Identifying Structures of Skeletal Structures

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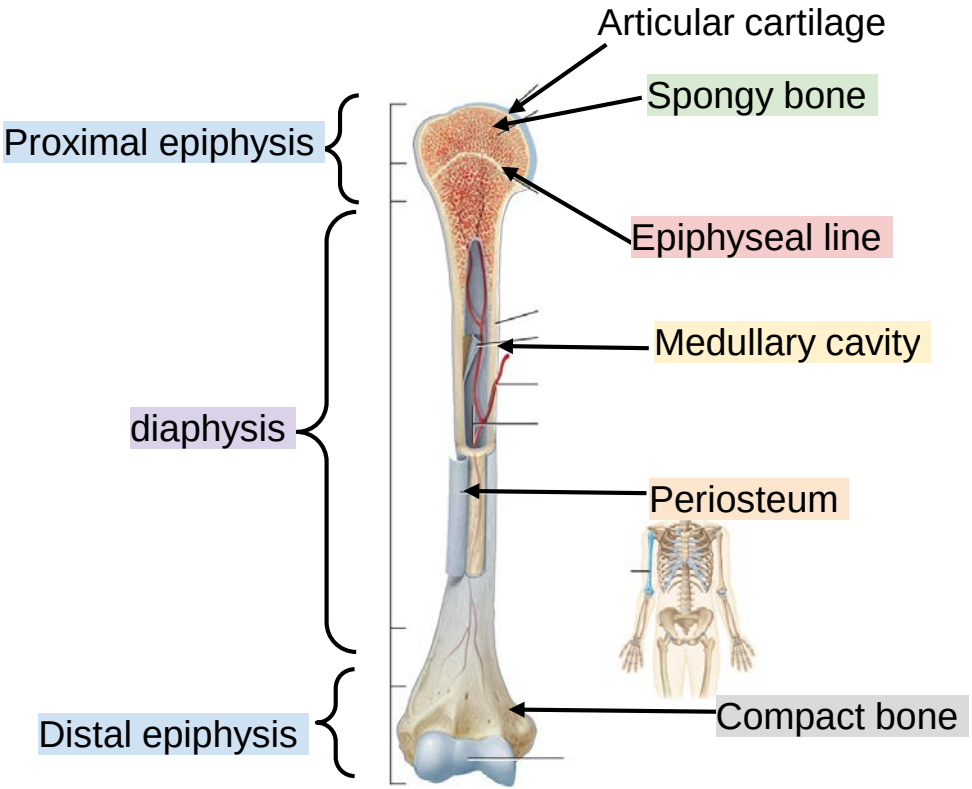
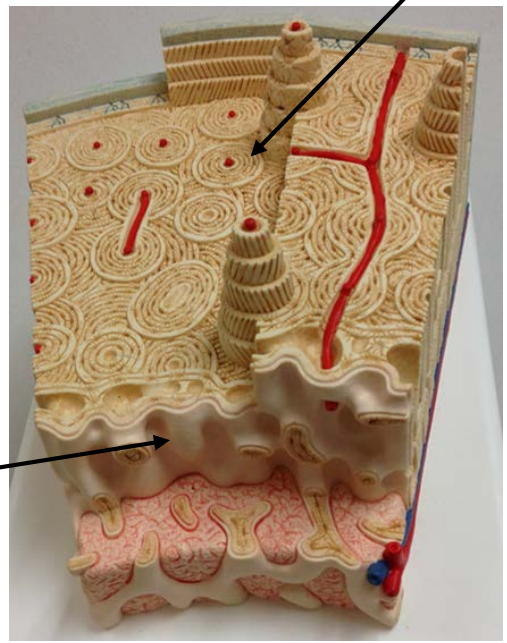
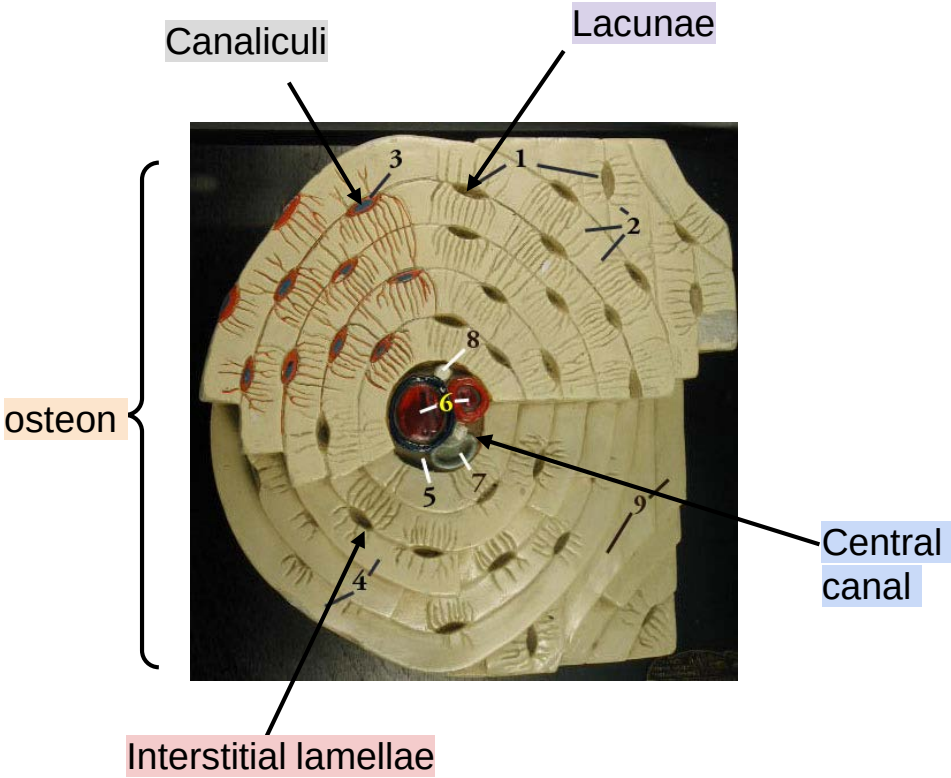
Identifying Long Bones



- **Proximal & distal epiphysis:** the heads/ends of long bones
- **Diaphysis:** the shaft of a long bone
- Articular cartilage: tissues that cover the ends of long bones to allow for joints to come together
- **Spongy bone:** osseous tissue type that is “sandwiched” between compact bone; found along diaphysis and thins out approaching epiphyses; structural + functional unit = trabeculae
- **Epiphyseal line/plate:** hyaline cartilage plate in the metaphysis at the ends of each long bone; separates epiphysis and diaphysis
- **Medullary (marrow) cavity:** hollow part of long bone that contains bone marrow; surrounded by internal layer of spongy bone
- **Periosteum:** membrane made of dense irregular CT that covers the outer surface of all bones
- **Compact bone:** osseous tissue type that forms the inner and outer parts of long bone

Osseous Tissue

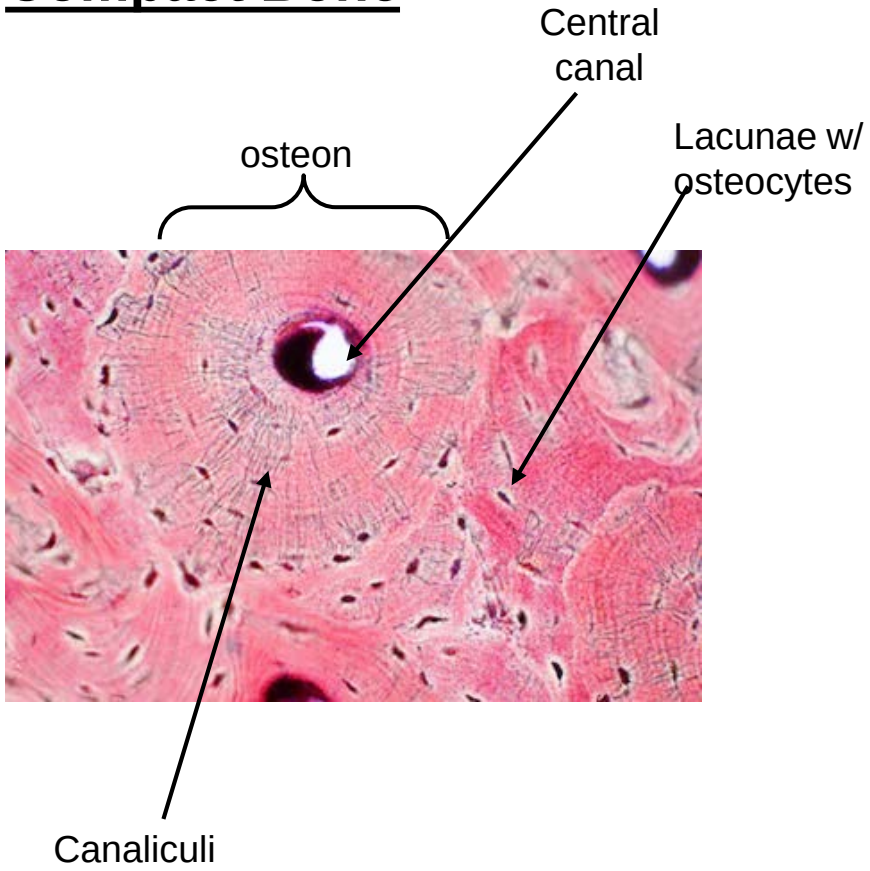




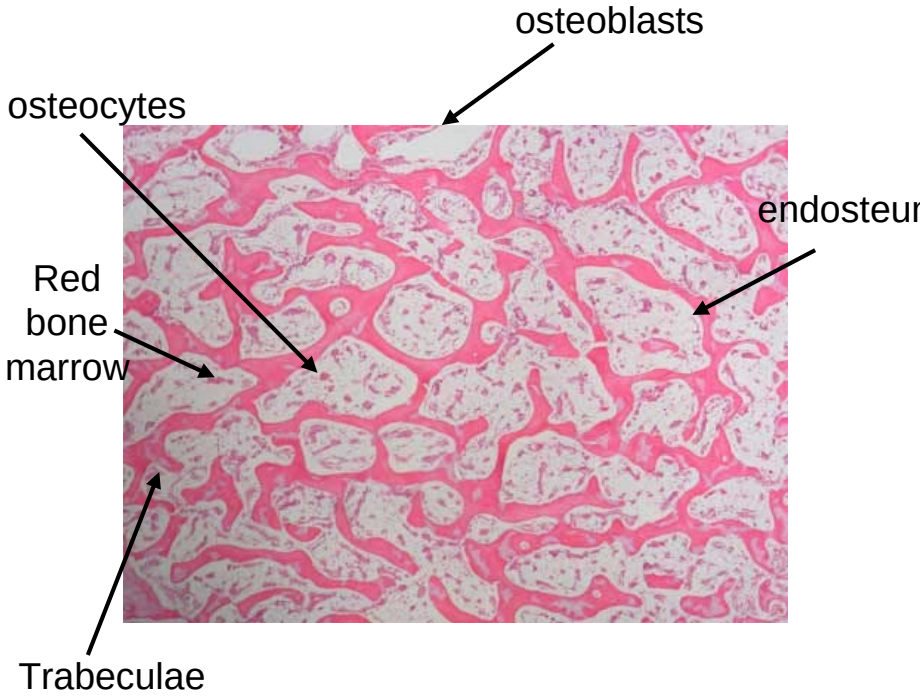
- Osteon: the structural and functional unit of compact bone
- Interstitial lamellae: fill in spaces b/t the osteons in compact bone
- Central (haversian) canal: where blood + lymph vessels and nerves travel through throughout compact bone

- Lacunae: small chambers than house osteocytes
- Canaliculi: channels that radiate through the matrix and link the lacunae together
- Trabeculae: structural and functional unit of spongy bone

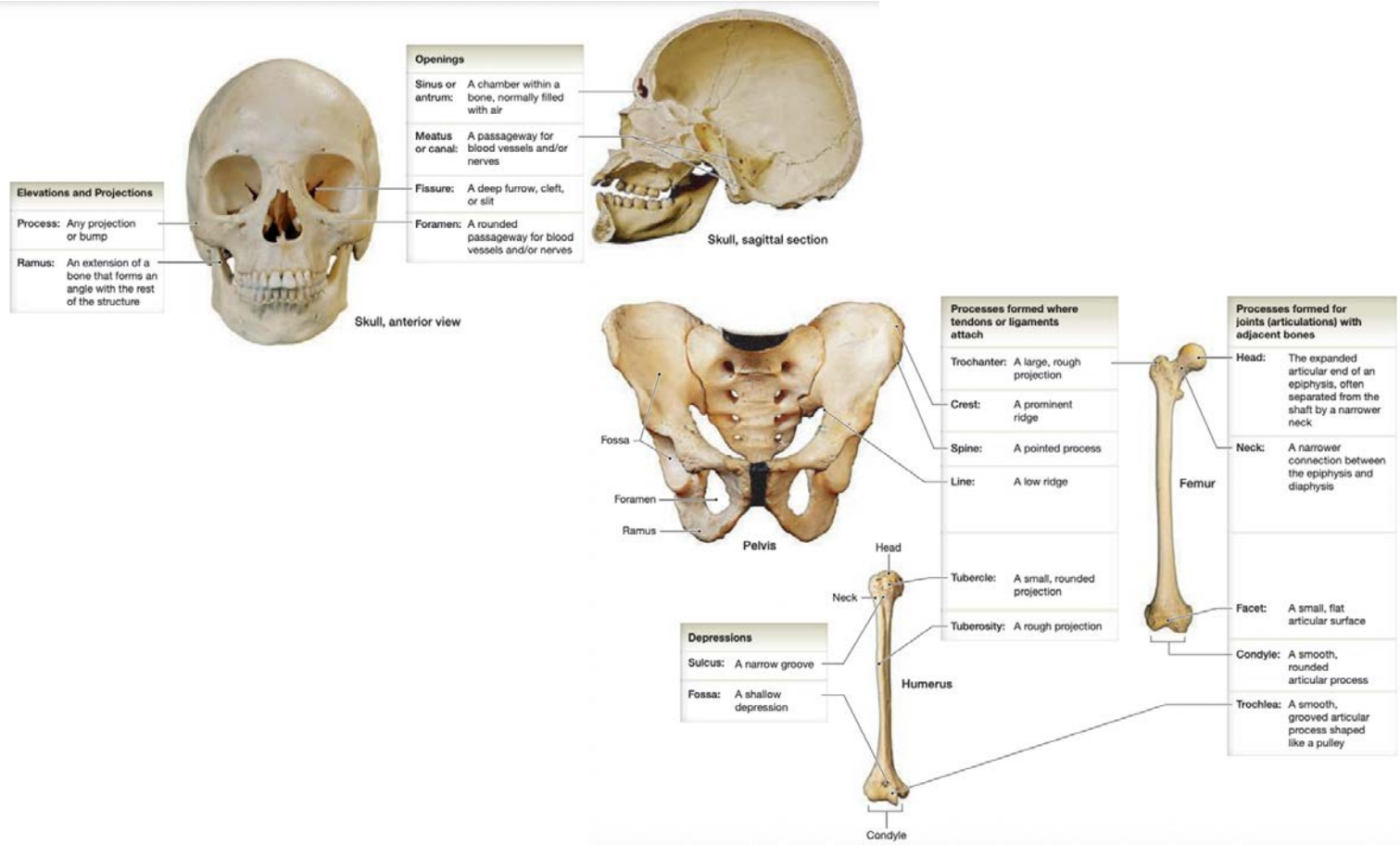
Histology of Compact Bone



Histology of Spongy Bone

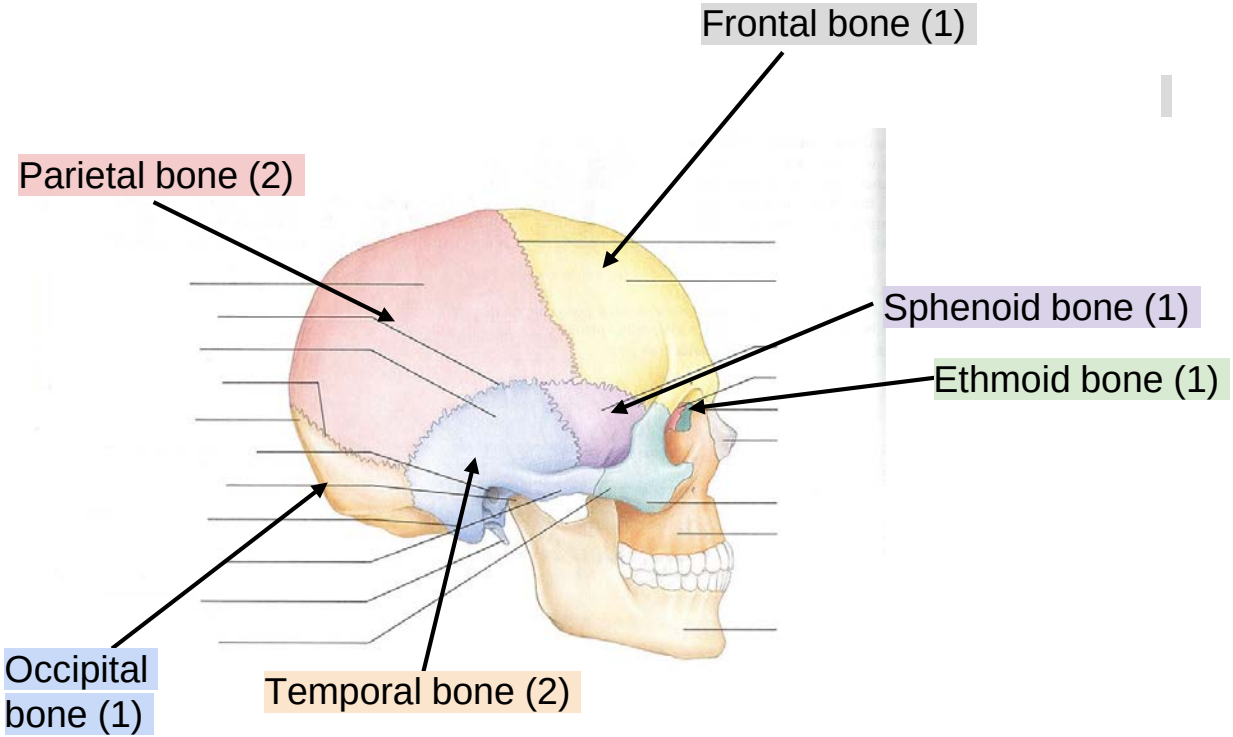


Common Bone Markings



8 Cranial Bones

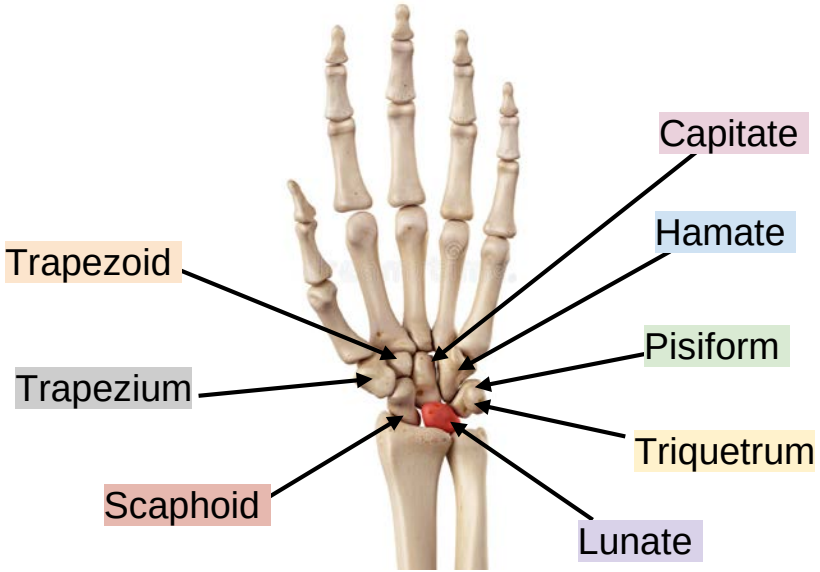
Mnemonic: "PEST OF 8"



- Parietal bone (2): pair of flat bones located at each side of the head
- Ethmoid bone (1): Irregular bone that is located posterior to sphenoid bone. Makes up part of nasal cavity.
- Sphenoid bone (1): irregular bone that sits directly inferiorly to the frontal bone
- Temporal bone (2): pair of irregular bones located under each of the parietal bones.
- Occipital bone (1): a flat bone located in the posterior region of the skull. It has an opening that allows your spinal cord to connect to your brain
- Frontal bone (1): flat bone that makes up your forehead

Carpal Bones

Mnemonic: "So Long To Pinky, Here Comes The Thumb"



Tarsal Bones

Mnemonic: "Tiger Cubs Need MILC"