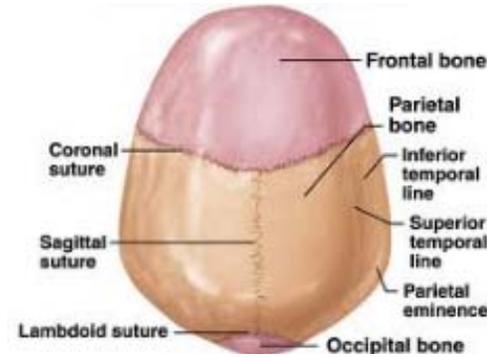


# AXIAL SKELETON: SKULL

20 Sept 2016

JFL: 120-, Martini 5<sup>th</sup> 195-211, 6<sup>th</sup>: 209-228, 7<sup>th</sup>: 206-234, 8<sup>th</sup>: 212-230, 10<sup>th</sup>: 207-239

Two parts to skull: **cranial and facial**. Most bones joined by **sutures**.  
Tied together with **sutures** **in childhood, fibrocartilage** ties together, then ossify



## CRANIAL BONES surround the brain:

**FRONTAL** p 215 forehead, roof of nasal cavity, roof of orbits, **coronal suture** to parietals

**Features:** frontal sinuses, superciliary arch, supraorbital margins, glabella

**PARIETAL BONES** p 214 joined by **sagittal sutures** to frontal by coronal suture, displays internal grooves and depressions, lodge venous sinuses, convolutions of brain

**OCCIPITAL:** 214 joined via **lambdoid suture** with R & L parietal bones

**Features:** **foramen magnum**, **occipital condyles**, basioccipital, external occipital protuberance, hypoglossal canal

**TEMPORAL BONE:** p 216 encloses ear, fossae for articulation with mandible

4 Portions: **squamous** articulates with **parietal**

**petrous** projects medially between **sphenoid** and **occipital**: contains middle and inner ear cavities

**mastoid** behind ear, contains mastoid sinuses & cells or, muscle attachment point [not mentioned in Martini]

**tympanic** surrounds external auditory meatus] not used these days?

**Features:** zygomatic process, internal & external auditory meatus (canal), styloid process, mandibular fossa, 1/2 of jugular foramen between occipital and temporal bones

**SPHENOID BONE** [wedge-like], termed "anchor of the skull" b/c anchors cranial bones, irregular bone: central body with 2 wings

p 217 Articulates with: **temporal** and **ethmoid** in front, **occipital** in back,

**Features:** lesser wings, greater wings, sella turcica, foramina rotunda & ovale, optic foramen, pterygoid processes

**ETHMOID:** p 218 (sieve-like) supports nasal cavity, aids in forming orbits, mostly cancellous tissue

**Features:** **cribriform plate**, **crista galli**, **superior & middle conchae (shells)** **perpendicular plate**

**AUDITORY OSSICLES:** (discussed later with special senses) malleus, incus, stapes [hammer, anvil and stirrup]

## FACIAL BONES (p 220):

### ORBIT (p 223)

**Rim LEARN:** formed by **frontal**, **maxillary** and **zygomatic**.

**Rear** **sphenoid** and parts of **ethmoid** (med.) & **palatine** (lat.),

medial wall includes **lacrimal**

**ZYGOMATIC** p 223 Cheek bone, "joins" maxilla to temporal bone

**PALATINE** p 211, 219 posterior part of roof of mouth, soft palate beyond

**LACRIMAL** p 210 posses lacrimal sulcus for lacrimal canal

**NASAL** p 211 paired, bridge of nose, articulate with frontal bone

**MAXILLARY** p 219 All facial bones articulate with maxilla forms ant. roof of mouth, floor & sides of nasal cavity, floor of orbit. Possesses large, maxillary sinuses

**SINUSES:** P 224: Frontal, ethmoid, sphenoid, maxillary

**MANDIBLE** p 221 **Features:** body and ramus, angle, coronoid process, notch, condyles, alveolar margins

### NASAL CAVITY: 224:

**VOMER** (211) inferior nasal septum, hard palate to ethmoid

**INFERIOR NASAL CONCHAE:** p 224 just below ethmoid, closest to nares

