

محاضرة التشريح الشعاعي - المرحلة الثانية

كلية المامون الجامعة

الفصل الأول

اعداد م د- عدي يوسف

NORMAL ANATOMY OF THE SKULL (cranial bones)

SKELETON

Human skeleton form the frame work of the body

Include

Bones

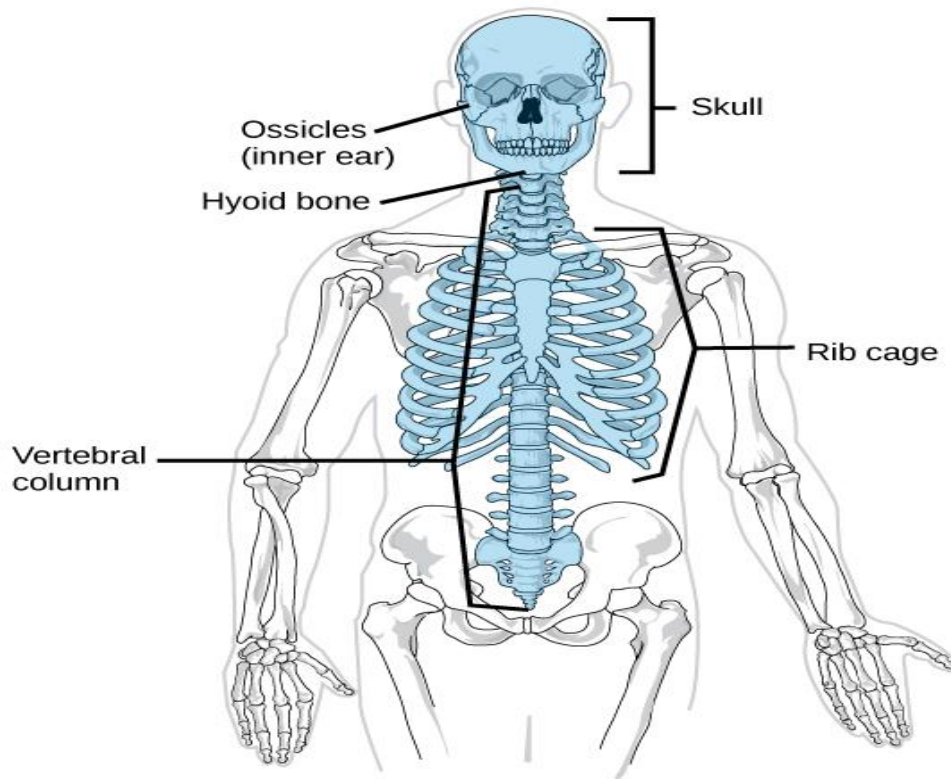
Cartilages

Joints

Its divided into

axial skeleton forms the central axis of the body and includes the bones of the skull, ossicles of the middle ear, hyoid bone of the throat, vertebral column, and the thoracic cage (ribcage)

APPENDICULAR SKELETON . comprises the upper and lower extremities



The Skull (THE CRANIUM)

The bones of the **skull** support the structures of the face and protect the brain.

The skull consists of 22 bones, which are divided into two categories: cranial bones and facial bones

The **cranial bones** are **eight** bones that form the cranial cavity, which encloses the brain and serves as an attachment site for the muscles of the head and neck. These bones are

frontal bone

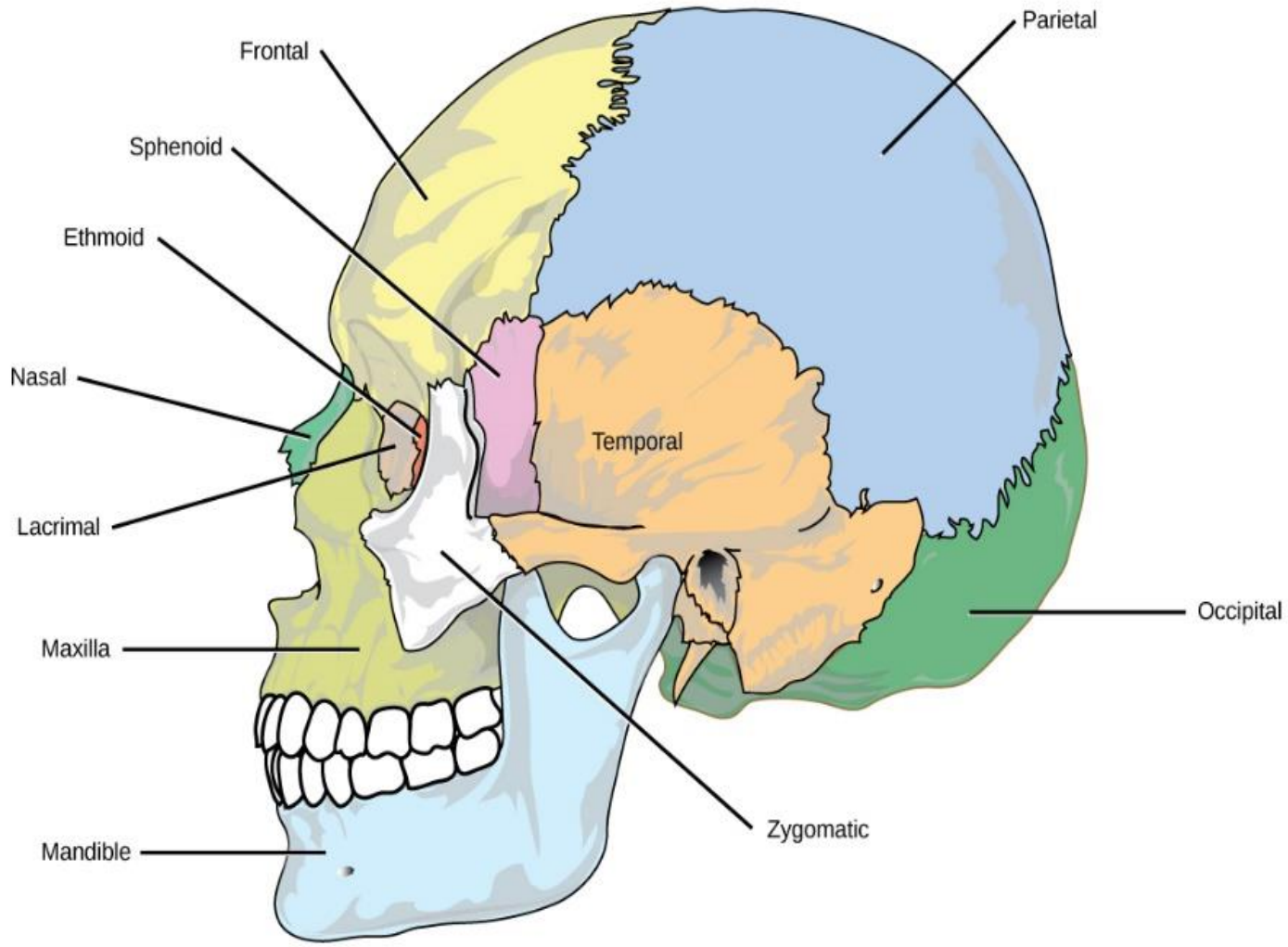
two parietal bones

two temporal bones

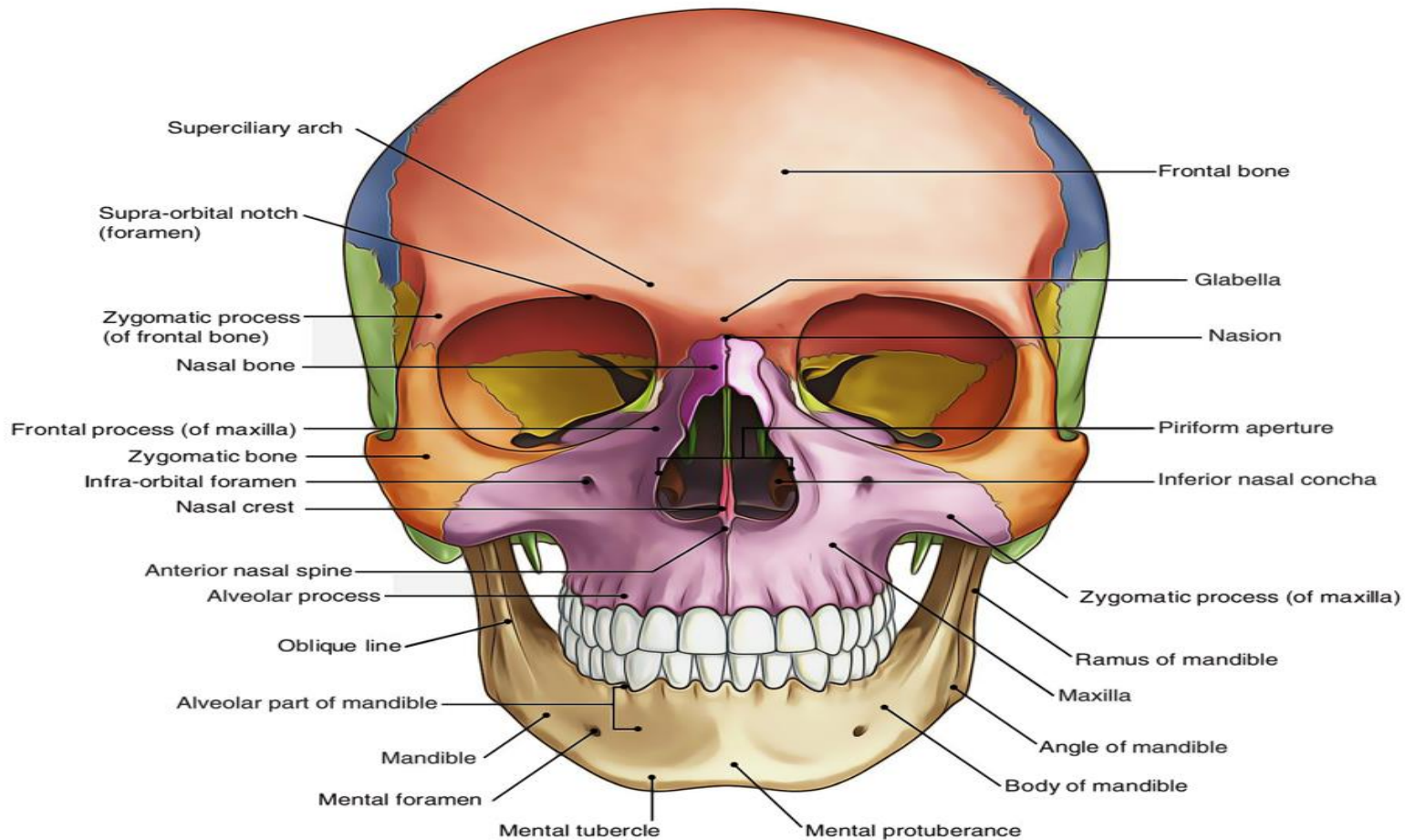
occipital bone

sphenoid bone

ethmoid bone



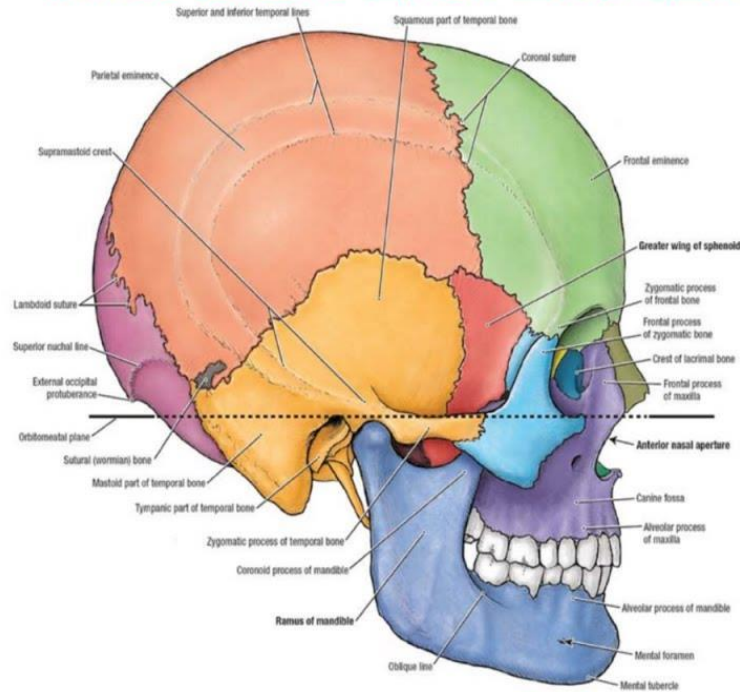
norma frontalis refers to the anterior view of the skull. It includes different parts such as the forehead, eye sockets (orbital cavities), nose, upper jaw, mouth, and lower jaw. The forehead consists of the frontal bone, which contains frontal paranasal air



NORMA LATERALIS

known as the lateral aspect of cranium or norma lateralis

NORMA LATERALIS



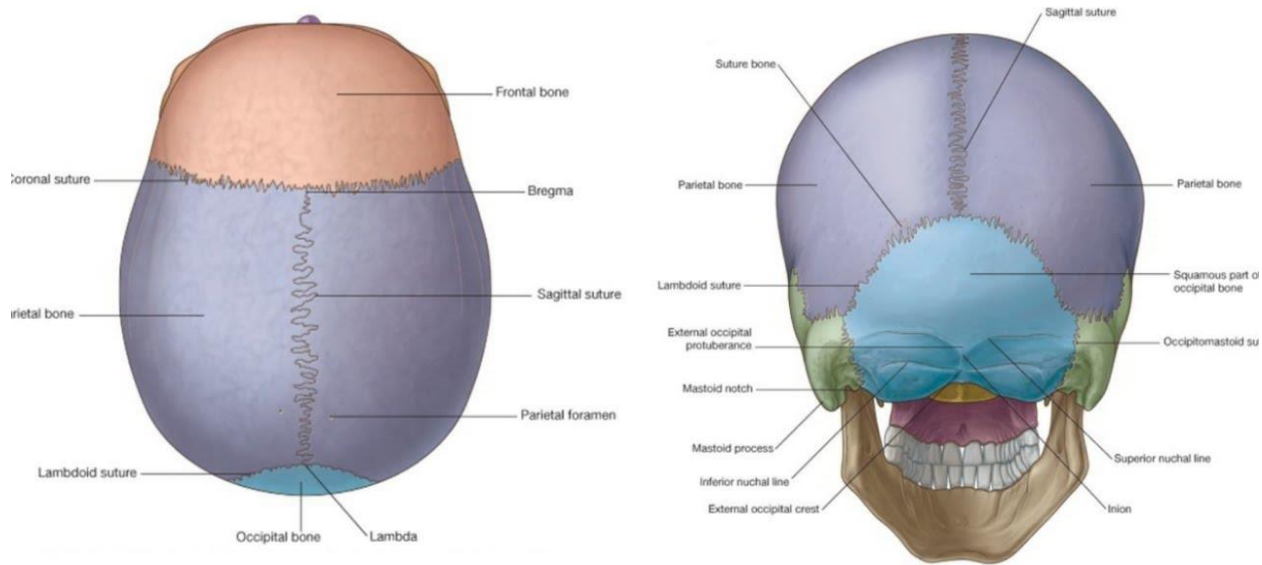
NORMA OCCIPITALIS

The back part of the skull, known as the occipital aspect of cranium or norma occipitalis, refers to how the skull appears from behind.

NORMA VERTICALIS

the **calvaria** or norma verticalis is the outline of the skull as viewed from above

NORMA VERTICALIS AND NORMA OCCIPITALIS



NORMA BASALIS

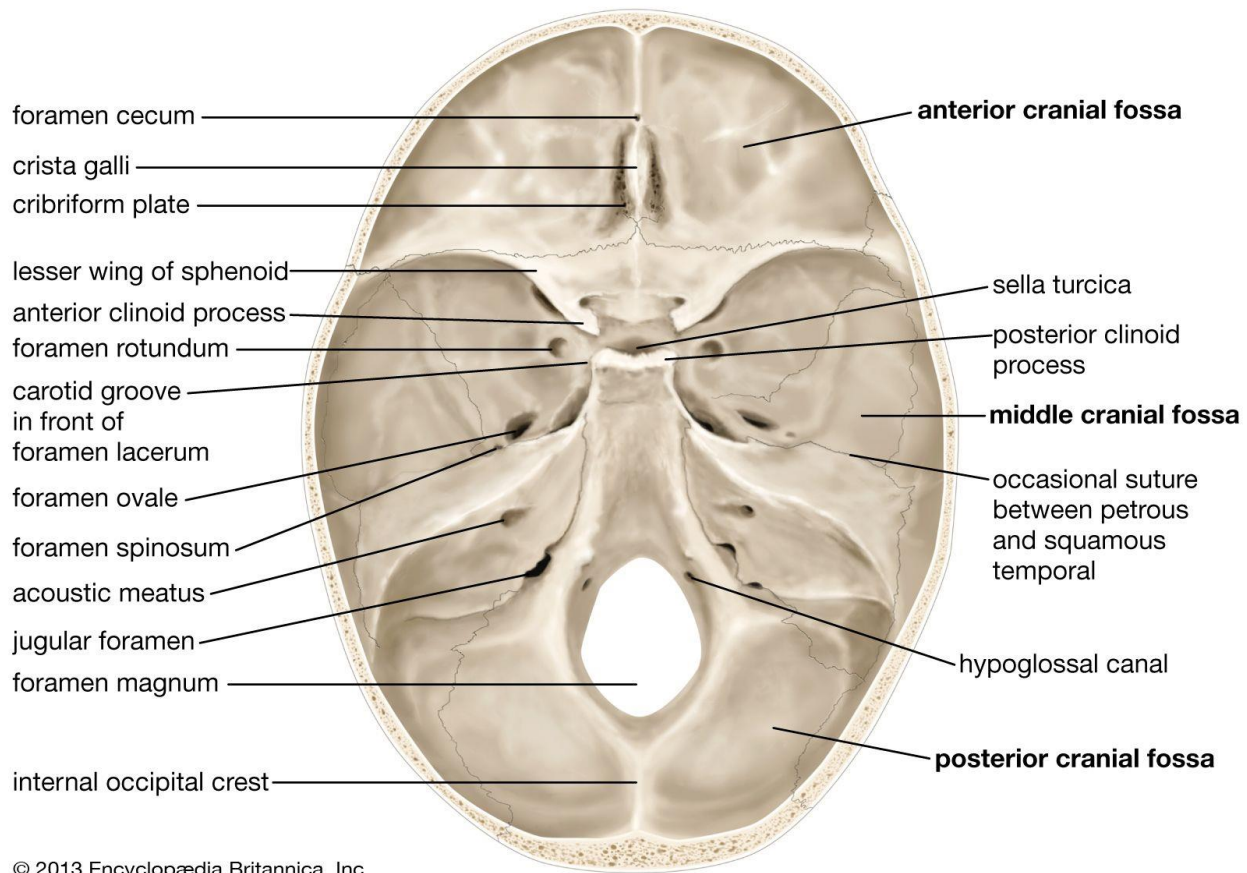
Norma Basalis. Inferior Aspect of Skull. Formed by

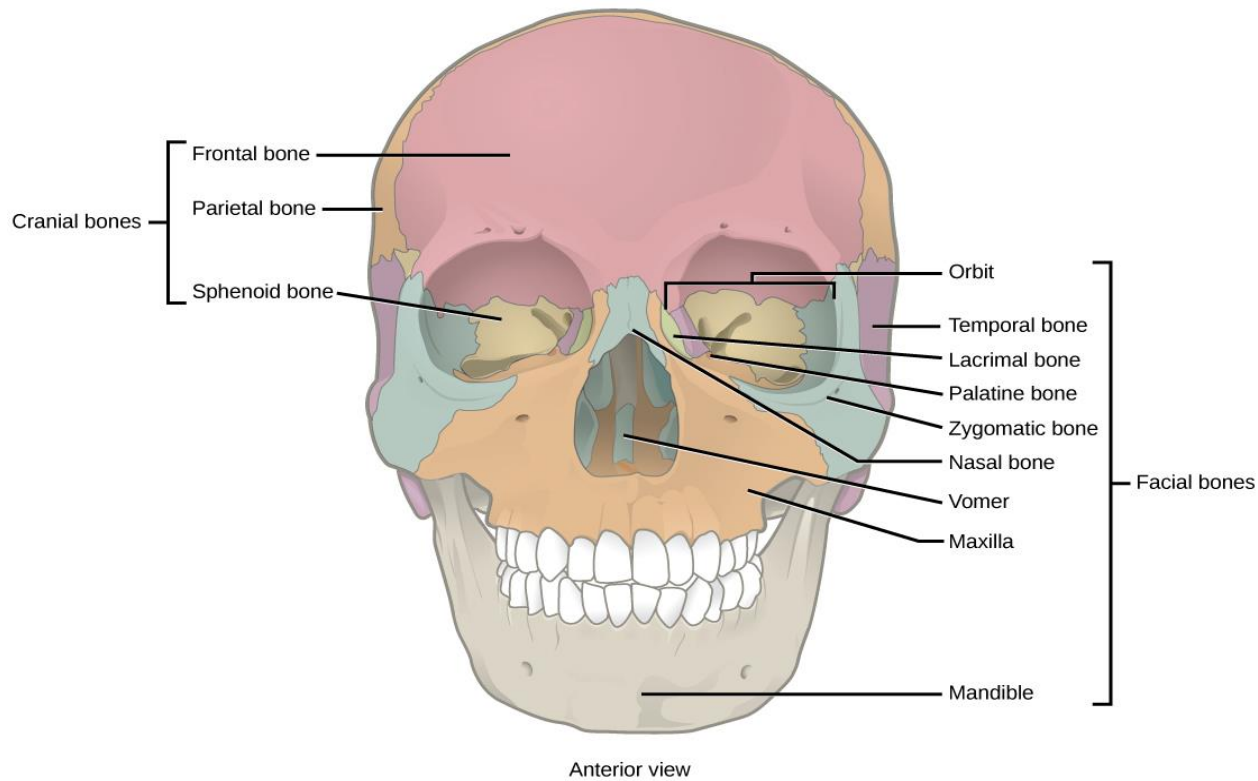
Palatine Processes of maxilla

Horizontal plate of palatine

bones Vomer

Pterygoid processes



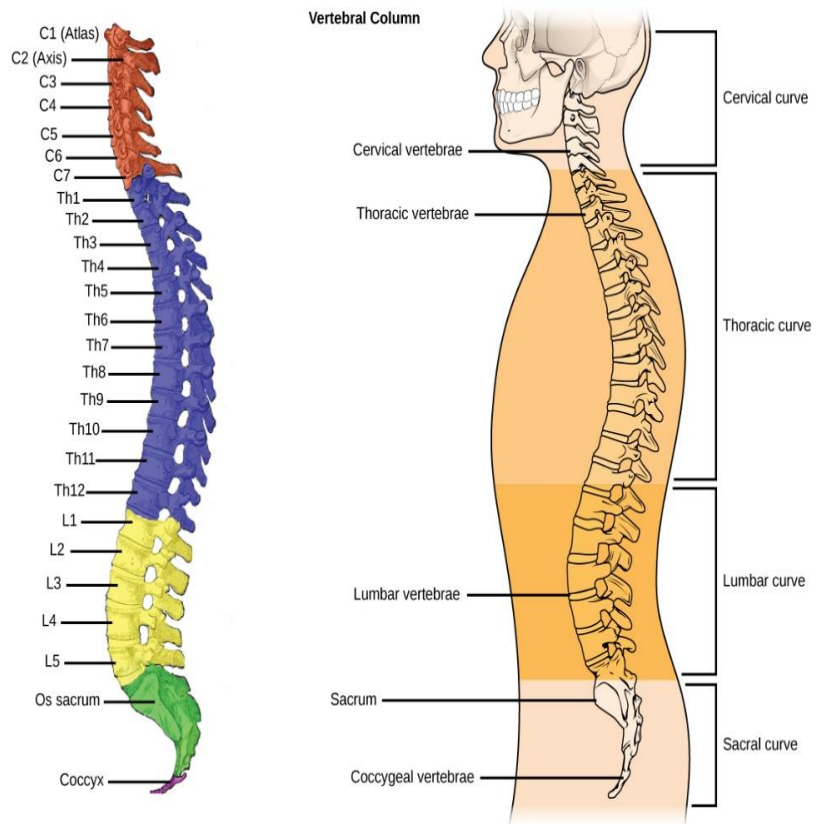


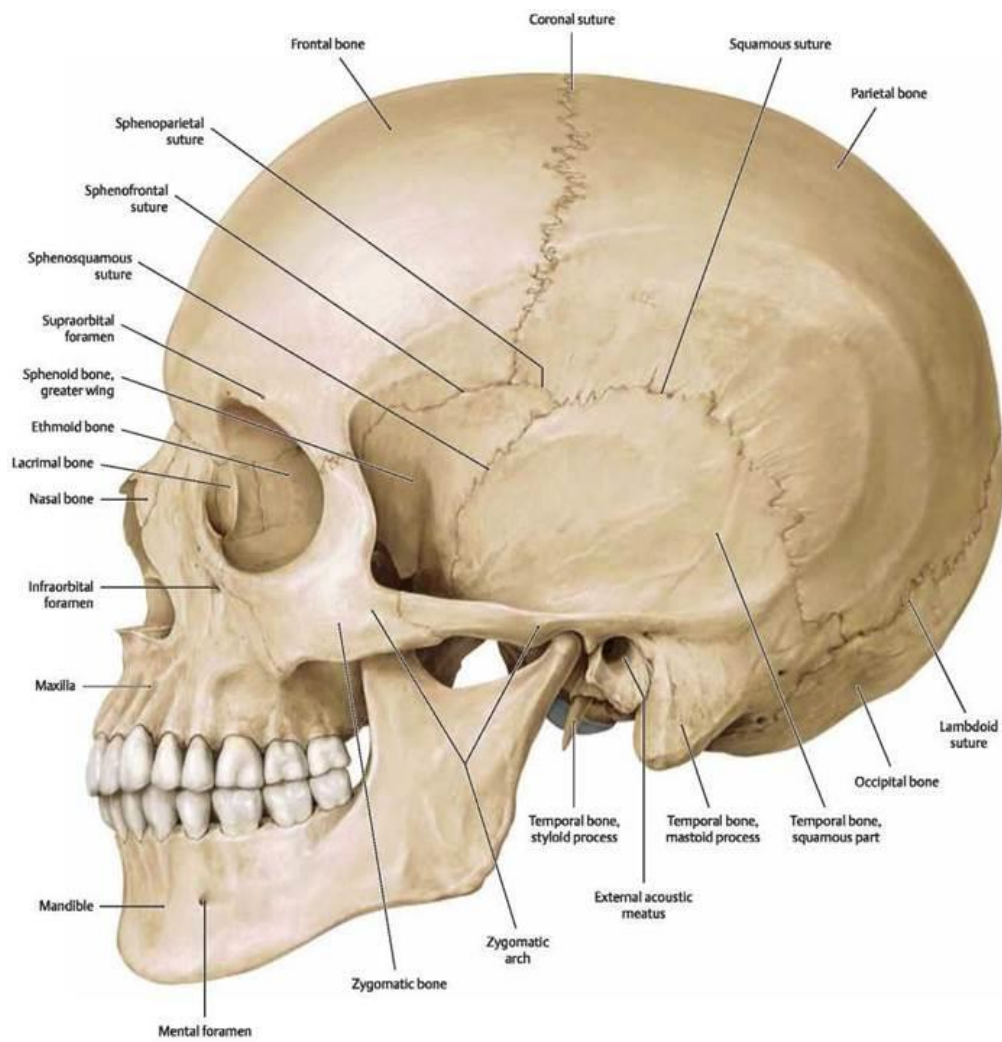
The **hyoid bone** lies below the mandible in the front of the neck. It acts as a movable base for the tongue and is connected to muscles of the jaw, larynx, and tongue. The mandible articulates with the base of the skull

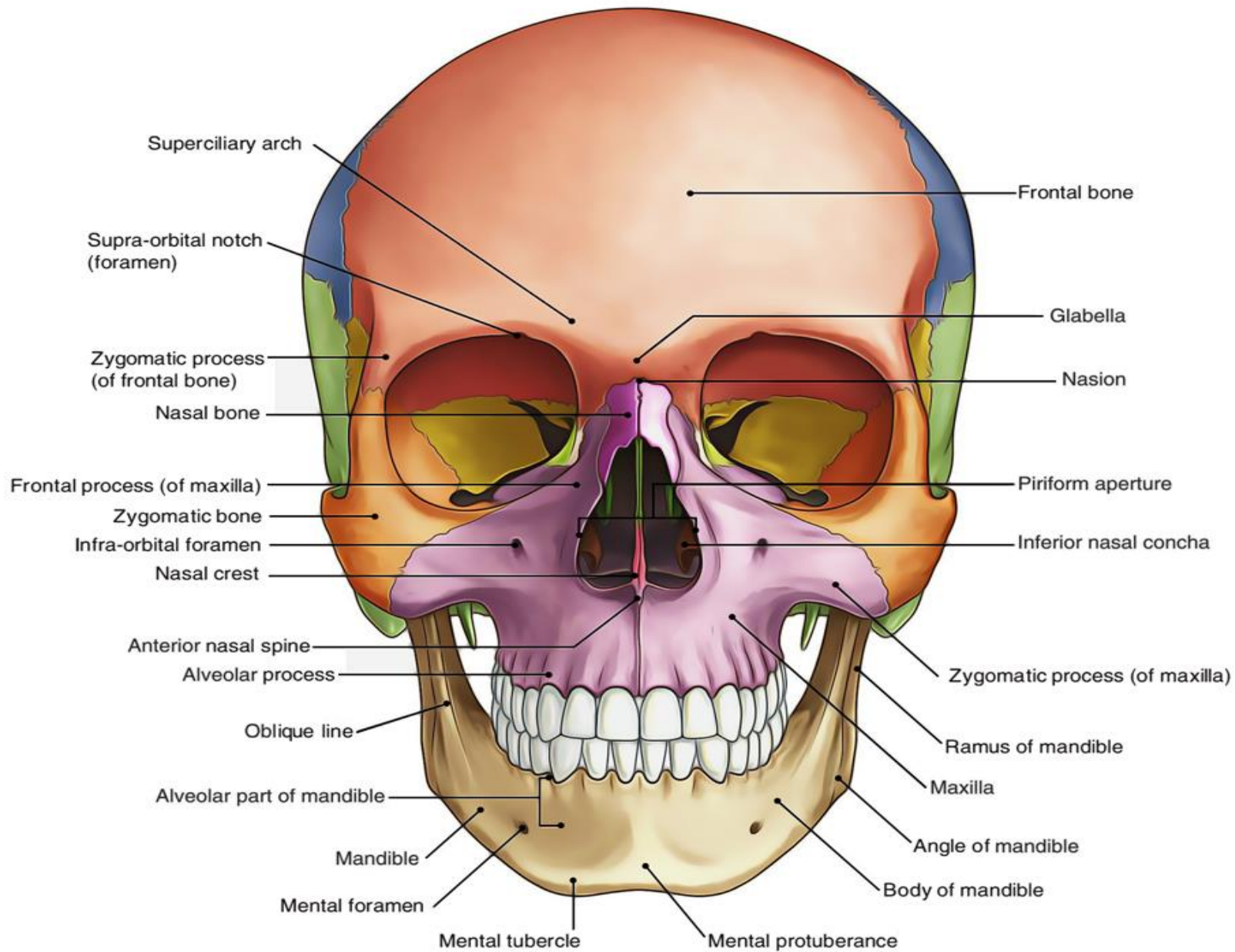
The Vertebral Column

The **vertebral column**, or spinal column, surrounds and protects the spinal cord, supports the head, and acts as an attachment point for the ribs and muscles of the back and neck. The adult vertebral column comprises 26 bones: the 24

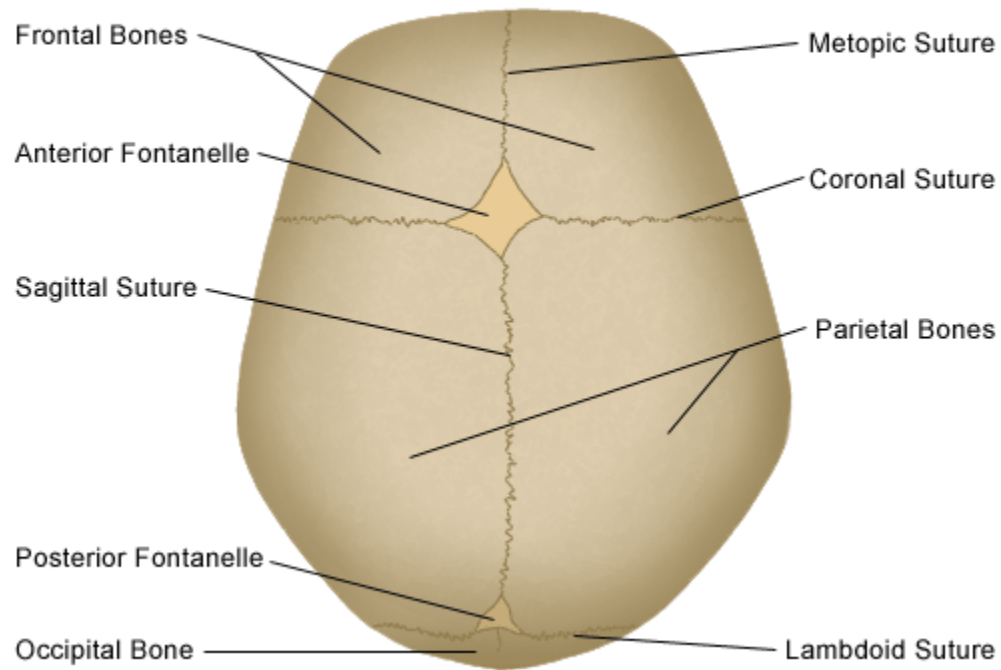
vertebrae, the sacrum, and the coccyx bones. In the adult, the sacrum is typically composed of five vertebrae that fuse into one. The coccyx is typically 3–4 vertebrae that fuse into one. Around the age of 70, the sacrum and the coccyx may fuse together. We begin life with approximately 33 vertebrae, but as we grow, several vertebrae fuse together. The adult vertebrae are further divided into the 7 cervical vertebrae, 12 thoracic vertebrae, and 5 lumbar vertebrae







Normal Skull of the Newborn



SUTURES OF THE SKUL

The sutures of the skull, also referred to as the cranial sutures, are fibrous joints that connect the bones of the skull. They appear as intricate thin lines that mark the adherence between the bones and the growth and closure of the cranial fontanelles.

The dense fibrous tissue that connects the sutures is made mostly out of collagen

Posterior view

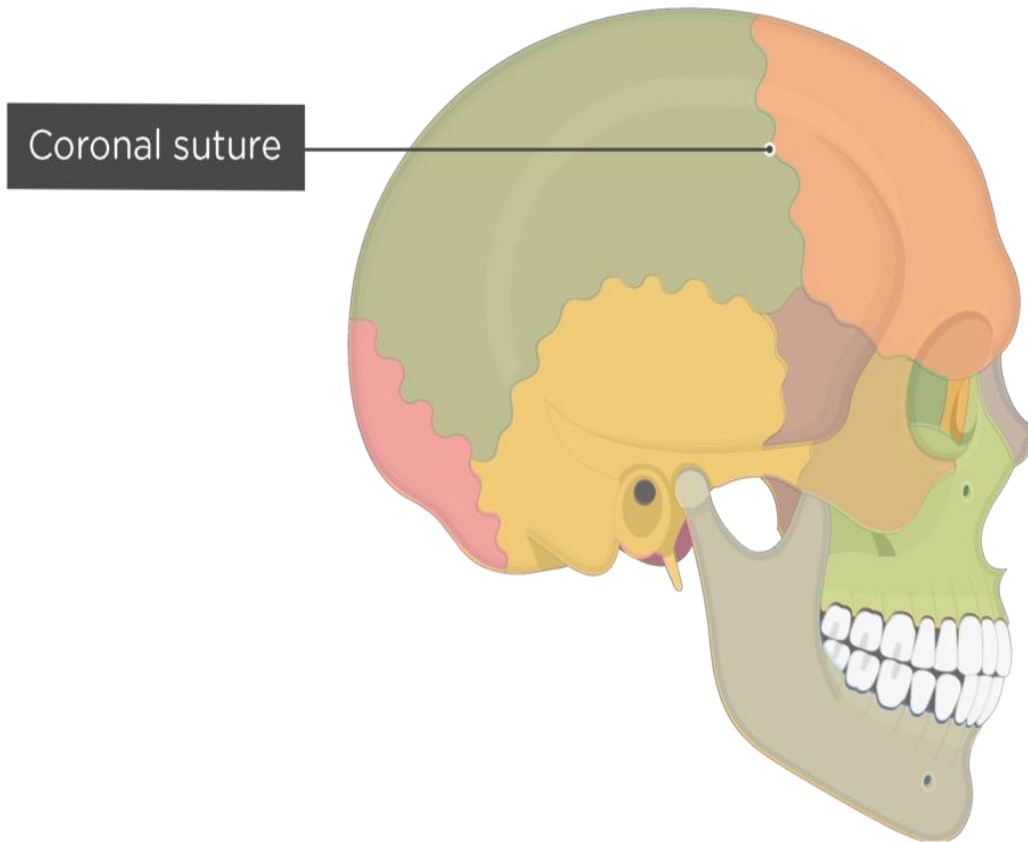
- The sagittal suture joins the two parietals.
 - The lambdoid suture separates the parietal and temporal bones of the skull from the occipital bone.
 - The sagittal and lambdoid sutures converge into a **lambda**.
-


Superior view

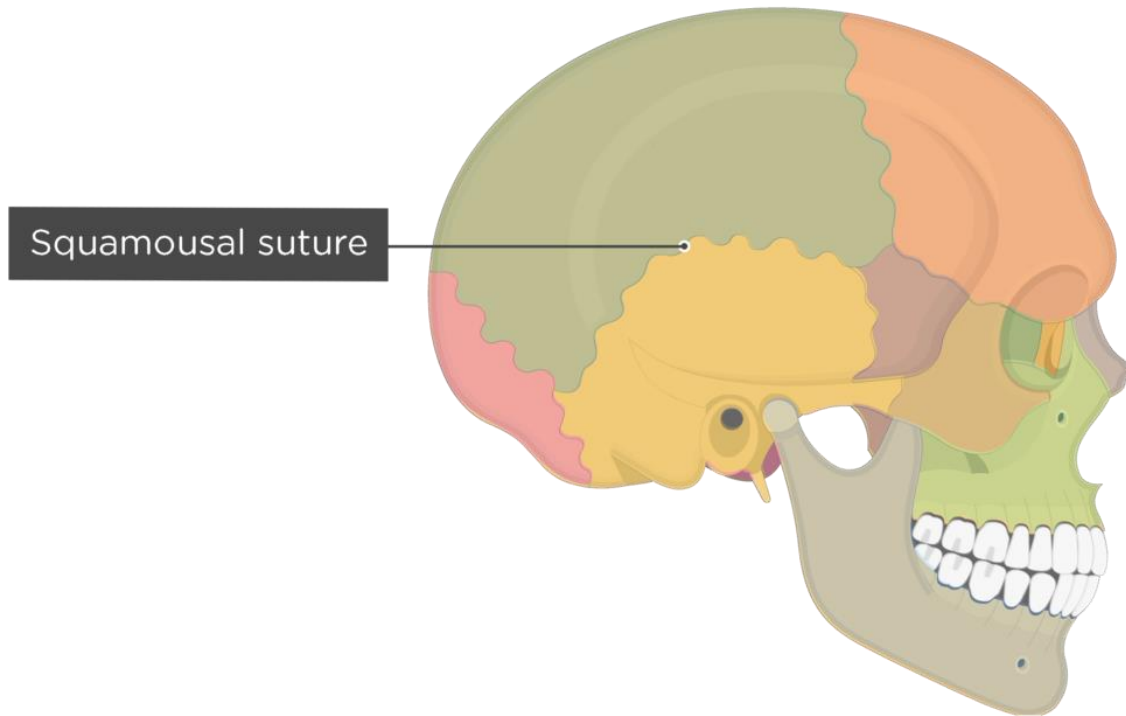
- The coronal suture separates the frontal bone and the parietal bone.
- The coronal and the sagittal sutures converge into the **bregma**.
- The sagittal and lambdoid sutures are also visible from this angle.


Major Sutures

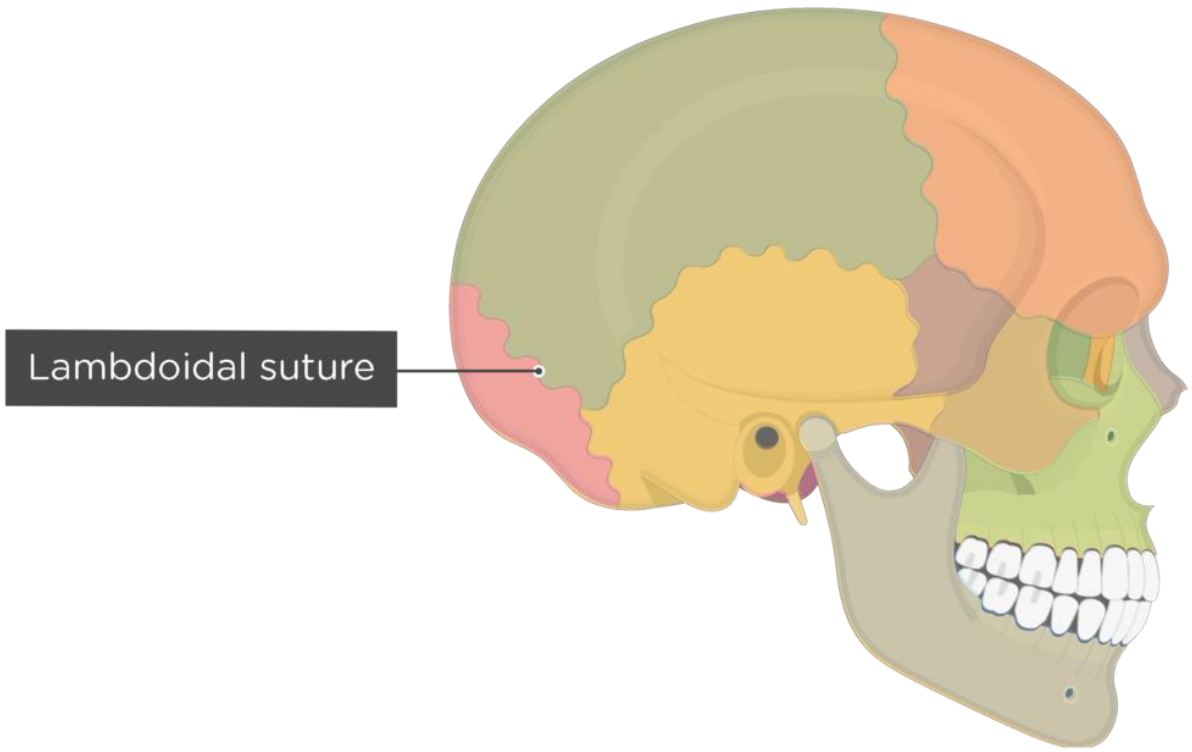
 **Coronal suture** – the junction between the **frontal** and **parietal bones**. [ **Lateral view**]




2. [Squamosal suture](#) – the junction between the parietal and [temporal bones](#). [
[Lateral view](#)]

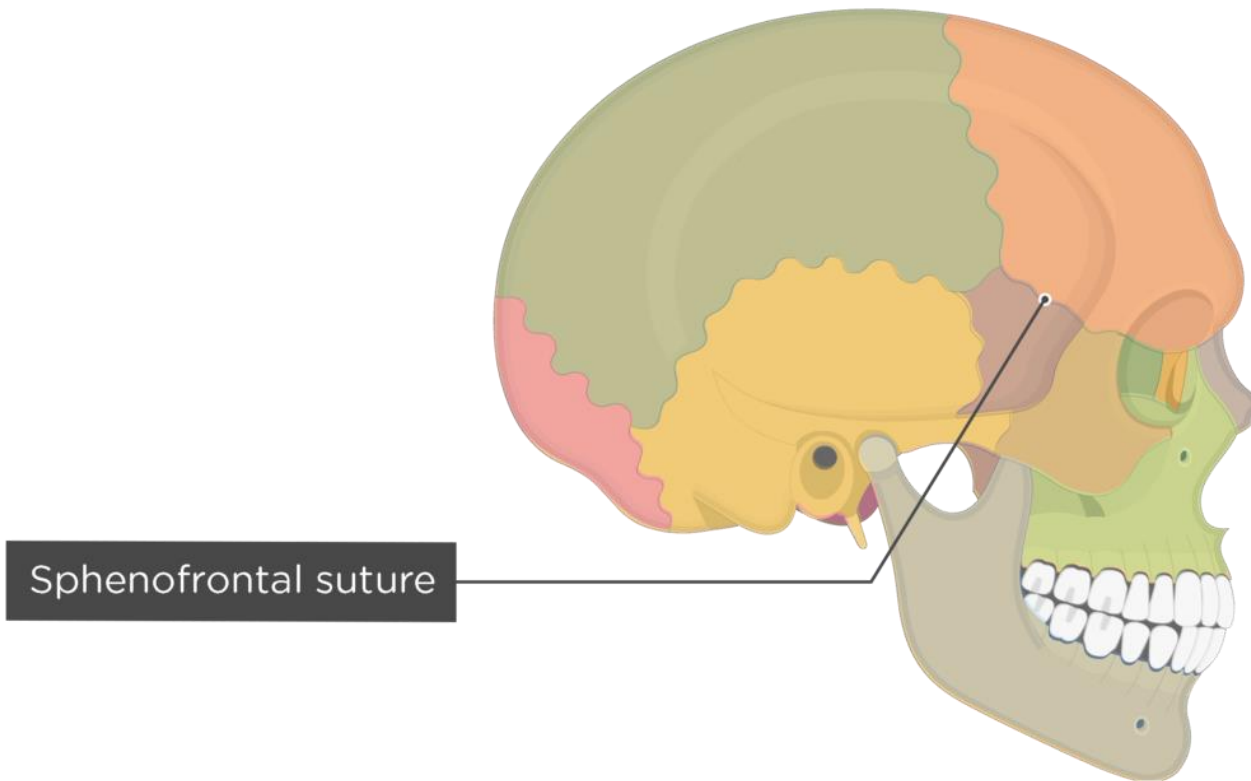



3. [Lambdoidal suture](#) – the junction between the parietal and [occipital bones](#). [
[Lateral view](#)]

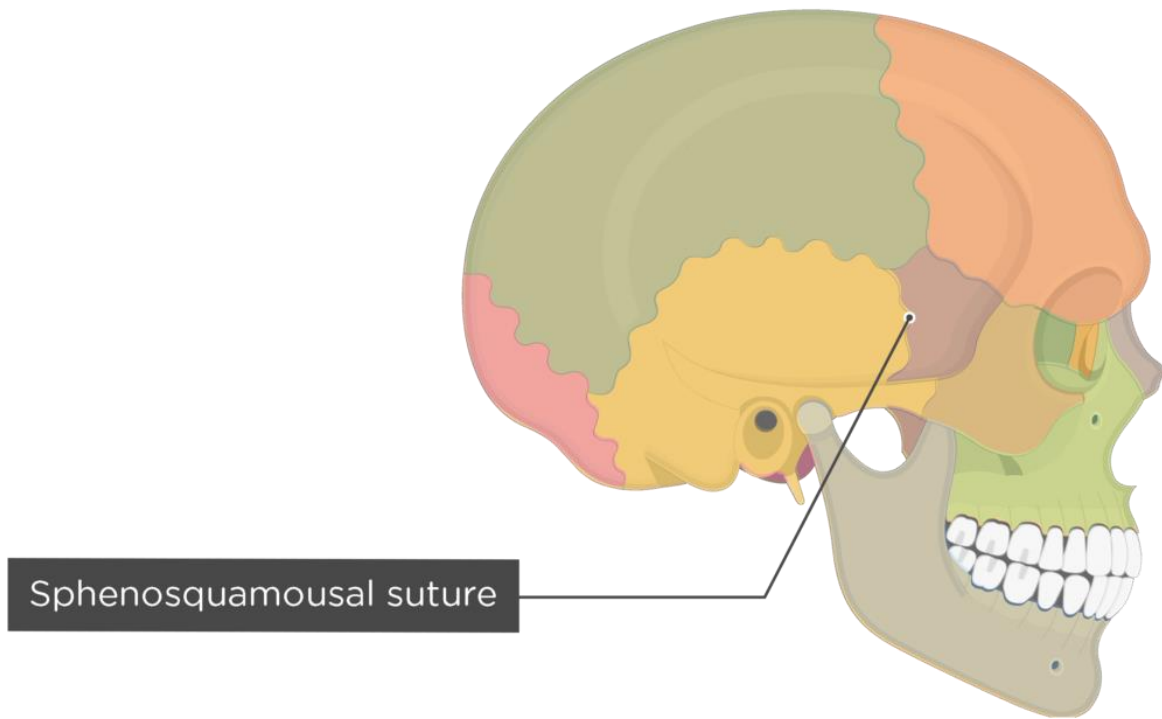


Other Sutures:

1. [Sphenofrontal suture](#) – the junction between the [sphenoid](#) and frontal bones. [
[Lateral view](#)]



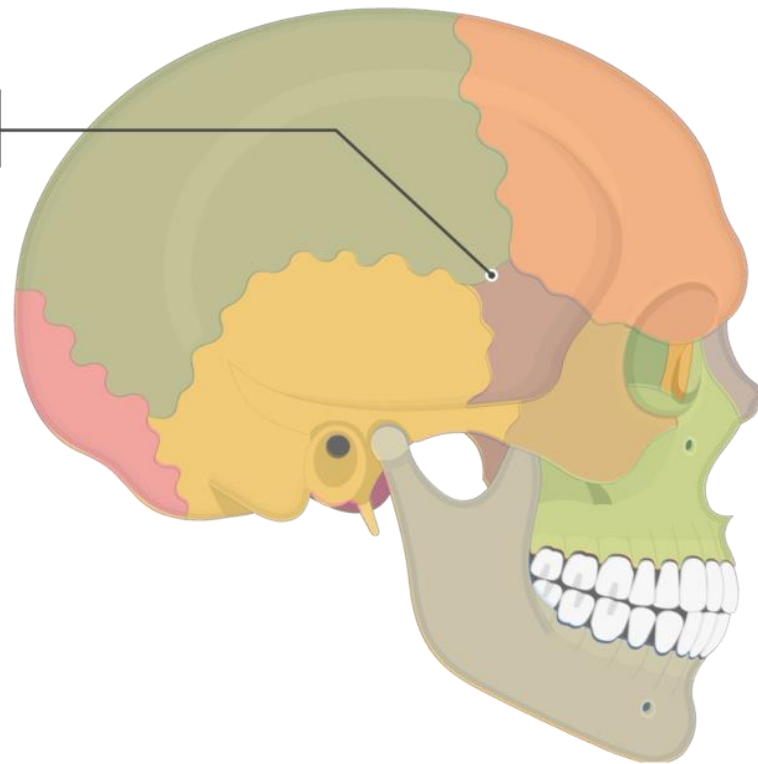
2. [Sphenosquamous suture](#) – the junction between the sphenoid and temporal bones. [
[Lateral view](#)]



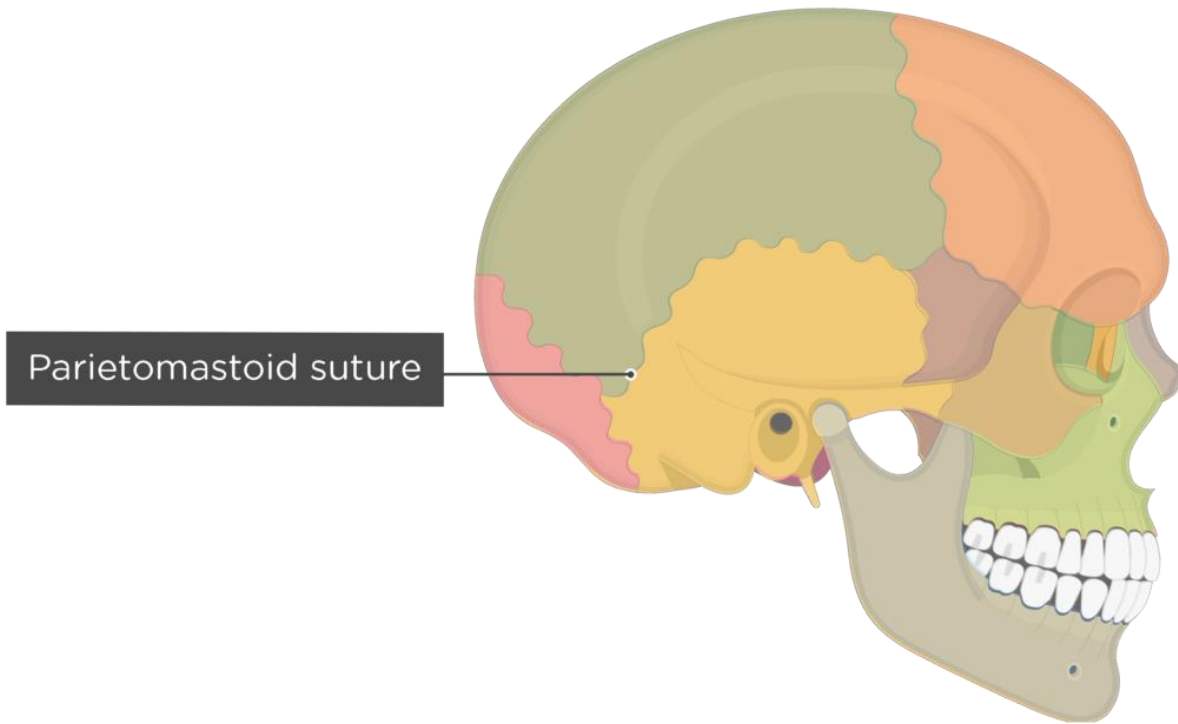
Sphenosquamous suture

3. [!\[\]\(13b6bdd0ca077c333d50231f1443cb1d_img.jpg\) Sphenoparietal suture](#) – the junction between the sphenoid and parietal bones. [[!\[\]\(5dbedd4e1e8871e3a0e67053ad2f9701_img.jpg\) Lateral view](#)]

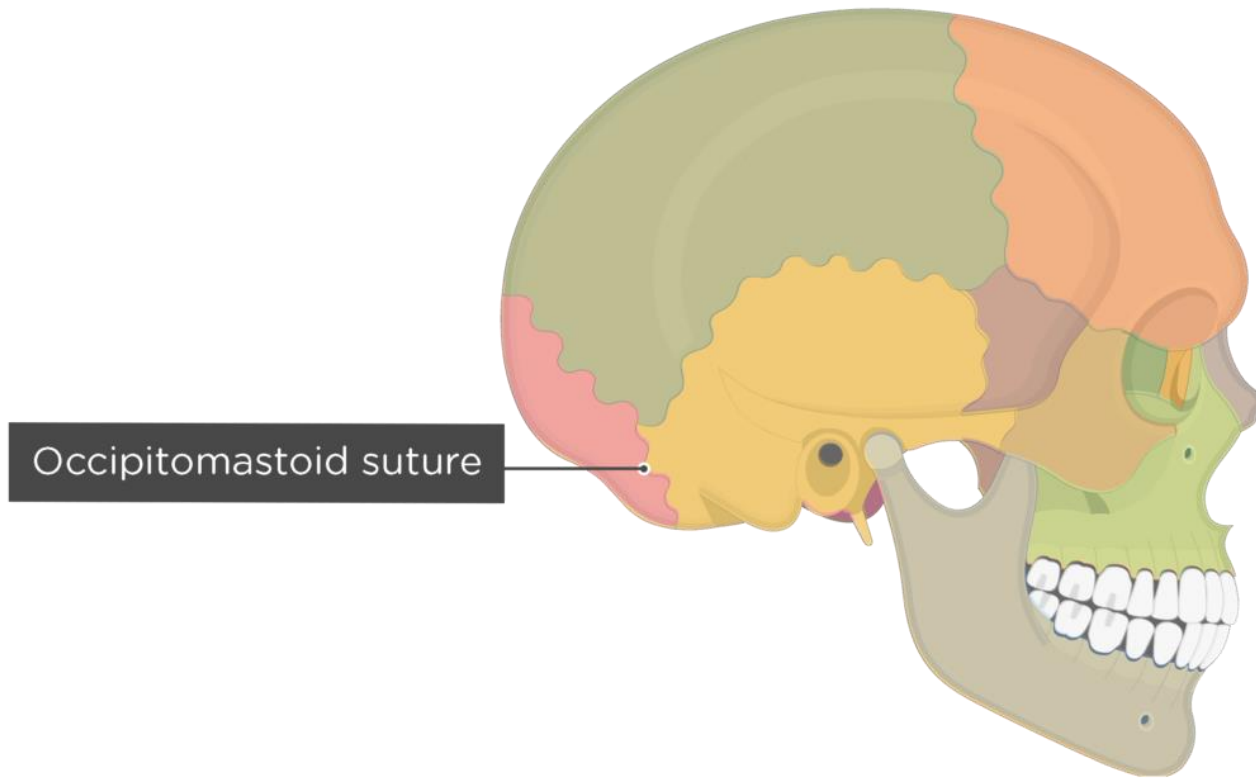
Sphenoparietal suture



4. [Parietomastoid suture](#) – the junction between the parietal and temporal bones. [[Lateral view](#)]

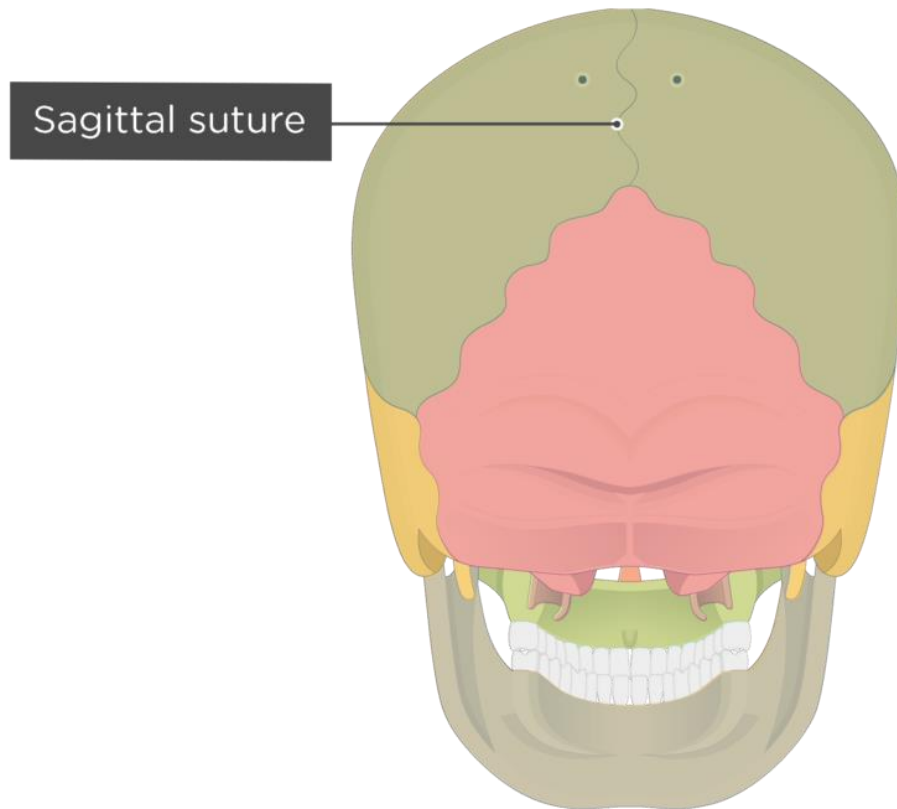




5. [!\[\]\(849840539e55921a3851a4ff96d7400d_img.jpg\) Occipitomastoid suture](#) – the junction between the occipital and temporal bones. [
[!\[\]\(c176e0b06f6c5dd85a4598b214d1ebba_img.jpg\) Lateral view](#)]

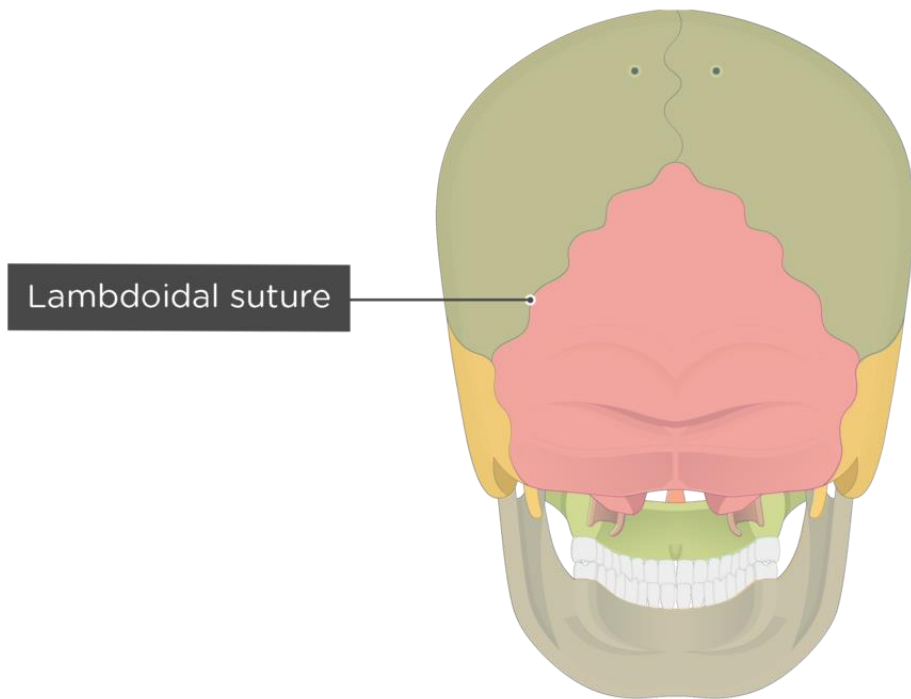


Major Sutures:

1. [Sagittal suture](#) – the junction between the two parietal bones. [[Posterior view](#)]

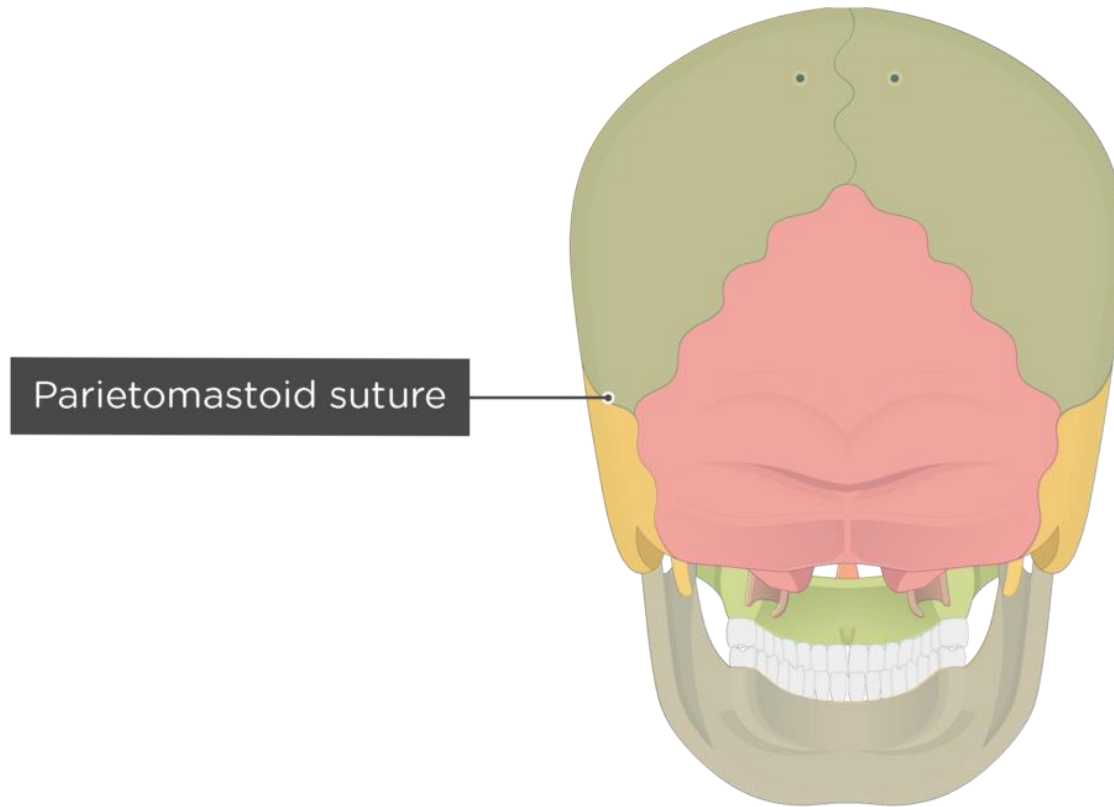


2.  Lambdoidal suture – the junction between the parietal bones and the occipital bone. [ Posterior view]



Other Sutures:

1. [\[🖼️\] Parietomastoid suture](#) – the junction between the parietal and temporal bones. [\[🖼️ Posterior view\]](#)



2. [🖼️ Occipitomastoid suture](#) – the junction between the occipital and temporal bones. [
[🖼️ Posterior view](#)]

Occipitomastoid suture

