

## **General Skull Anatomy**

- **Calvarium** – Dome-like superior portion of the cranium.
- **Cranial Base** – Floor of the skull that supports the brain.
- **Sutures** – Immovable joints between cranial bones (coronal, sagittal, lambdoidal, squamosal).
- **Fontanel**s – “Soft spots” in infants where sutures have not yet fused.
- **Foramen Magnum** – Large opening at the base of the skull for the spinal cord.

## **Cranial Bones**

- **Frontal Bone** – Forms the forehead and roof of the orbits.
- **Parietal Bones (2)** – Form the sides and roof of the cranium.
- **Temporal Bones (2)** – House the ear structures, contain mastoid process and petrous ridges.
- **Occipital Bone** – Posterior/inferior skull, contains the foramen magnum.
- **Sphenoid Bone** – Bat-shaped bone; contains sella turcica and sphenoid sinuses.
- **Ethmoid Bone** – Light spongy bone between the orbits; contains cribriform plate and ethmoid sinuses.

## **Landmarks**

- **Glabella** – Smooth area between the eyebrows.
- **Nasion** – Junction of frontal and nasal bones.
- **Acanthion** – Midpoint at the base of the anterior nasal spine.
- **Mental Point** – Midpoint of the chin.
- **External Acoustic Meatus (EAM)** – Opening of the ear canal.
- **Infraorbital Margin (IOM)** – Lower rim of the eye orbit.
- **Orbitomeatal Line (OML)** – Line from outer canthus of eye to EAM.
- **Infraorbitomeatal Line (IOML)** – Line from infraorbital margin to EAM.
- **Glabellomeatal Line (GML)** – Line from glabella to EAM.
- **Interpupillary Line (IPL)** – Line between pupils; important in lateral positioning.

## **Positioning & Imaging**

- **PA Caldwell** – Shows frontal bone, petrous ridges in lower third of orbits.
- **AP Axial (Towne Method)** – Visualizes occipital bone, dorsum sellae, foramen magnum.
- **Lateral Skull** – Shows entire cranium, sella turcica, and parietal bones.
- **SMV (Submentovertex)** – Shows base of skull, zygomatic arches, sphenoid sinus.
- **Waters Method** – Shows maxillary sinuses, orbits, and facial bones.

## **Other Key Terms**

- **Sella Turcica** – Depression in sphenoid bone that houses pituitary gland.
- **Crista Galli** – Bony projection of ethmoid bone.
- **Clivus** – Sloping bony surface at base of skull, anterior to foramen magnum.
- **Sinuses** – Air-filled cavities (frontal, ethmoid, sphenoid, maxillary).
- **Mastoid Process** – Rounded projection of temporal bone, posterior to EAM.
- **Petrous Ridges** – Dense portion of temporal bone containing inner ear structures.