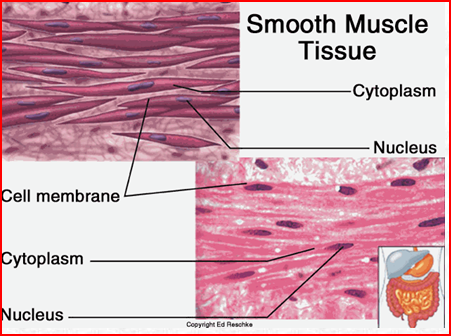
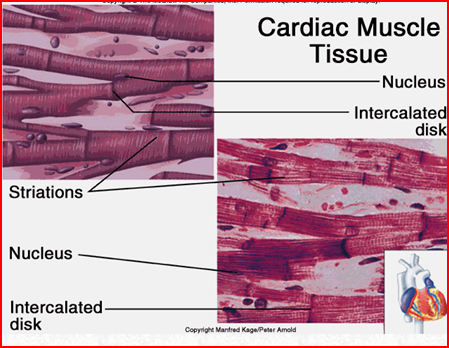
**Types of muscles**

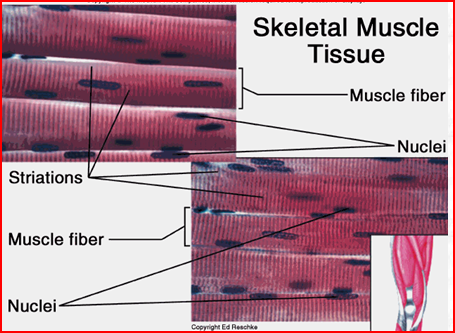
**1.smooth muscle**

****

**2.cardiac muscle**

****

**3.skeletal muscle**

****

**Muscular system**

**Three primary functions:**

**1.movement of skeleton**

**2.maintenance of posture with a steady partial contraction called a muscle tone**

**3.generation of heat which is a natural by-product of muscle cell metabolism**

**Structure of muscle**

**fascicles-**

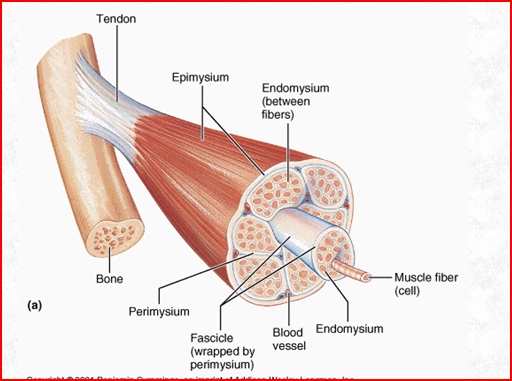
**Endomysium-**

**Perimysisum-**

**Deep fascia-**

**Epimysium-**

**Tendon-**

****

**Movement**

**-motor impulses-move away from the brain and travel carried by motor neurons**

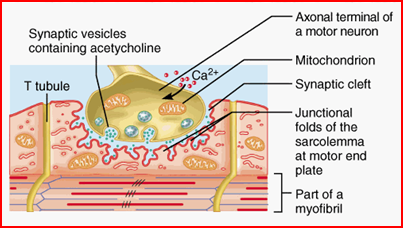
**Motor unit-**

**Neuromuscular junction-point at which a nerve fiber contracts because a neurotransmitter(acetylcholine) is released from the neuron to stimulate the muscle**

**fiber**

**synapse-**

**synaptic cleft-**

****

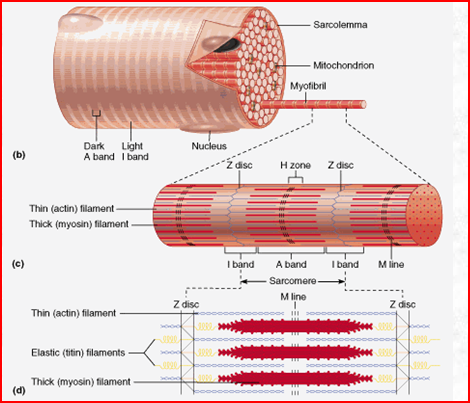
**Contractions**

**contractility-**

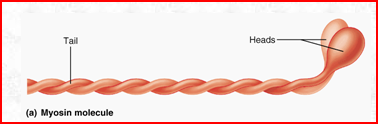
**actin-**

**myosin-**

**Sarcomere-**

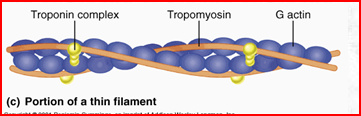
****

**-movement is created when a band of myosin filaments latch onto actin filaments by means of paddlelike extensions called myosin heads**

****

**Myosin heads-**

**At rest-**

****

**Types of muscle contractions**

**Muscle tone-muscle’s partially contracted state due to using muscles regularly so they do not become flabby**

**1.isotonic contractions-tension in muscle but the muscle shortens caused from weight lifting, walking**

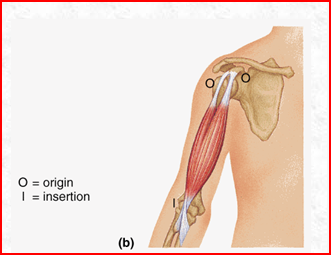
**2.isometric contractions-no change in muscle length but increase in muscle contractions caused from pushing palms together**

**Mechanics of muscle movement**

**-one end of a muscle is attached to a more freely movable part of the skeleton with the other end attached to a stable part**

**Origin-**

**Insertion-**

****

**-when a muscle contracts, it pulls on both attachment points bringing the more movable insertion closer to the origin causing movement of the body part**

**-prime mover-**

**Antagonist-**

**Synergist-**