BONE

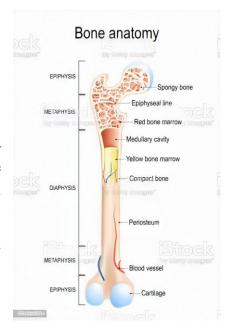
Bone is a living tissue consists of cells, fibers, and matrix. Bone exists in two forms: <u>compact</u> and <u>cancellous</u>. Compact bone appears as a solid mass; cancellous bone consists of a branching network of trabeculae.

CLASSIFICATION OF BONES

Long Bones

Long bones are found in the <u>limbs</u> (e.g., the humerus, femur, metacarpals, metatarsals, and phalanges). They have a tubular shaft, (the <u>diaphysis</u>), and usually an <u>epiphysis</u> at each end. The shaft has a central marrow cavity containing bone marrow. The outer part of the shaft is composed of compact bone that is covered by a connective tissue sheath, the <u>periosteum</u>.

The ends of long bones are composed of cancellous bone surrounded by a thin layer of compact bone.



Short Bones

Short bones are found in the hand and foot (e.g., the scaphoid, lunate, talus, and calcaneum). They are roughly cuboidal in shape.

Flat Bones

Flat bones are found in the vault of the skull (e.g., the frontal and parietal bones).

Irregular Bones

Irregular bones include those not assigned to the previous groups (e.g., the bones of the skull, the vertebrae, and the pelvic bones).

Sesamoid Bones

Sesamoid bones are small nodules of bone. The largest sesamoid bone is the patella.

