

Function of the Skeletal System

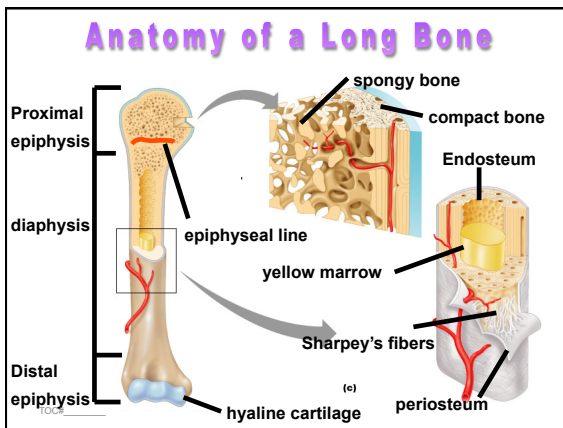
- Support- framework that supports body and cradles its soft organs
- Protection- for delicate organs, heart, lungs, brain
- Movement- bones act as levers for muscles
- Mineral storage- calcium & phosphate
- Blood cell formation- hematopoiesis

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The Skeletal System

- Parts of the skeletal system
 - Bones (skeleton)
 - Joints
 - Cartilages
 - Ligaments (bone to bone)(tendon=bone to muscle)

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Cartilage

- Is a flexible connective tissue that:
 - Connects bones and stops them from grinding together (joints).
 - Ears, nose
 - Bronchial tubes

Labels: Articular cartilage, Patella

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Types of Joints – Places that bend/move

Hinge-
A hinge joint allows extension and retraction of an appendage. (Elbow, Knee)

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Ball and Socket-
A ball and socket joint allows for radial movement in almost any direction. They are found in the hips and shoulders. (Hip, Shoulder)

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Ossification

- Making bone
- The process of laying down new bone material by cells called osteoblasts.

Bone Marrow

- Bone marrow is the flexible tissue found in the interior of bones.
- Makes **RBC**: In humans, red blood cells are produced in the heads of long bones

Haversian Canal

- Tunnels in bones for blood vessels, nerve fibers.

Periosteum

- Periosteum is a membrane that lines the outer surface of all bones
- attachment for muscles and tendons.

Diseases of the Skeletal System:

Rickets- vitamin D deficiency

Osteomalacia- soft bones, inadequate mineralization in bones, lack of vitamin D

Pagets Disease- spotty weakening in the bones, excessive and abnormal bone remodeling

Rheumatoid arthritis- autoimmune reaction

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