

Bio& 241 (A&P) Unit 2 Lab 1: THE SKULL

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AXIAL SKELETON

SKULL - Cranium Special Features

Sutures

- Sagittal
- Coronal
- Squamosal
- Lambdoidal
- Wormian bones

Fontanels (Fetal skull)

- Anterior (or frontal)
- Posterior (or occipital)
- Anterolaterals (or sphenoidals)
- Posterolaterals (or mastoidals)

Air sinuses

- Paranasal sinuses
 - Frontal sinus
 - Sphenoidal sinus
 - Ethmoidal sinus
 - Maxillary sinus
- Mastoid sinus

Blood sinus sulci (grooves on of cranium created by veins called sinuses)

- Superior sagittal sulcus
- Transverse sulci
- Sigmoid sulci

SKULL - Cranium Bones [8]

Frontal Bone [1]

- Superciliary arch
- Glabella
- Supraorbital margin
- Supraorbital notch (sometimes foramen)

Parietal bones [2]

Occipital bone [1]

- Foramen magnum
- Occipital condyles
- Hypoglossal canal (fossa)
- External occipital protuberance
- Superior nuchal line
- Inferior nuchal line

Temporal bones [2]

- Squamous portion
 - Zygomatic process
- Mastoid portion
 - Mastoid process
 - Mastoid air cells (or sinuses)
- Petrous portion
 - External auditory meatus
 - Mandibular fossa
 - Styloid process
 - Stylomastoid foramen
 - Jugular fossa
 - Jugular foramen
 - Carotid canal (or foramen)
 - Internal auditory meatus

Sphenoid bone [1]

- Body
- Sphenoid sinuses
- Greater wings
- Lesser wings
- Sella turcica (or Turk's saddle)
 - Chiasmatic groove
 - Hypophyseal fossa
- Optic foramen
- Superior orbital fissure
- Pterygoid processes
 - Medial
 - Lateral
- Foramen ovale

Sphenoid bone

Foramen rotundum

Ethmoid bone [1]

Horizontal (or cribriform) plate
Crista galli
Perpendicular plate
Lateral masses (or labyrinths)
Superior turbinates (or conchae)
Middle turbinates (or conchae)
Ethmoid sinuses

SKULL - Facial Bones [14]

Mandible [1]

Body
Angle
Ramus
Condylar process (or head)
Neck
Coronoid process
Mandibular notch
Alveolar processes
Mandibular foramen
Mental foramen

Maxillae [2]

Maxillary sinus (or antrum of Highmore)
Alveolar process
Palatine process
Incisive fossa (or foramen)
Infraorbital foramen
Inferior orbital fissure
Lacrimal groove

Lacrimal bones [2]

Palatine bones [2]

Inferior nasal conchae
(turbinates) [2]

Nasal Bones [2]

Zygomatic (or malar) bones [2]

Temporal process (forming zygomatic arch with temporal bone)

Vomer [1]

SKULL - Facial Special Features

Nasal Septum formed by

Perpendicular plate of ethmoid bone and the Vomer

Orbits formed by

Frontal (roof of orbit)
Ethmoid (medial wall)
Lacrimal (medial wall)
Sphenoid (lateral wall)
Zygomatic (lateral wall)
Maxillary (floor)
Palatine (floor)

SKULL-Miscellaneous Bones [7]

Auditory ossicles [6]

Malleus (or hammer) [2]
Incus (or anvil) [2]
Stapes (or stirrup) [2]

Hyoid [1]