The Skull
The Skull

• Made up of two major divisions
  – Cranium (brain case)
    • Made up of 8 bones
      – Frontal, 2 parietal, 2 temporal, occipital, sphenoid, and ethmoid
    • All cranial bones are singular except the temporal and parietal bones
  – Face
    • Made up of 14 bones
      – 2 maxilla, 2 zygomatic, 2 nasal, mandible, and vomer
    • All facial bones are found in pairs except the mandible and vomer
Cranial Bones

- Frontal Bone (p. 221)
  - Forms the forehead
  - Contains sinuses
    - Mucosa-lined, air filled spaces
    - Part of the paranasal sinuses
      - Frontal sinuses
  - Makes up the superior part of the orbits (eye socket)
  - Unites w/ the parietal bones at the coronal suture
    - Suture – immovable joint
Cranial Bones

• Parietal Bones (p. 221)
  – 2 bones make up the top and sides of the cranium
    • Lambdoidal suture
      – Suture joint with the occipital bone
    • Squamous suture
      – Suture joint with the temporal bone and sphenoid
    • Coronal suture
      – Meets with what other bone?
Cranial Bones

- Temporal Bones (p. 221)
  - 2 bones that make up the lower sides of the cranium and part of its floor
  - Contains the inner ear structures
  - Mastoid sinuses
Cranial Bones

• Mastoid sinuses
  – Mastoiditis
    • Caused by middle ear infection
    • Leading cause of death in children prior to antibiotics
    • Infected material deteriorates the sinus
Cranial Bones

- Occipital bone (p. 222)
  - Inferior, posterior portion of the skull
    - Back of your head
  - Sutures w/ parietal, temporal, and sphenoid bones
    - Movable joint with the first cervical vertebrae

- Foramen Magnum – Opening for the spinal cord to reach the brain
Cranial Bones

- **Sphenoid Bone** (p. 222)
  - “anchor” of the cranial bones
    - Central portion of the cranial floor
    - Resembles a bat in the center of the cranium
  - Part of the floor of each orbit
  - Contains the sphenoid sinuses
Cranial Bones

• Ethmoid bone
  – Forms the anterior portion of the cranial floor
    • Anterior to sphenoid
    • Posterior to the nasal bones
  – Forms the medial walls of the orbits
Cranial Bones

Ethmoid Bone
- Nasal structures
  - Forms part of the upper nasal septum
  - Forms part of the sidewall of the nasal cavity
  - Forms part of the nasal roof
- several small holes (foramina) for olfactory nerves
- Lateral masses are honeycombed with sinus spaces