

Lab 5 — Skeletal System Overview & Axial Skeleton

General bone types:

- Long bones
- Short bones
 - Sesamoid bones
- Flat bones
- Irregular bones

Bone Morphology & Histology:

- Compact
- Spongy = Cancellous
 - Trabeculae
- Diaphysis
- Epiphysis
- Medullary cavity
- Marrow: red vs yellow
- Epiphyseal plate and line
 - Resting, Proliferatin, Hypertrophic, Calcification & Ossification Zones
- Articular cartilage
- Periosteum
- Endosteum
- Concentric lamellae
- Circumferential lamellae
- Interstitial lamellae
- Central canal
- Perforating canal
- Osteocytes in Lacunae

Vertebral Column:

- Vertebrae markings
 - Superior articular process
 - Inferior articular process
 - Spinous process
 - Transverse process
 - Vertebral foramen
 - Transverse foramen
 - Vertebral body
- Vertebrae types
 - Cervical vertebrae
 - Atlas
 - Axis: Dens
 - Thoracic vertebrae
 - Lumbar vertebrae
- Intervertebral disks (intact skeleton)
- Sacrum (fused sacral vertebrae)
 - Sacral foramina
 - Sacral canal
- Coccyx

Ribs

- True vs False vs Floating ribs
- Head
- Shaft
- Costal cartilages

Hyoid Bone

Sternum

- Manubrium
- Body
- Xiphoid process

Skull Bones and Markings:

- Frontal bone
 - Coronal suture
- Parietal bone
 - Sagittal suture
- Temporal bone
 - External acoustic meatus
 - Internal acoustic meatus
 - Zygomatic arch and process
 - Mastoid process
 - Styloid process
 - Mandibular fossa
 - Jugular foramen
 - Carotid canal
 - Squamous suture
- Occipital bone
 - Foramen magnum
 - Occipital condyles
 - Lambdoid suture
- Sphenoid bone
 - Greater wing
 - Lesser wing
 - Superior orbital fissure
 - Optic canal
- Ethmoid bone
 - Crista galli
 - Cribiform plates
- Nasal bone
- Maxillae (maxillary bones)
 - Palatine process
- Zygomatic bone
- Lacrimal bone
- Palatine bone
- Vomer
- Inferior Nasal Conchae
- Mandible
 - Mandibular ramus
 - Coronoid process
 - Condylar process
 - Temporomandibular joint

Fetal Skull:

- Ossification centers (esp. parietal bone)
- Anterior fontanelle
- Sphenoidal fontanelle
- Mastoid fontanelle
- Posterior fontanelle