADAPTATION

Mr. Linda's Physical Education Class

WHAT IS ANATOMICAL ADAPTATION

Scientific definition:

This is the initial phase of physical training which usually occurs after a period of being ***sedentary*** and is known as a prep period. Its purpose is to prepare each of these physiologic systems (***the circulatory system***, ***the muscular system***, and ***the respiratory system***) which undergo specific ***adaptations*** that increase the body's ***efficiency*** and ***capacity***.

Wordbank

Sedentary: (of a person) tending to spend much time seated; somewhat inactive.

Cardiovascular system: The system that circulates blood and lymph through the body, consisting of the heart, blood vessels, blood, lymph, and the lymphatic vessels and glands.

The muscular system: All the muscles of the body collectively, especially the voluntary skeletal muscles.

The respiratory system: The respiratory system is the set of organs that allows a person to breathe and exchange oxygen and carbon dioxide throughout the body.

Adaptations: The process by which a species becomes fitted to its environment

Efficiency: The ratio of the useful work performed

Capacity: The maximum amount that something can contain.

THE MUSCULAR SYSTEM

WOLFF'S LAW

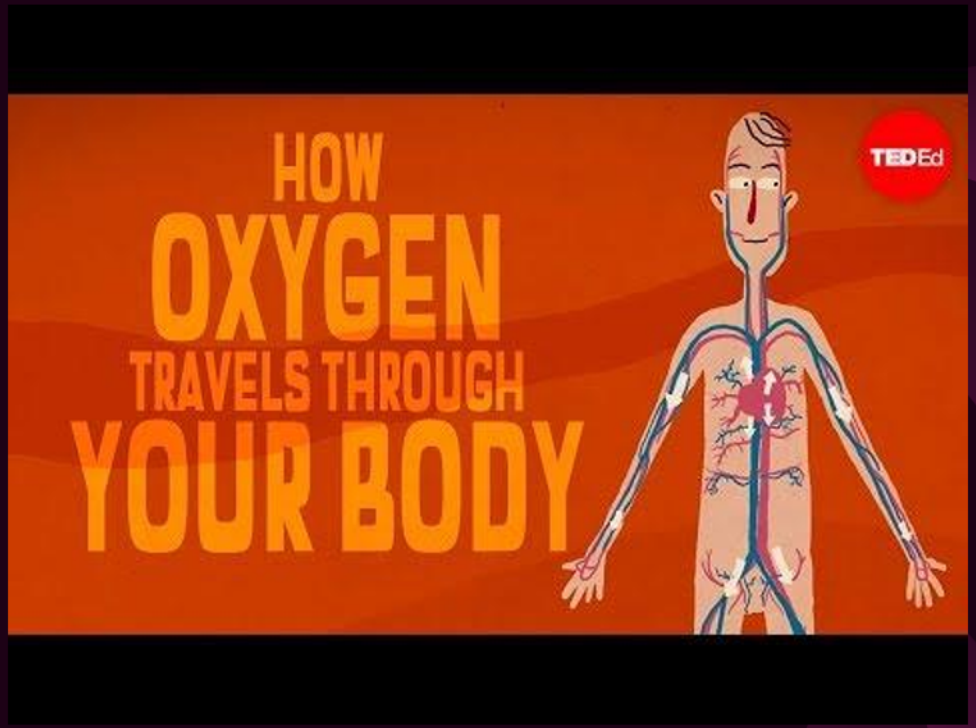
Scientific definition:
Wolff's Law states that your bones will adapt based on the stress or demands placed on them. When you work your muscles, they put stress on your bones. In response, your bone tissue remodels and becomes stronger. But Wolff's Law works the other way too.

HYPERTROPHY / ATROPHY

Scientific definition:
Muscle hypertrophy is a term for the growth and increase of the size of muscle cells. The most common type of muscular hypertrophy occurs as a result of physical exercise such as resistance training, and the term is often associated with weight training.

Scientific definition:
Muscular atrophy is when muscles waste away. It's usually caused by a lack of physical activity. When a disease or injury makes it difficult or impossible for you to move an arm or leg, the lack of mobility can result in muscle wasting.

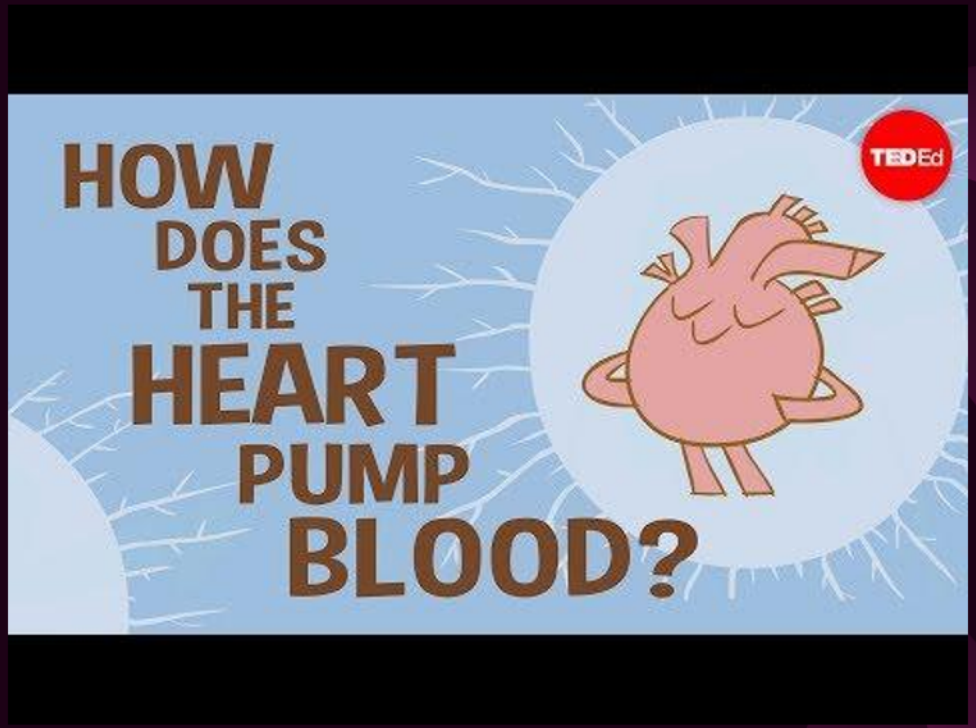
THE RESPIRATORY SYSTEM



PROGRESSIVE OVERLOAD

Scientific definition:
Progressive overload is a method of physical training that advocates for the gradual increase of the stress placed upon the various physiological systems to increase the body's strength, endurance, or size.

THE CIRCULATORY SYSTEM



PACING

Scientific definition:
Pacing is learning how to run within your body's energy and fitness level. By learning the importance of pacing and fine-tuning your skills, you can improve your consistency and set new personal bests.

CONVERSATIONAL GAUGED ENERGY EXPENDITURE

A pace that you can run and carry out a conversation. If you become out of breath and cannot continue your conversation, you need to slow your pace down.

RHMS GOLDEN EAGLE
FITNESS CHALLENGE

7TH GRADE GOLDEN EAGLE FITNESS CHALLENGE ACTIVITIES AND STANDARDS

Students will need Golden Eagle in all 5 fitness testing areas.

Fitness Area	Golden Eagle	Advanced	Proficient	Basic	Improvement Needed
Mile Run	Below - 9:35	9:36-10:30	10:31-11:00	11:01-13:00	13:01-Higher
PACER	52 - Above	40 - 51	30 - 39	20 - 29	Below - 19
Push-ups	20 - Above	15 - 19	10 - 14	6 - 9	Below - 5
Pull-ups	2 - Above		1		0
Flexed Arm Hang	13 Seconds - Above	10 Seconds - 12	6 Seconds - 9	3 Seconds - 5	Below - 2 Seconds
Curl-Ups	41 - Higher	35 - 40	29 - 34	23 - 28	Below - 22
Trunk-Lift	10-12 inches	9	8	7	Below - 6
Shoulder Stretch	Right- Pass / Left - Pass		Pass only Right or Left		Right- Fail / Left - Fail

7TH GRADE GOLDEN EAGLE FITNESS CHALLENGE ACTIVITY EXAMPLES

PACER

PUSH-UPS

CURL-UPS

TRUNK LIFT

SHOULDER STRETCH