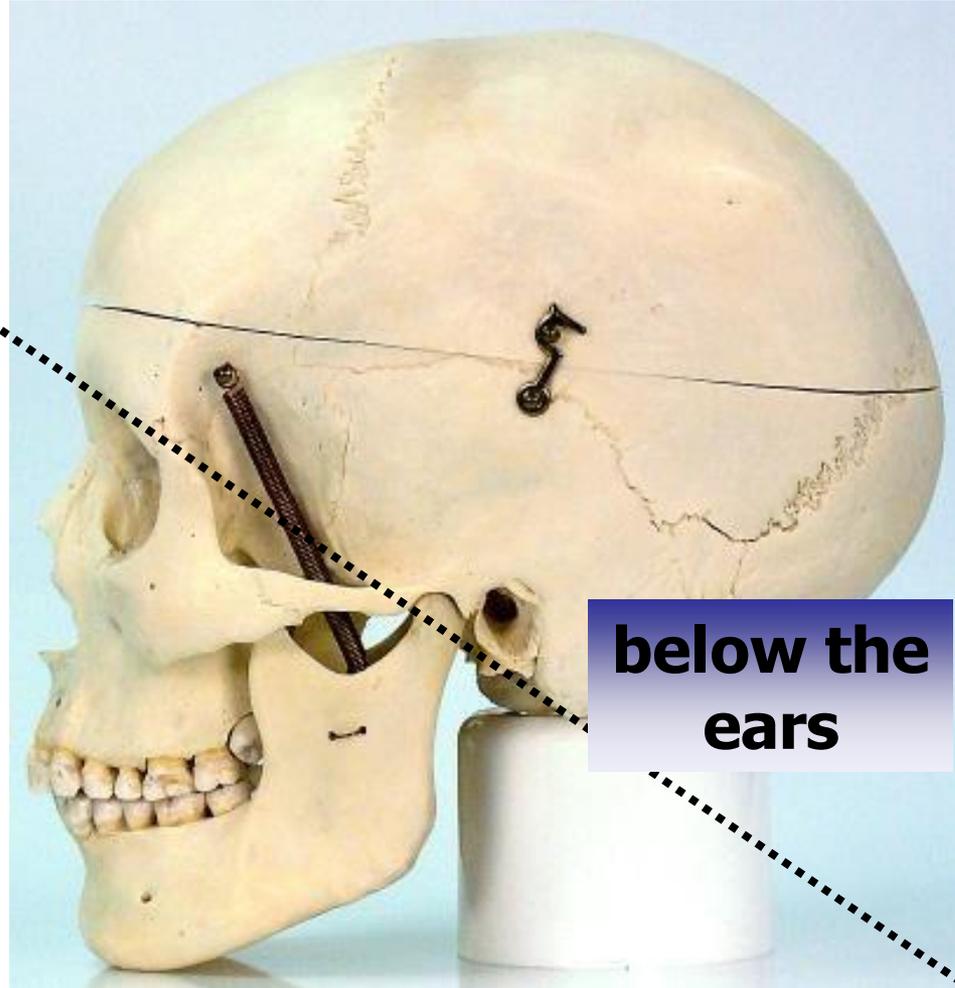




Head & Neck Anatomy Course

SKULL OSTEOLOGY

bones of the cranial vault (neurocranium)



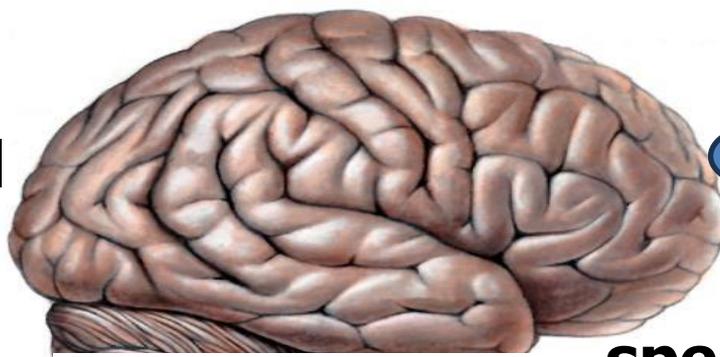
**above the
eyes**

**below the
ears**

**base of
the skull**

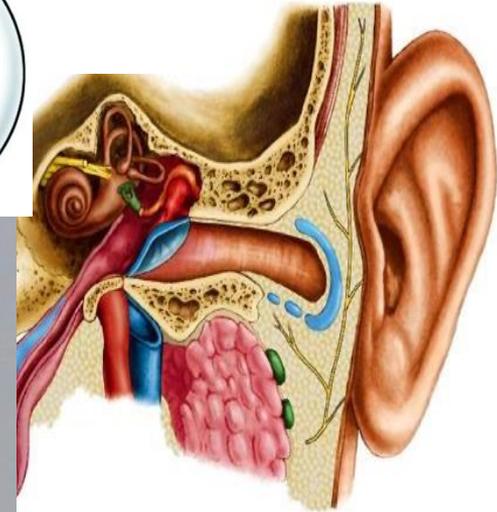
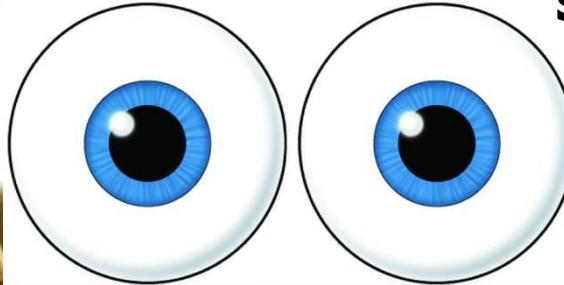
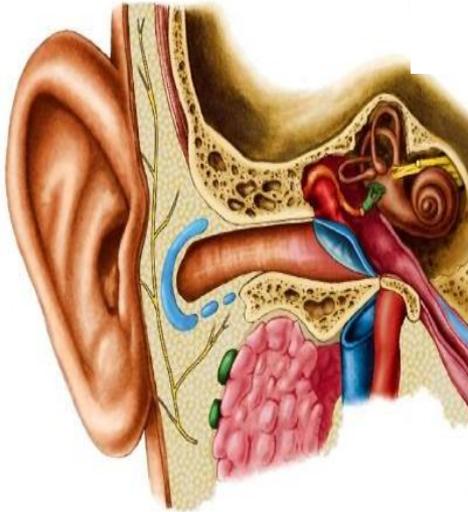
**bones of the face
(viscerocranium)**

brain & cranial nerves

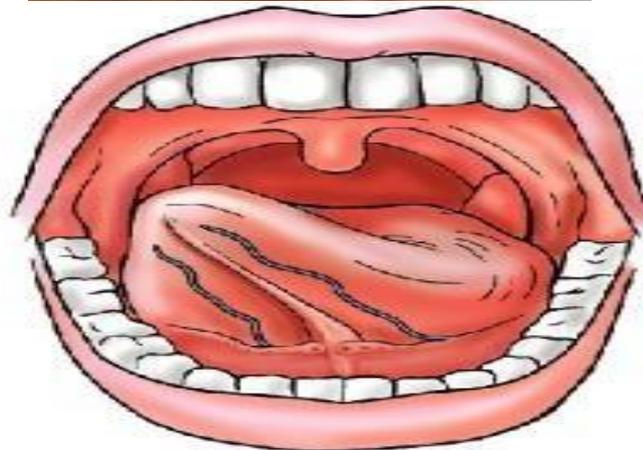


Why head & nek imp

special sense organs

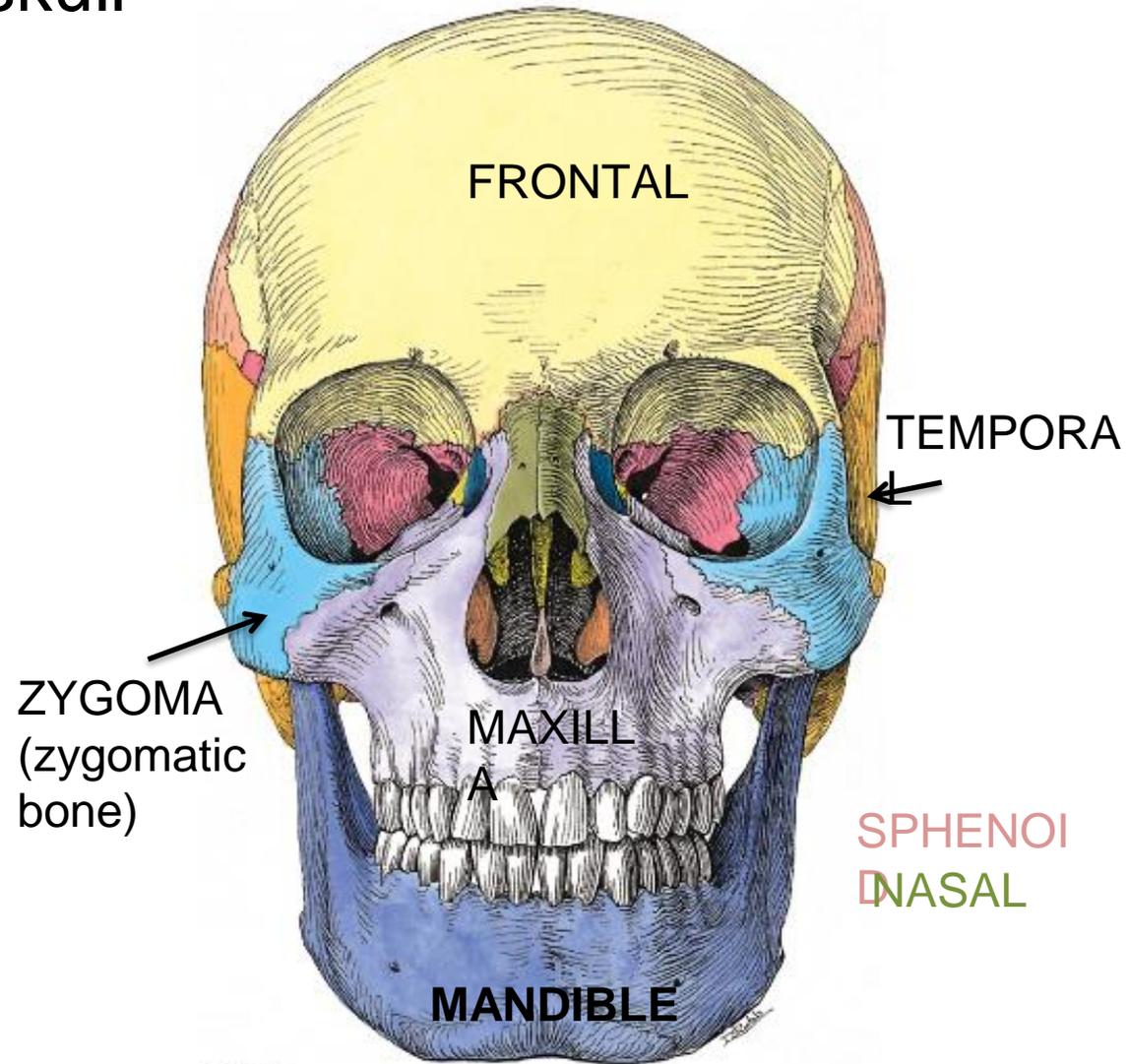
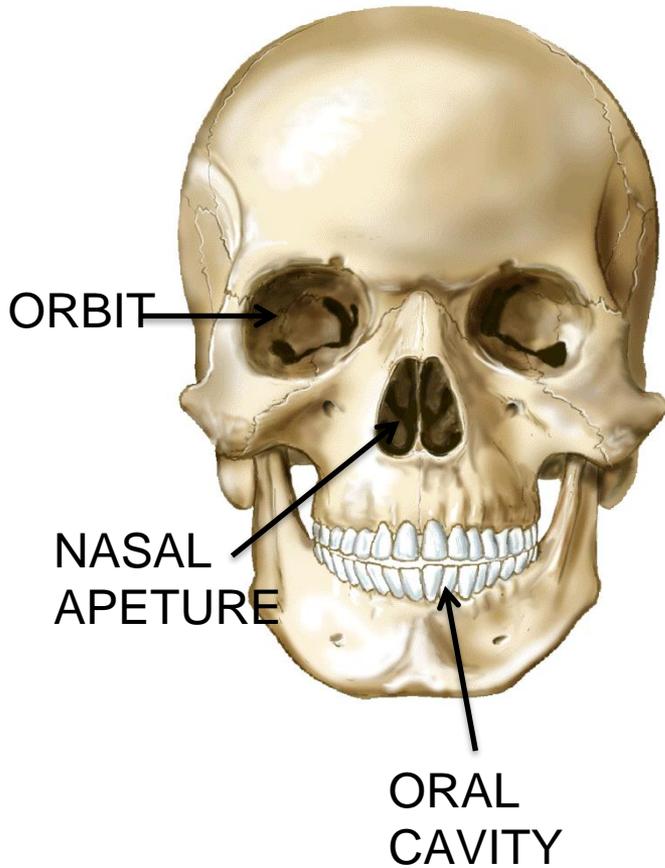


air passages



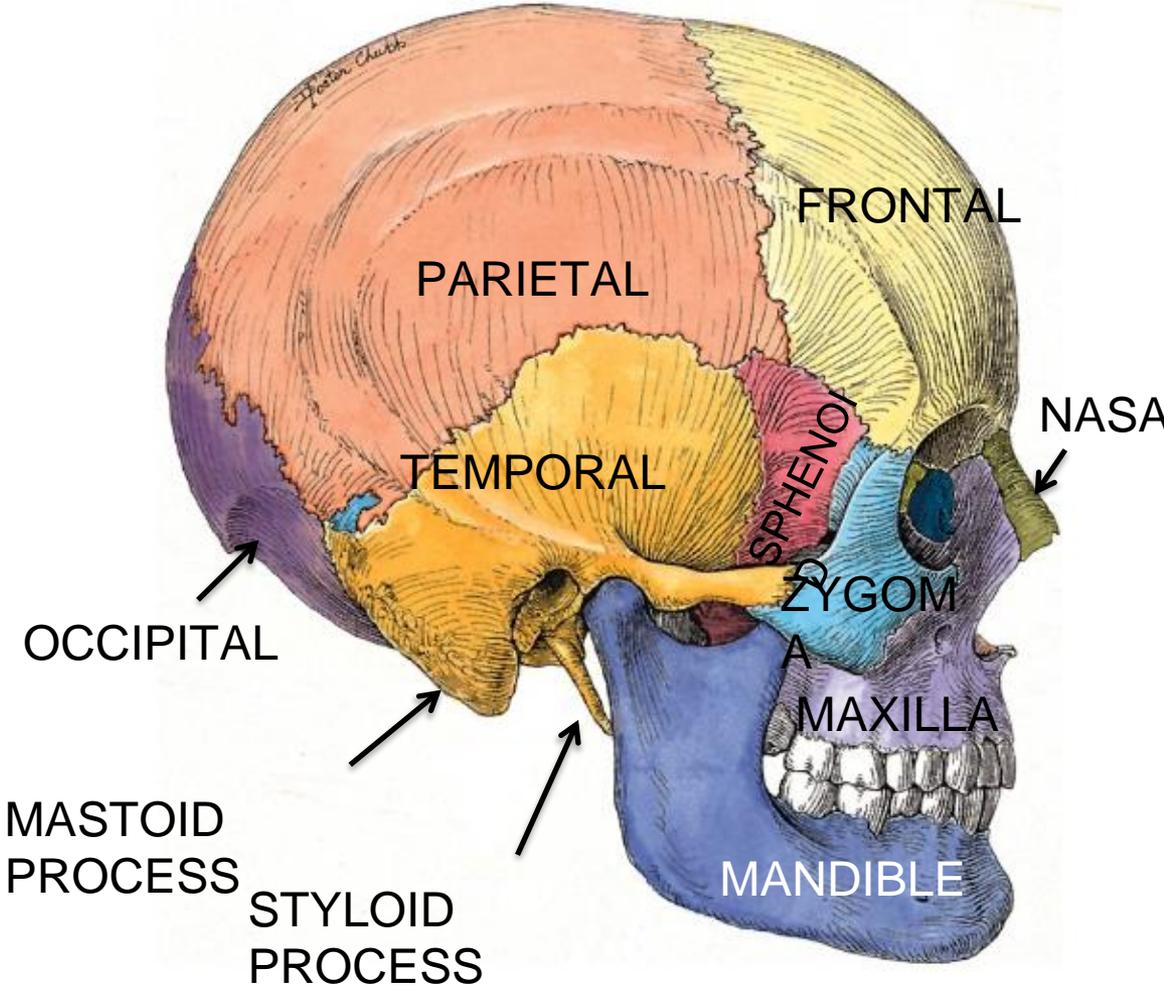
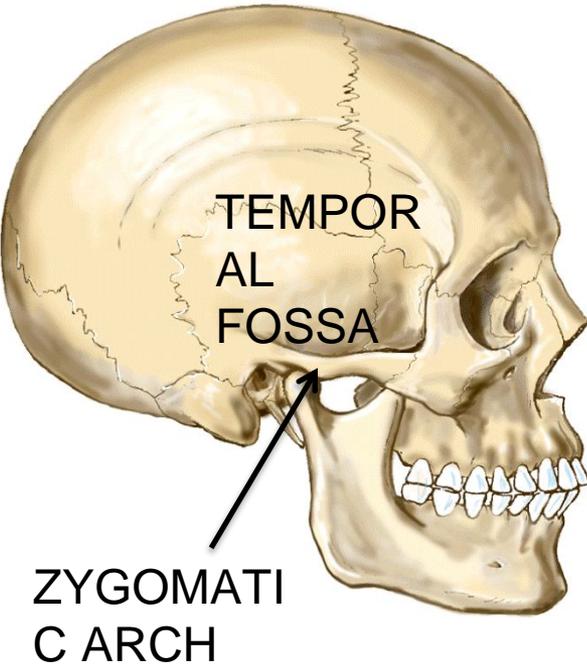
alimentary passages

Anterior view of the skull



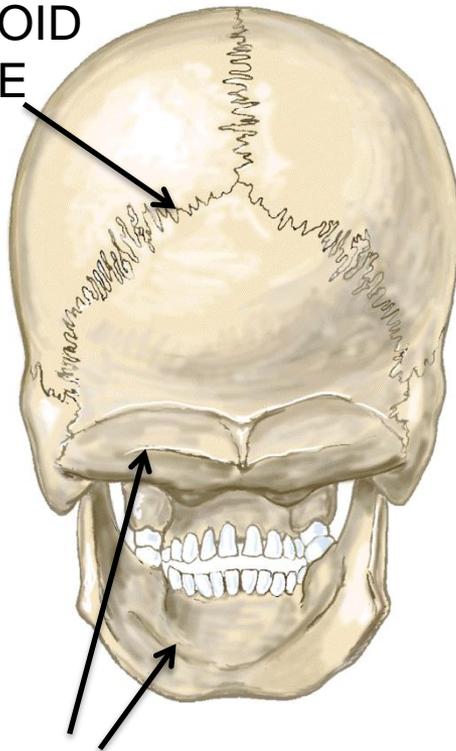
maxilla and mandible contain alveolar bone – teeth

Lateral view of the skull

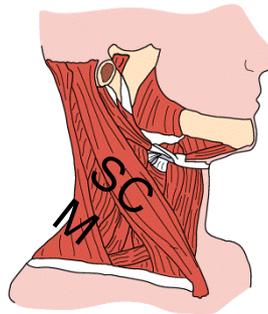


Posterior view of the skull

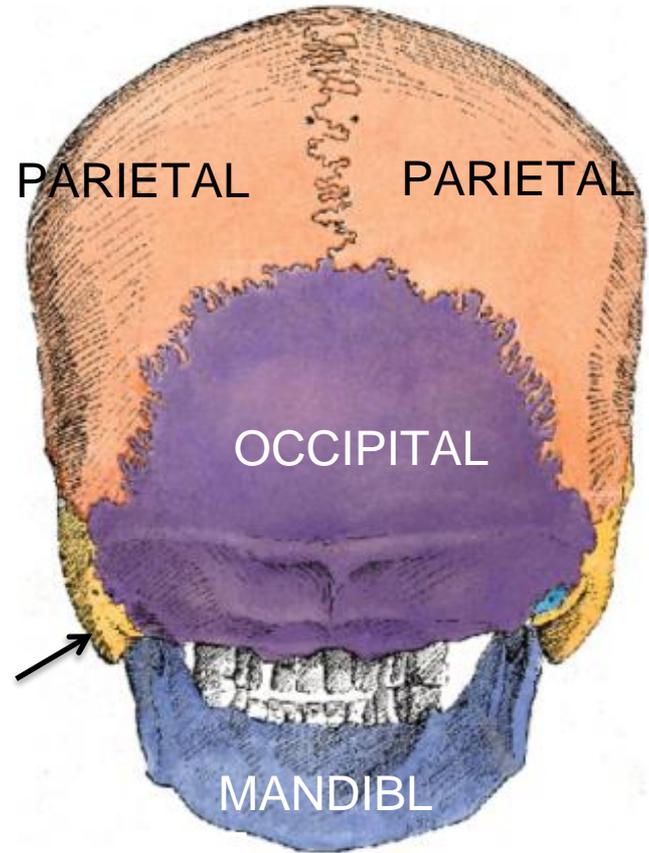
LAMBDOID SUTURE



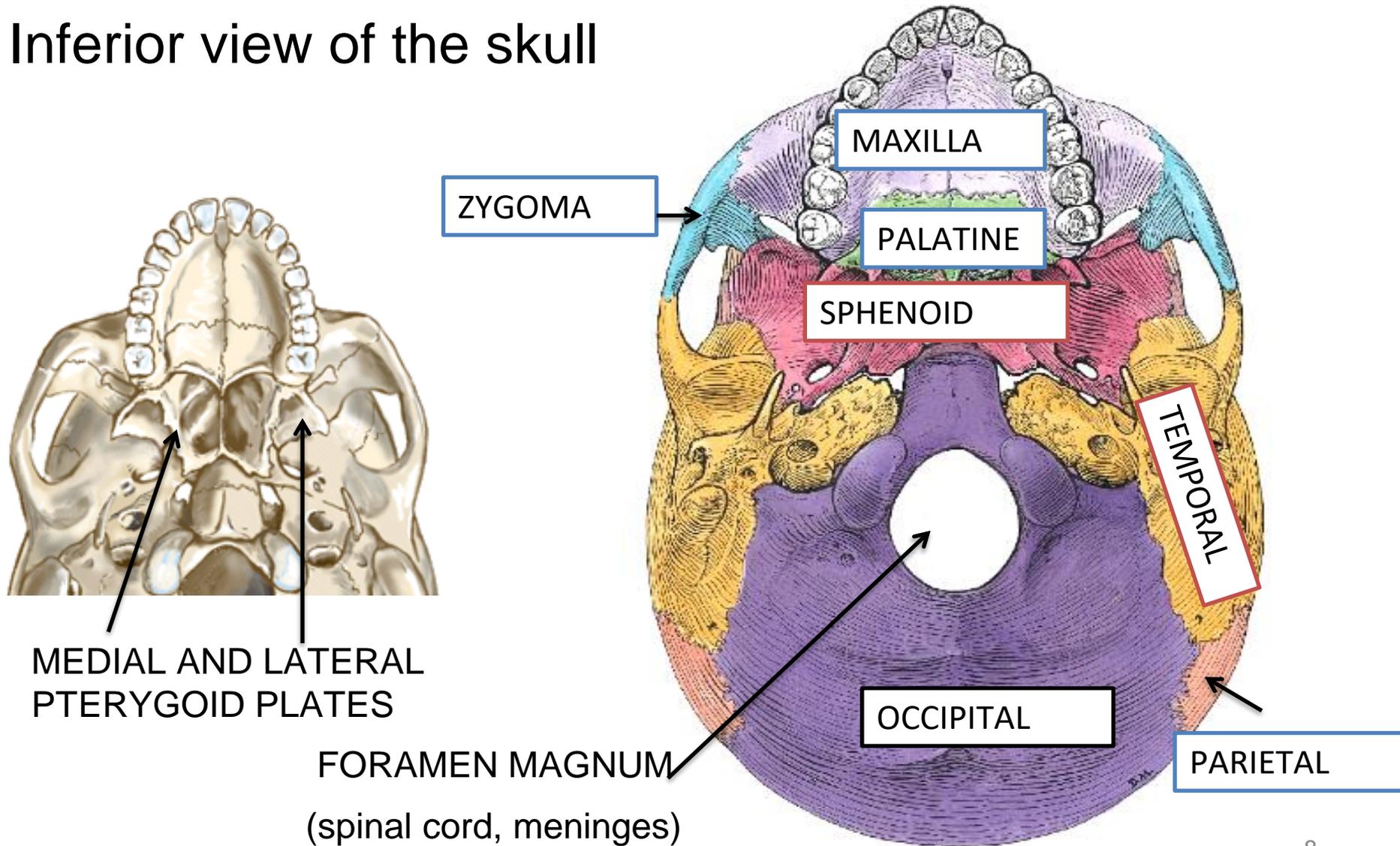
MUSCLE MARKINGS



MASTOID PROCESS

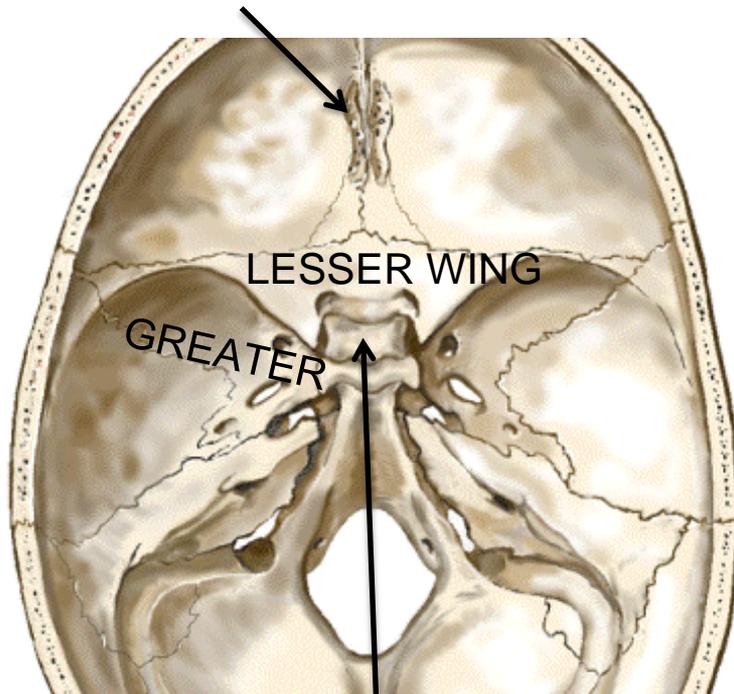


Inferior view of the skull

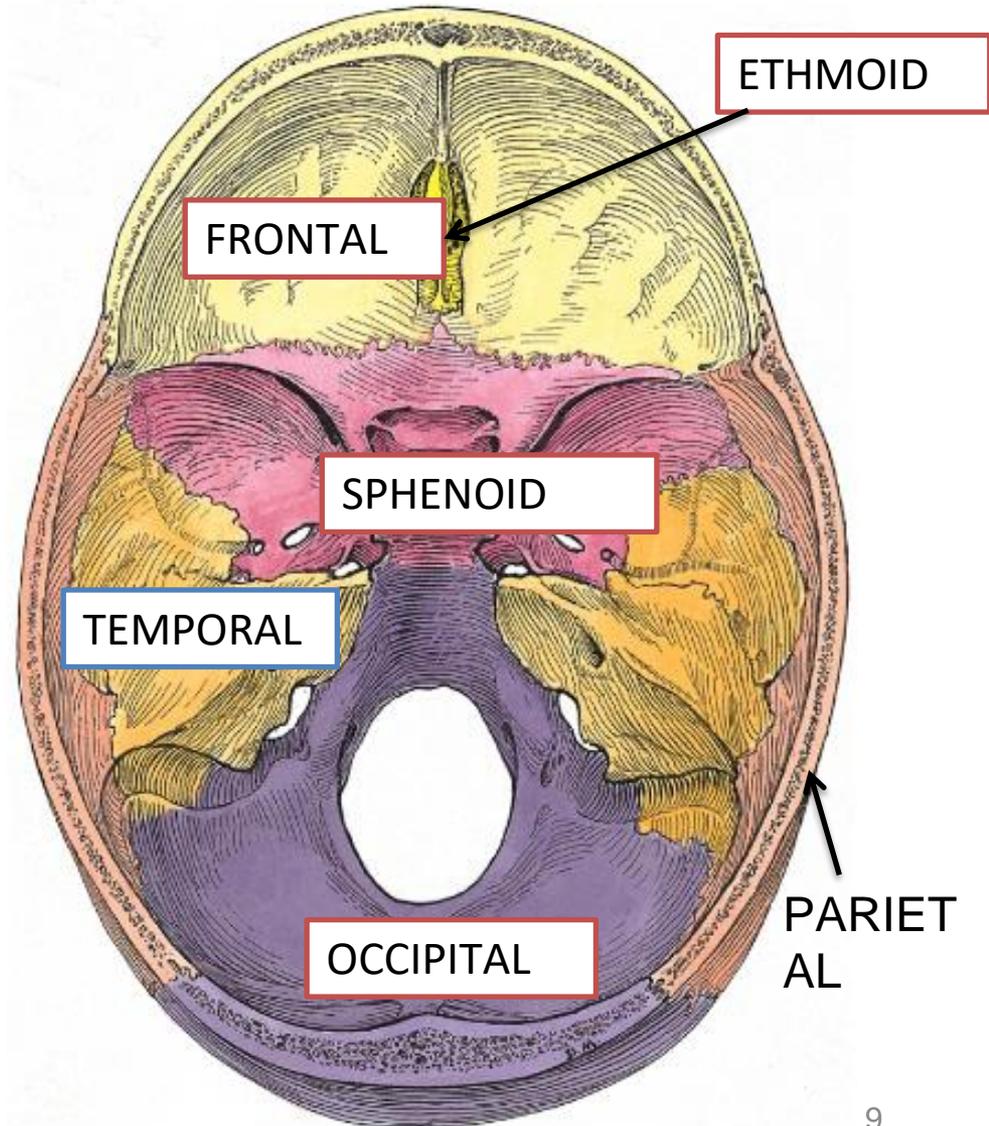


Cranial fossae

CRIBRIFORM PLATE

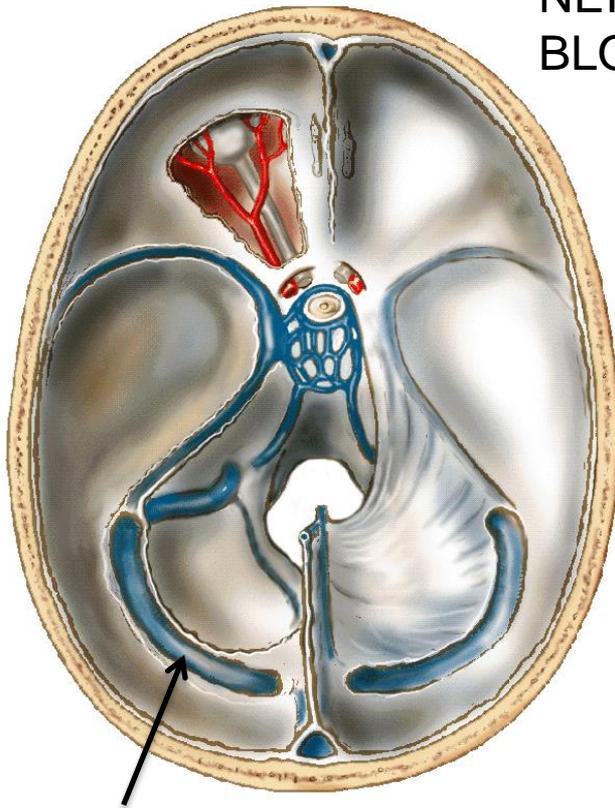


SELLA TURCICA
(pituitary gland)

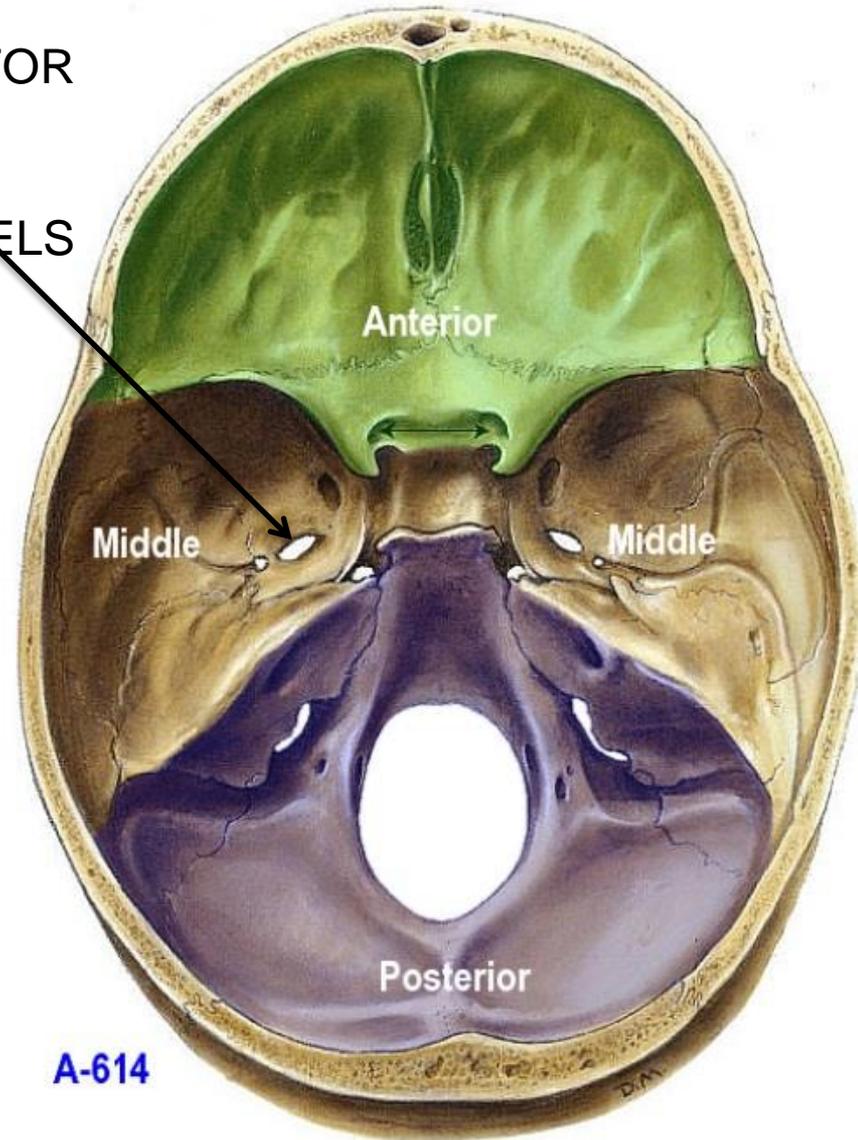


Cranial Fossae

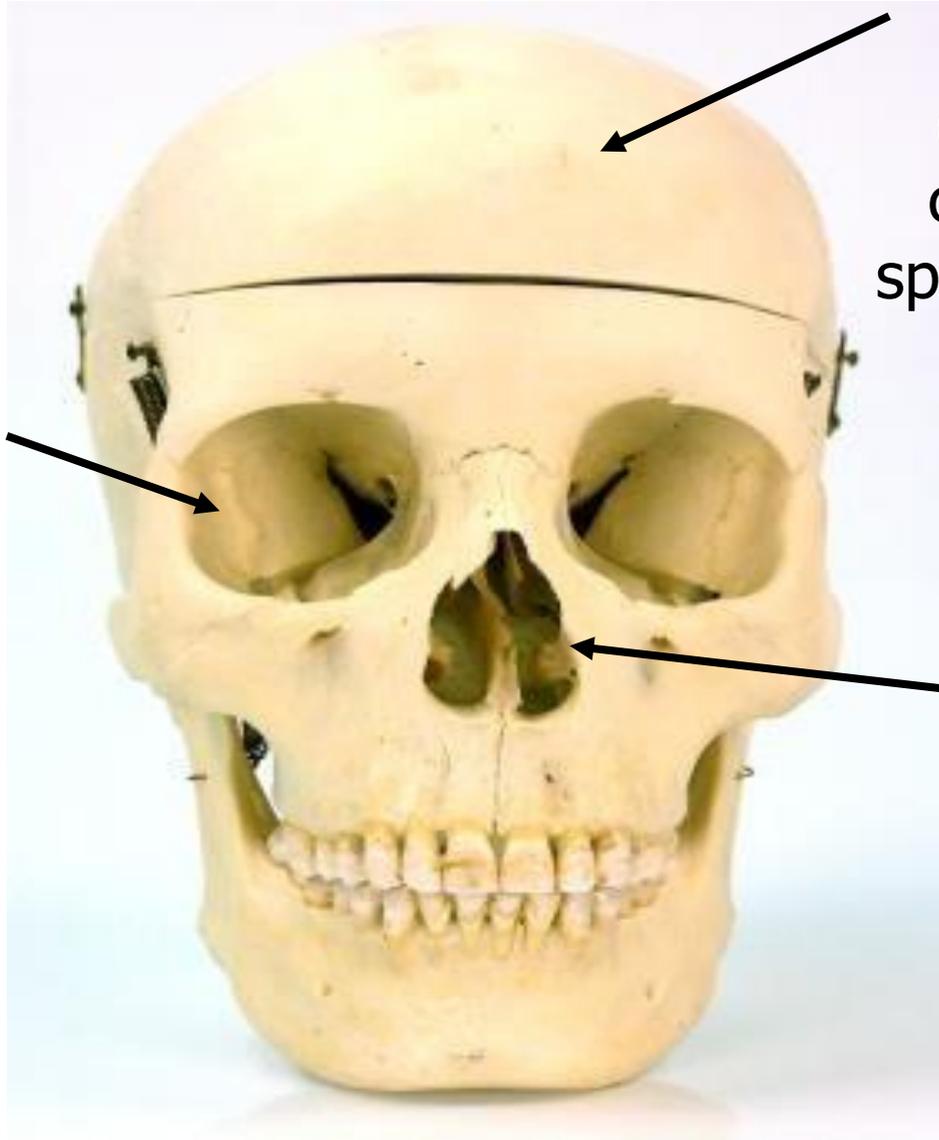
OPENINGS (FORAMINA) FOR CRANIAL NERVES AND BLOOD VESSELS



DURAL VENOUS SINUSES



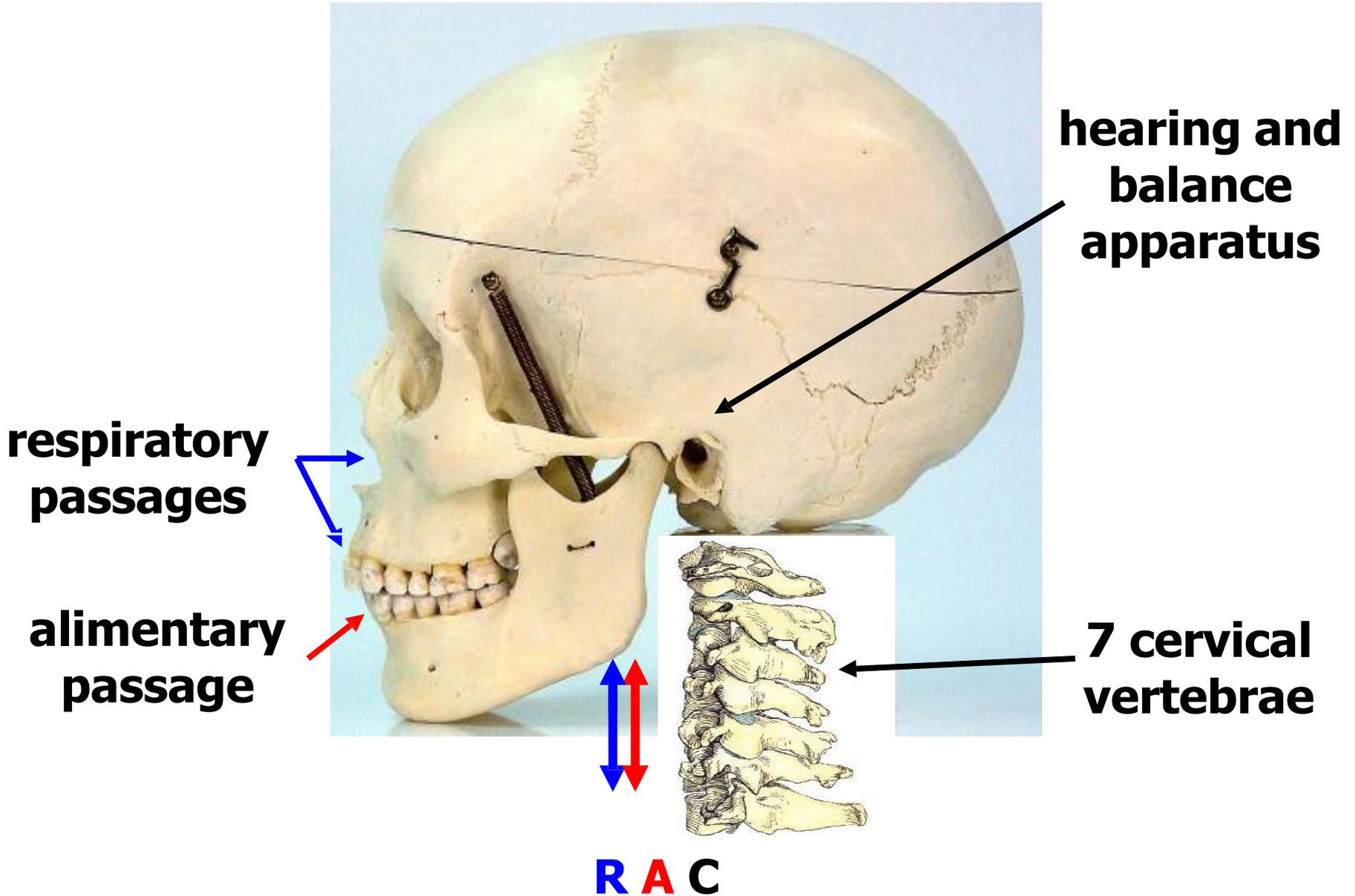
A-614



**orbit
(holds eye)**

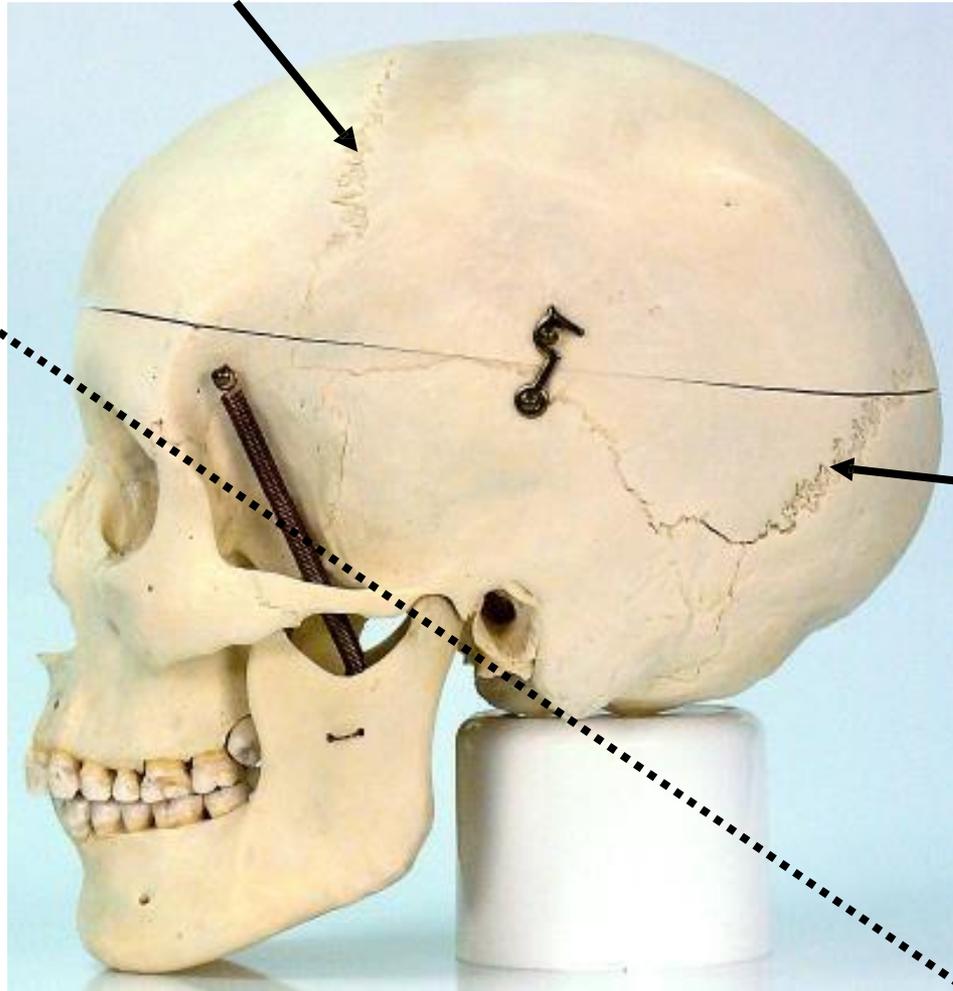
**the cranial
vault**
(the cranial
cavity is the
space inside for
the brain)

**nasal cavity
(smell)**



**suture lines
(fibrous joints)**

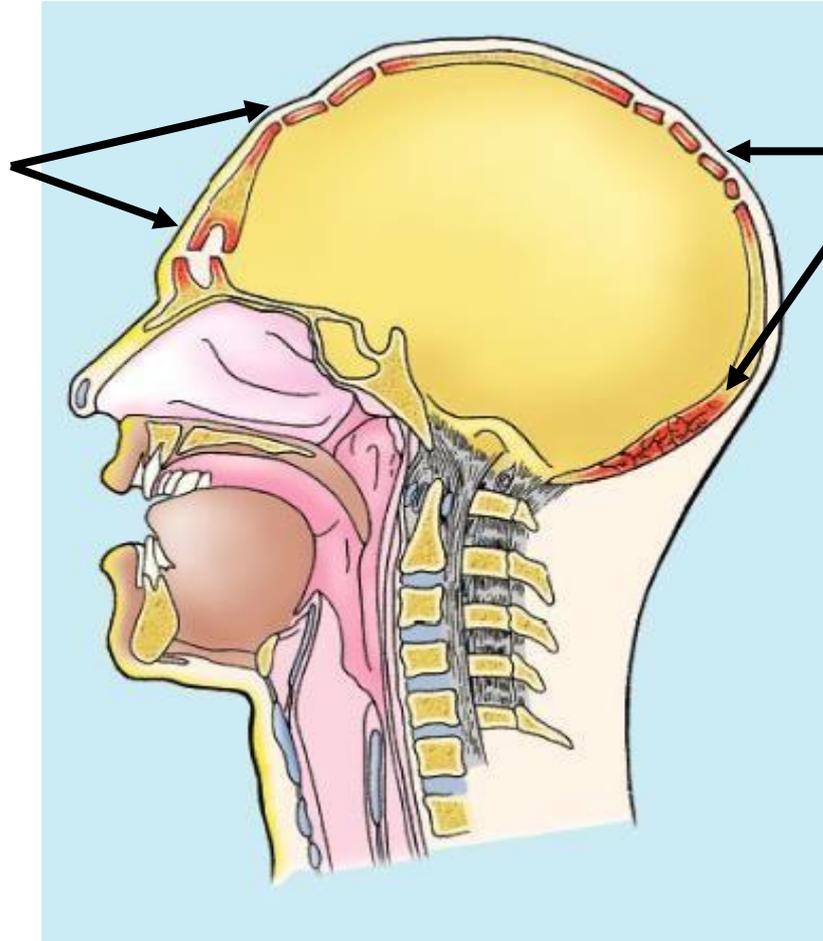
**bones of the cranial vault
(neurocranium)**



**suture lines
(fibrous
joints)**

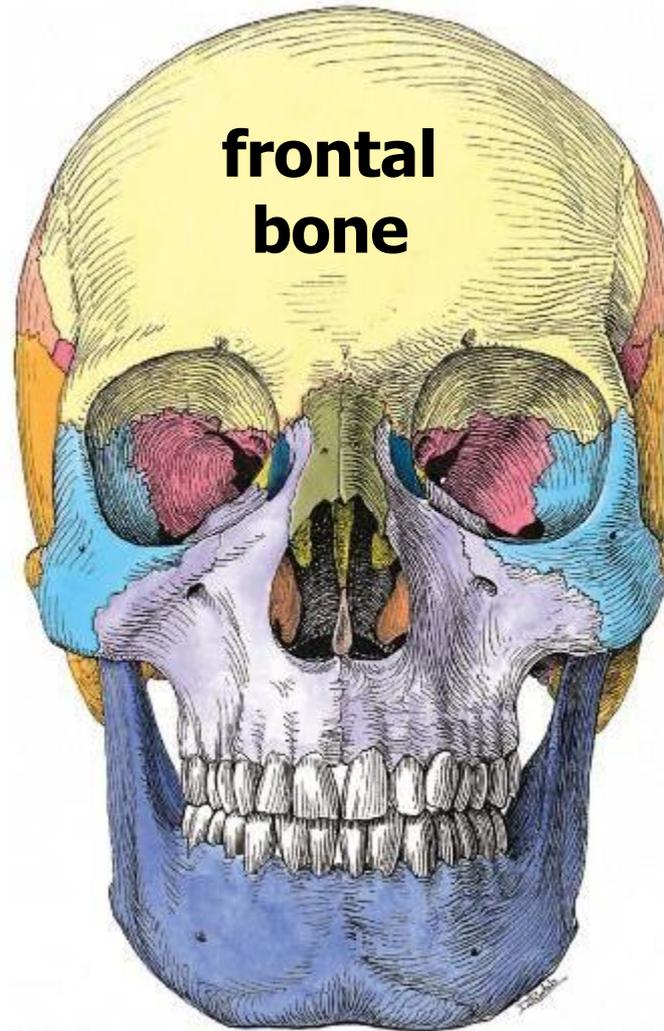
SKULL FRACTURES

which bone?

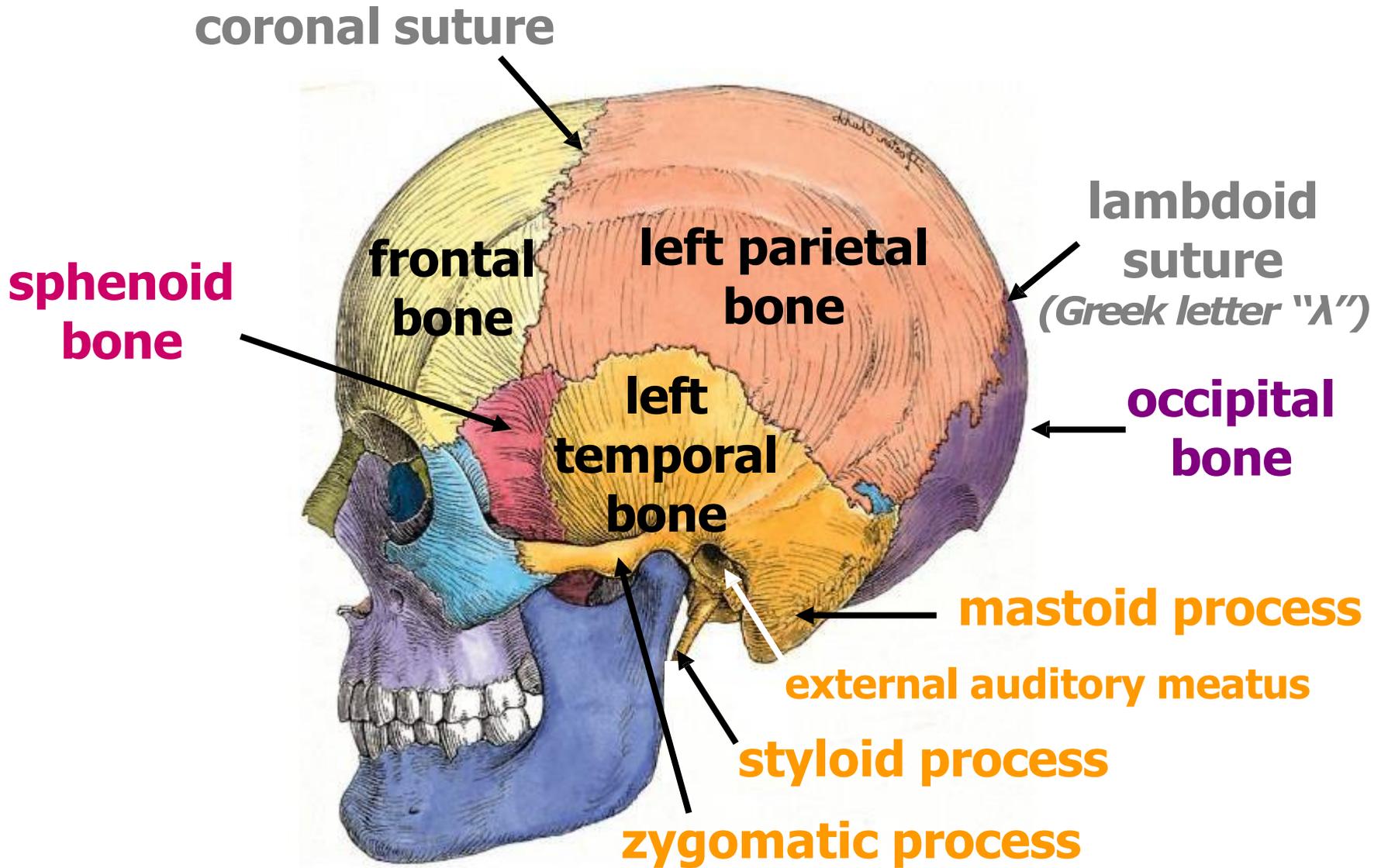


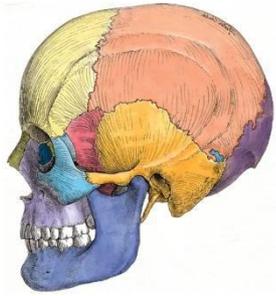
which bones?

The Skull – Anterior View



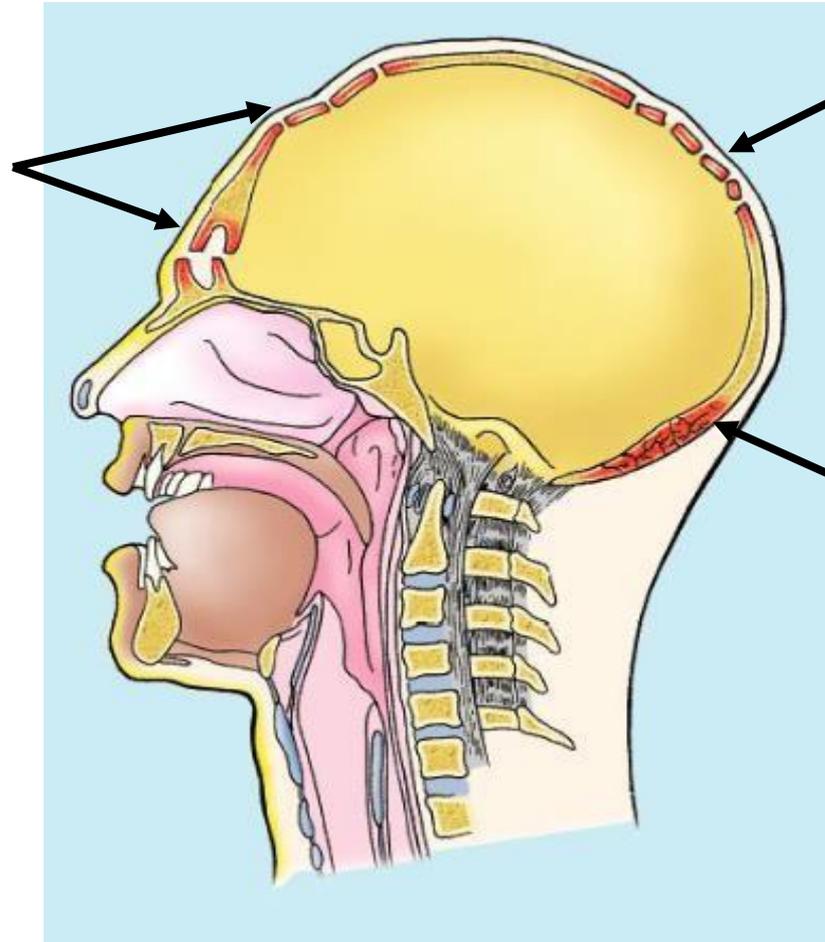
The Skull – Left Lateral View





SKULL FRACTURES

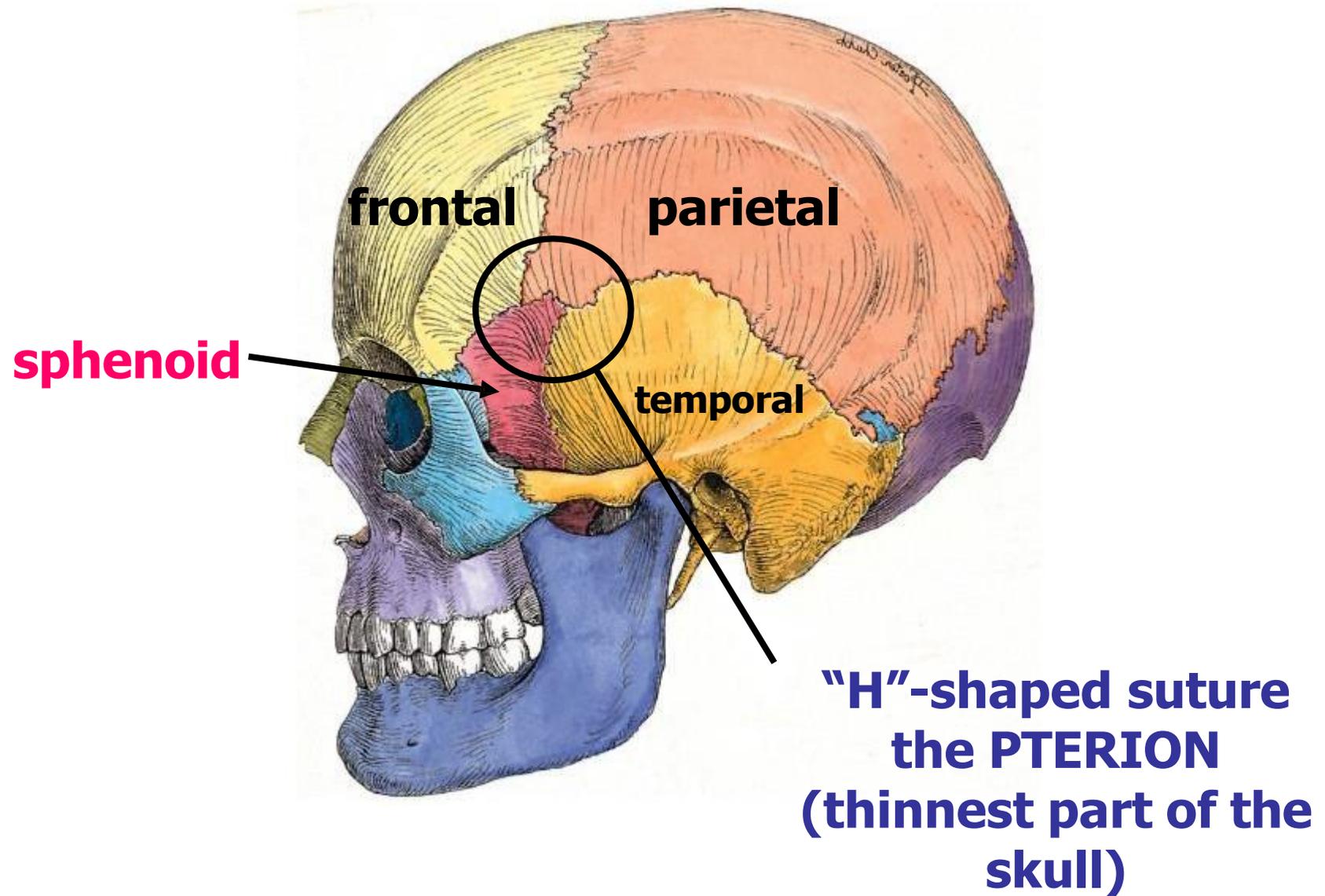
frontal bone

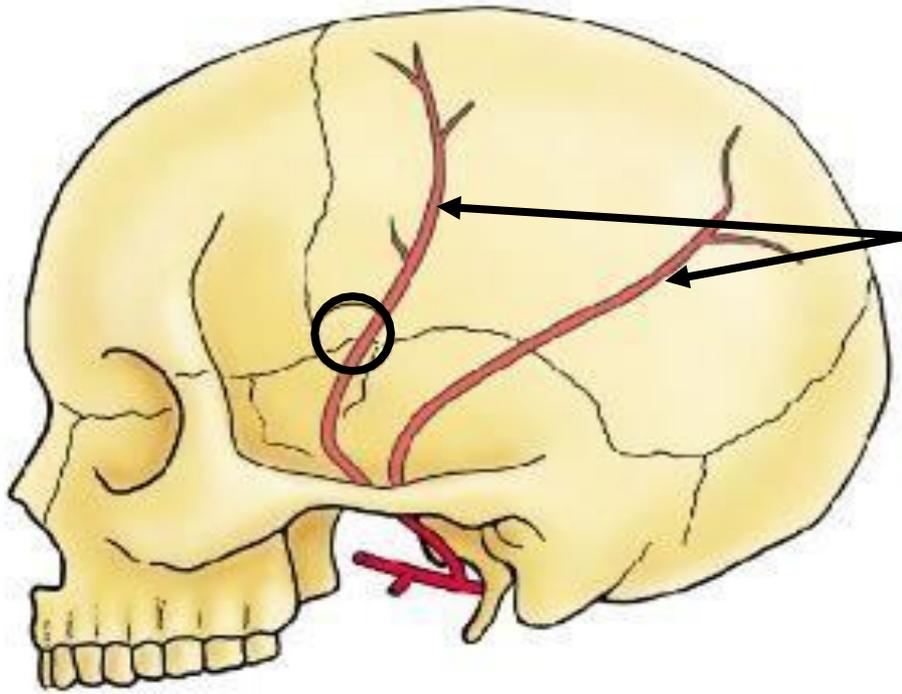


parietal bone

occipital bone

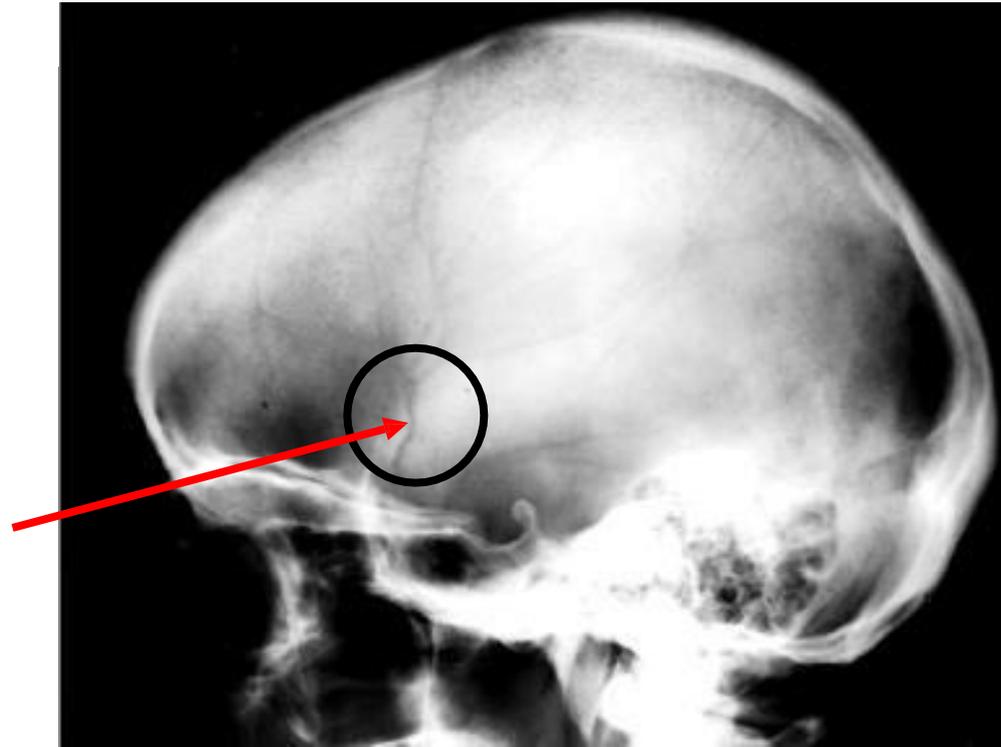
The Skull – Left Lateral View

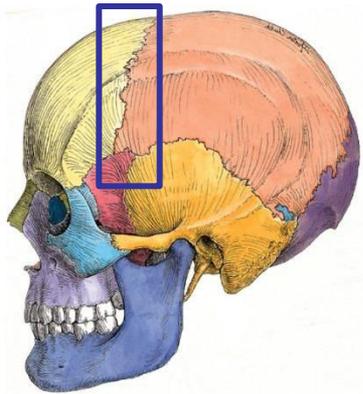




**the 2 branches of the
middle meningeal
artery
(inside the skull)**

**Lateral skull radiograph
showing the vascular
markings of the middle
meningeal artery**





• suture line

• vascular marking

• fracture

• artefact



The Skull – Posterior View

sagittal suture

parietal
bone

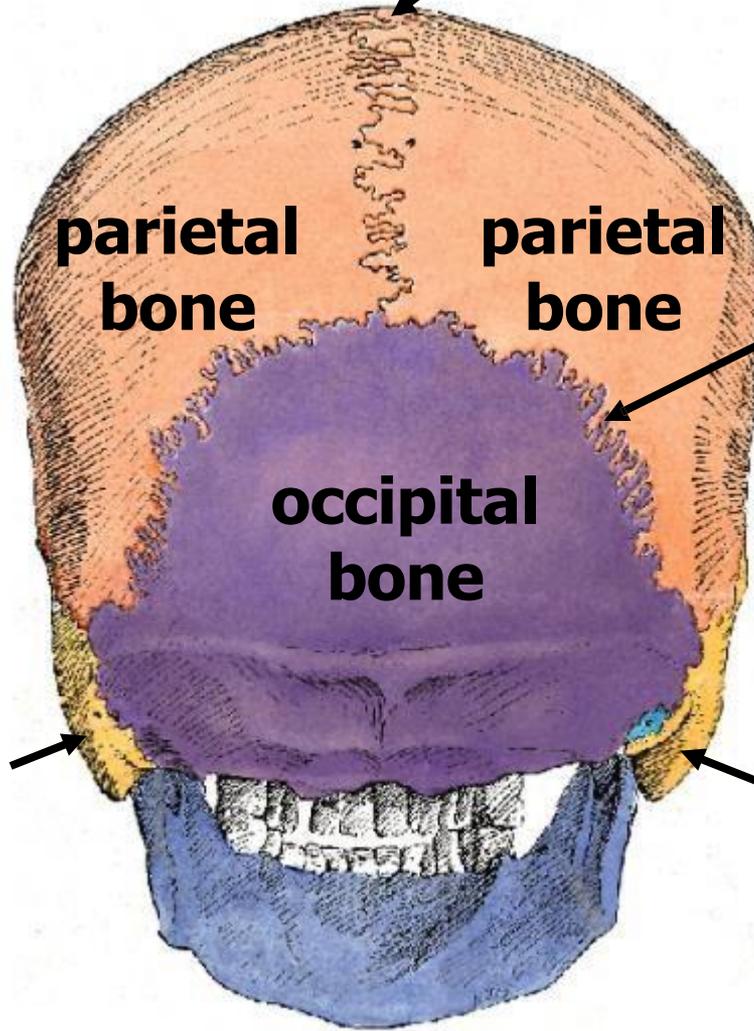
parietal
bone

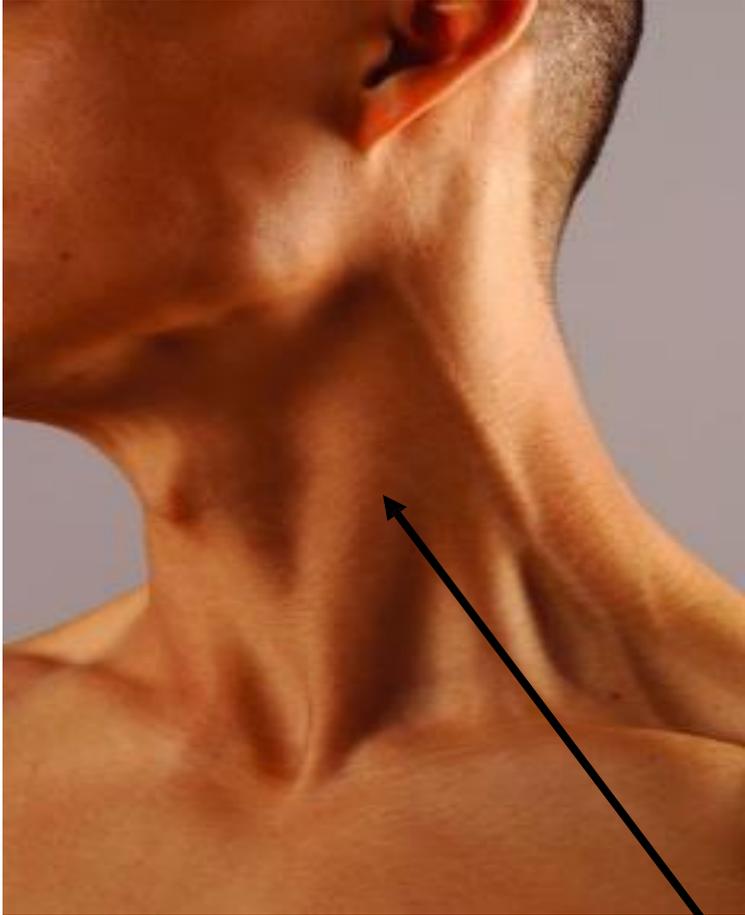
lambdoid
suture
(Greek letter "λ")

occipital
bone

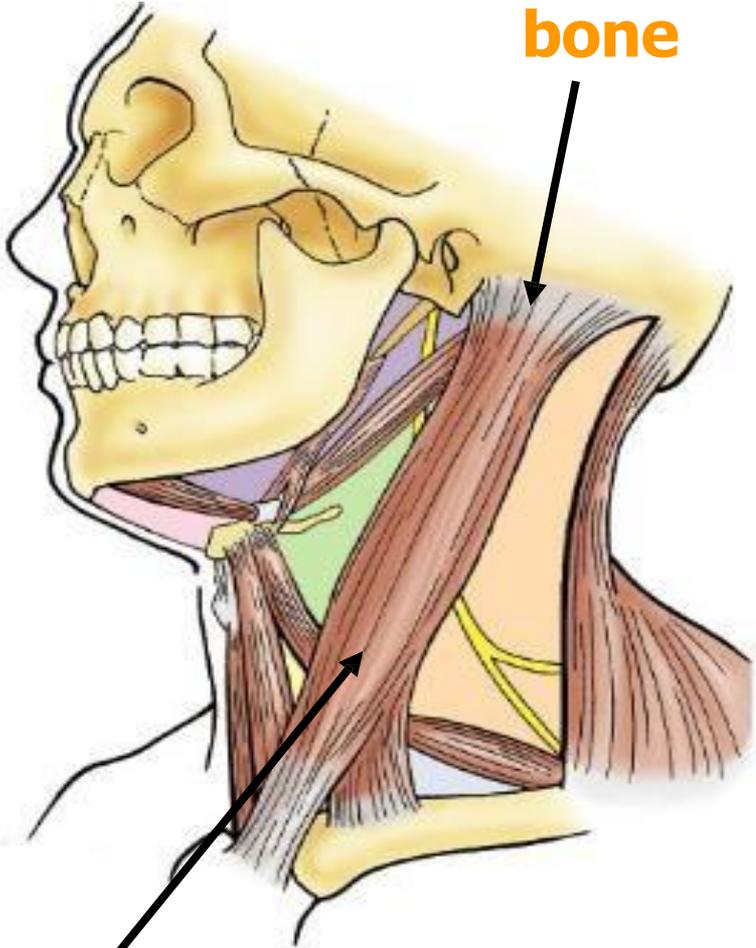
mastoid process
of the temporal
bone

mastoid process
of the temporal
bone



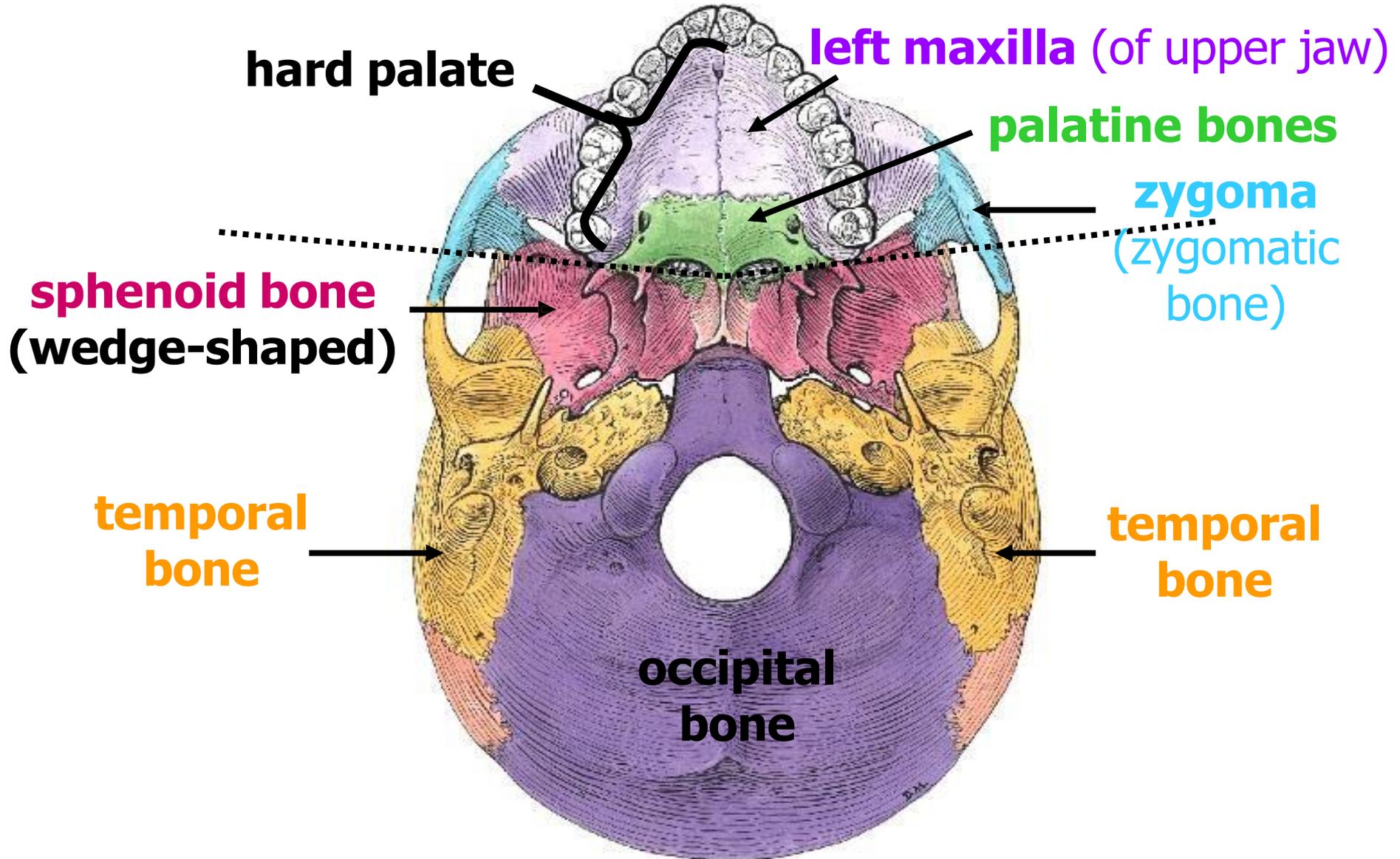


sternocleidomastoid muscle

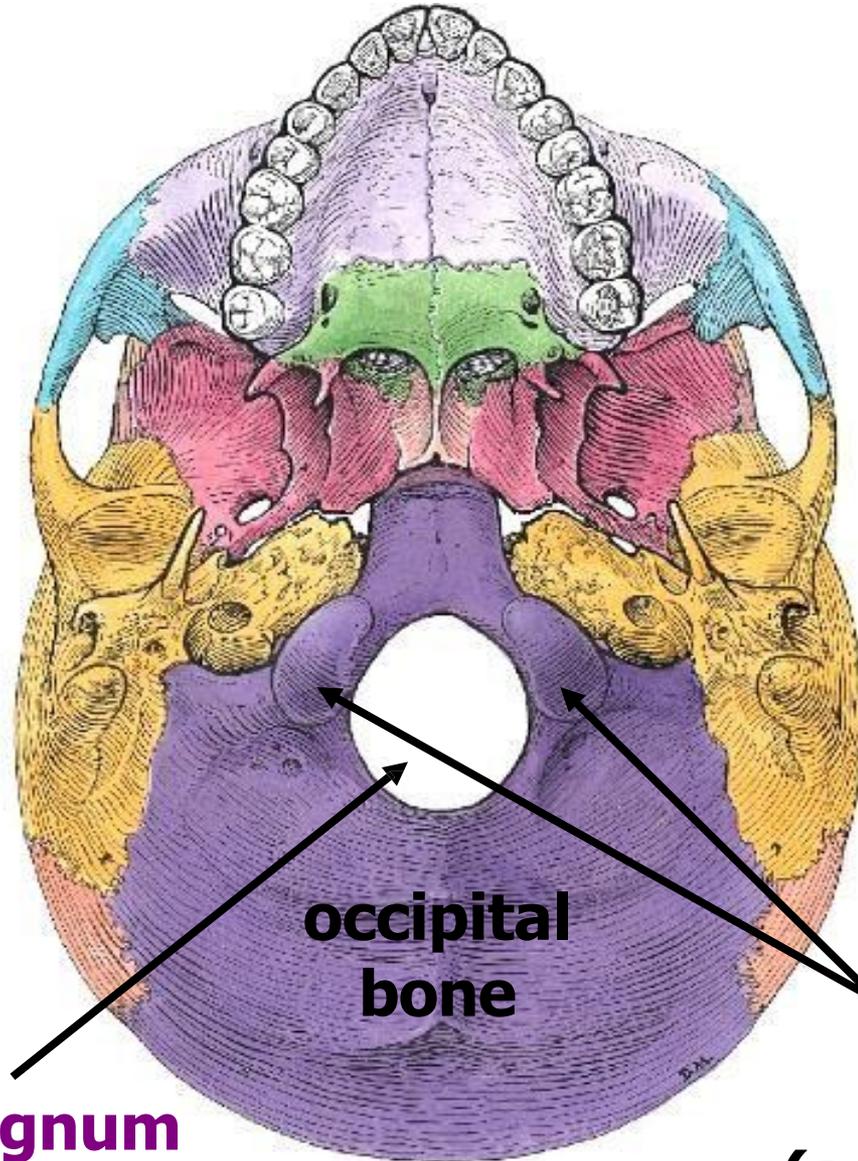


**mastoid process
of the temporal
bone**

bones of the face – inferior view (mandible removed)



bones of the skull - inferior view



**occipital
bone**

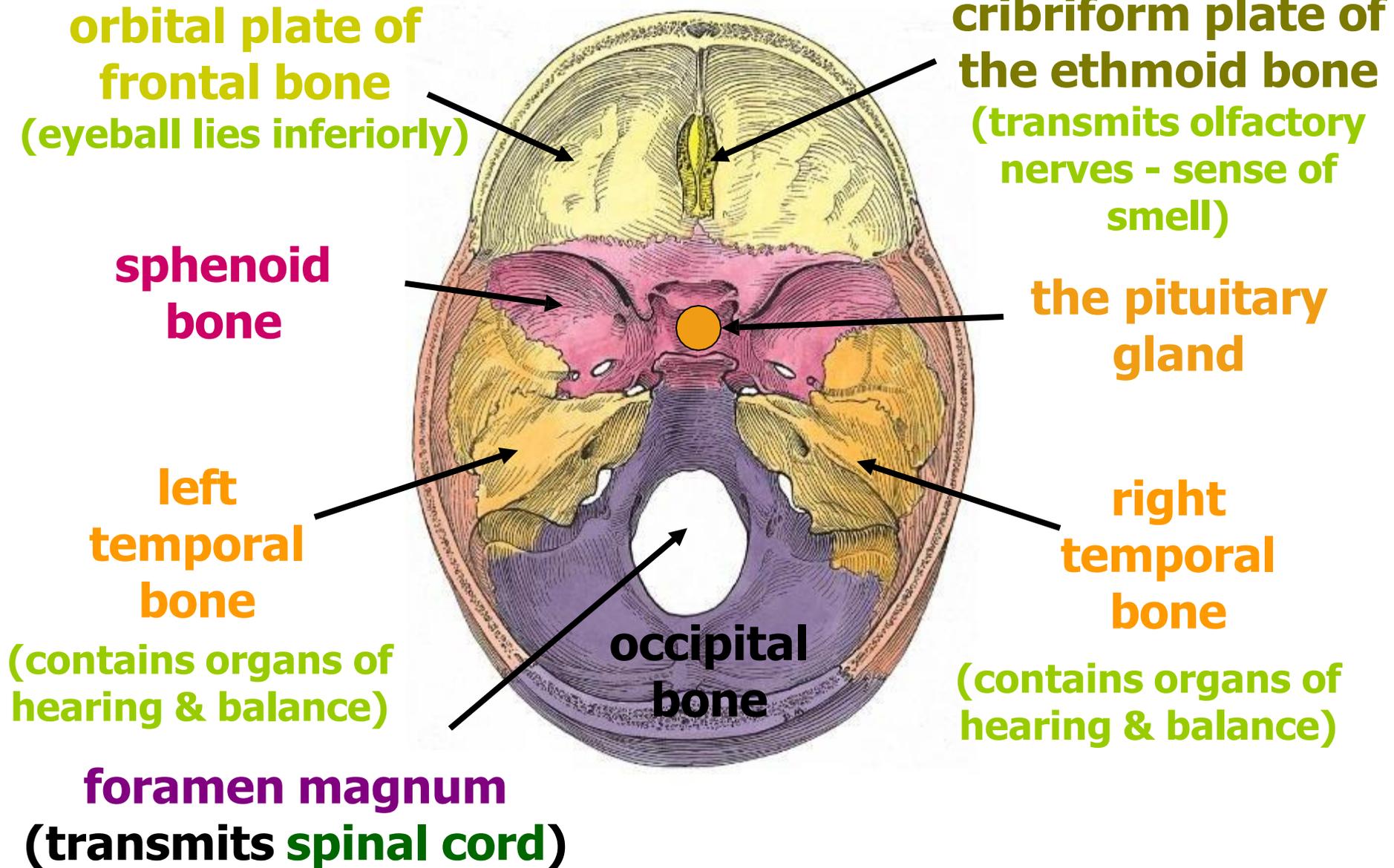
**occipital
condyles**

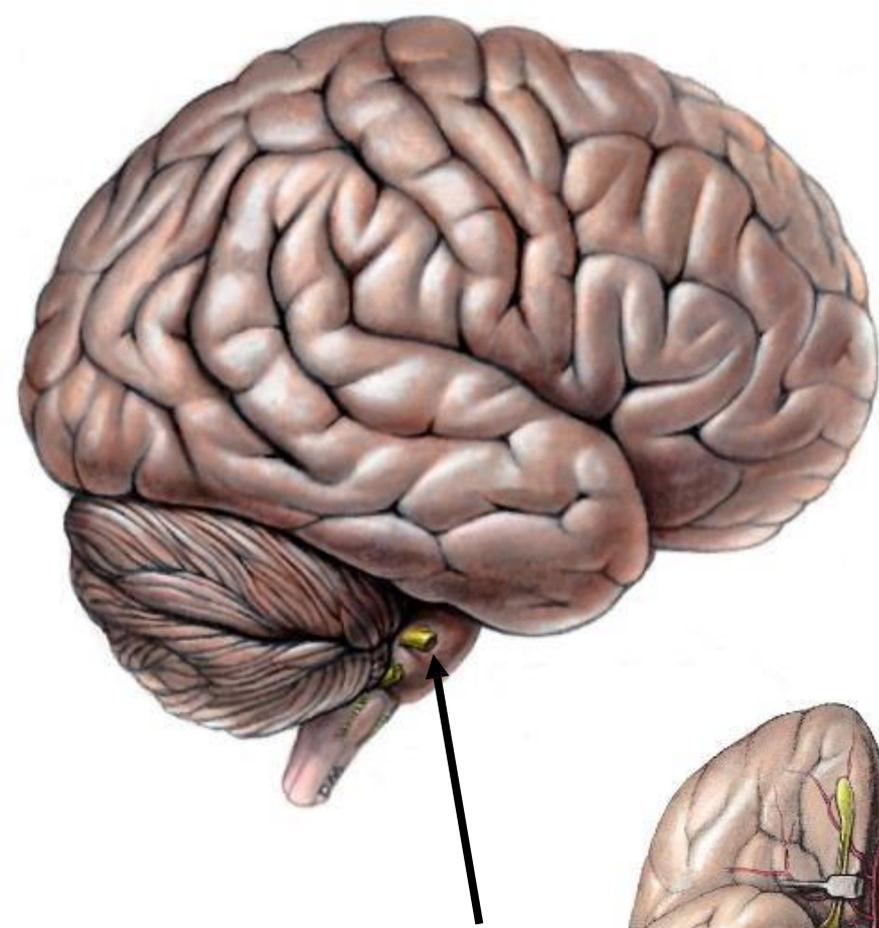
**foramen magnum
(transmits spinal cord)**

**(articulate with
vertebra C1)**

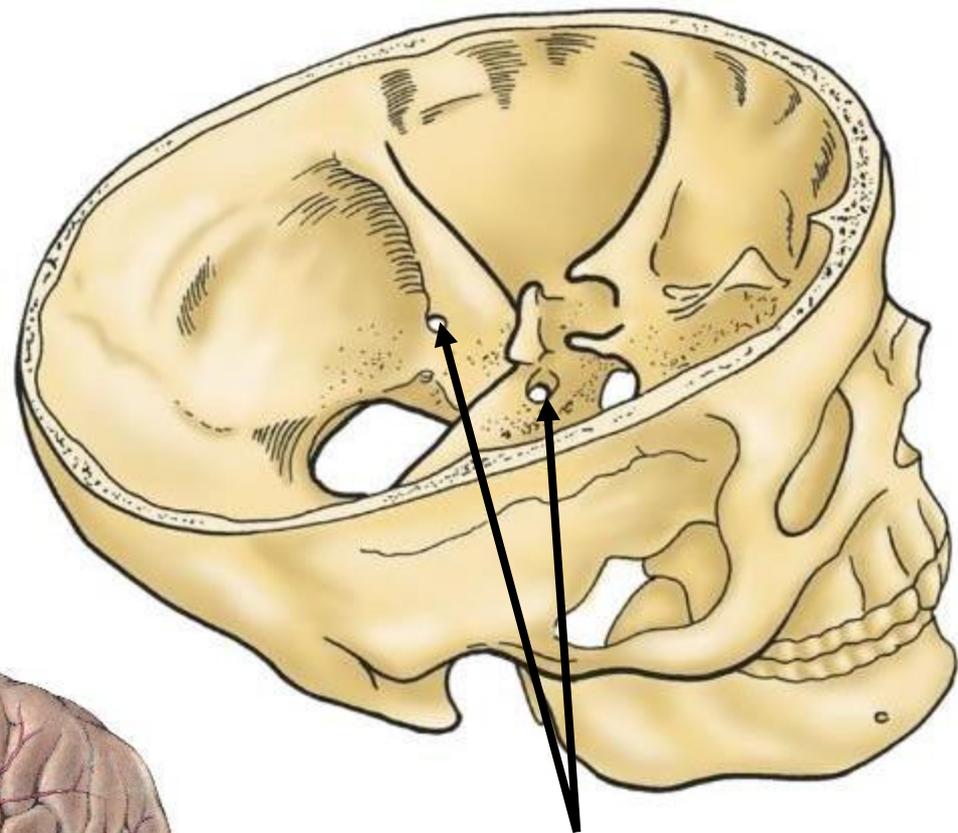
Superior view of the floor of the cranial cavity

(bones of the base of the skull)

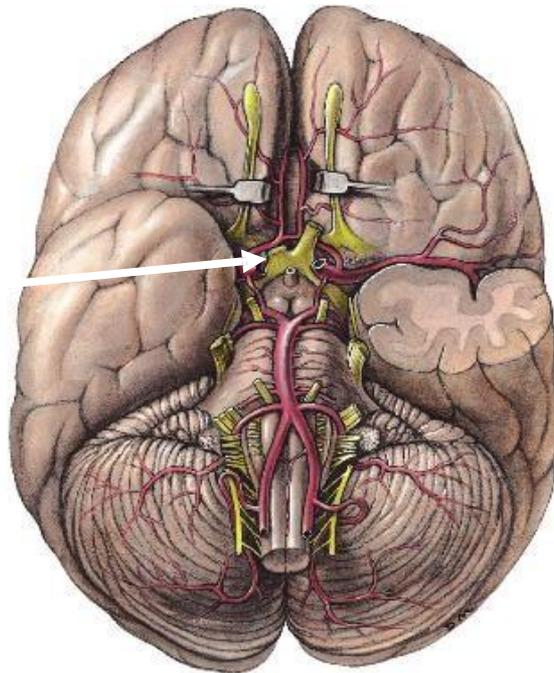




cranial nerves



**foraminae
through which
cranial nerves
and blood vessels
enter/exit the
cranial cavity**



bones of the cranial vault

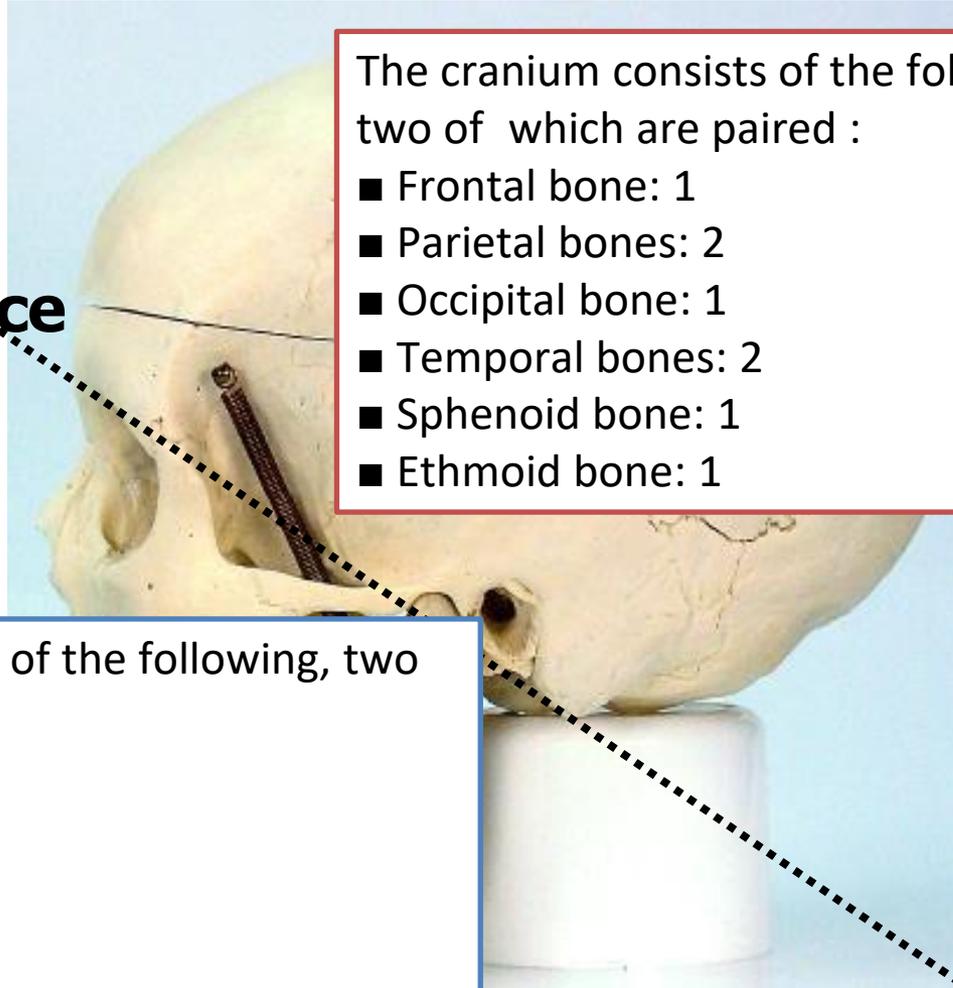
bones of the face

The cranium consists of the following bones, two of which are paired :

- Frontal bone: 1
- Parietal bones: 2
- Occipital bone: 1
- Temporal bones: 2
- Sphenoid bone: 1
- Ethmoid bone: 1

The facial bones consist of the following, two of which are single:

- Zygomatic bones: 2
- Maxillae: 2
- Nasal bones: 2
- Lacrimal bones: 2
- Vomer: 1
- Palatine bones: 2
- Inferior conchae: 2
- Mandible: 1



Important terms



The head = the brain, its protective coverings, the ears and the face

Skeleton of the head = the skull (cranium)

The skull = the neurocranium (the cranial vault) + the viscerocranium (the facial skeleton)

The neurocranium (cranial vault) = skullcap (calvaria) + the base of the skull (cranial base)

The cranial cavity = space inside the skull

The floor of the cranial cavity = the internal aspect of the base of the skull

The cranial fossae (anterior, middle & posterior) = 3 large depressions of the floor of the cranial cavity

The neck = joins the head to the trunk (the chest/abdomen/pelvis)