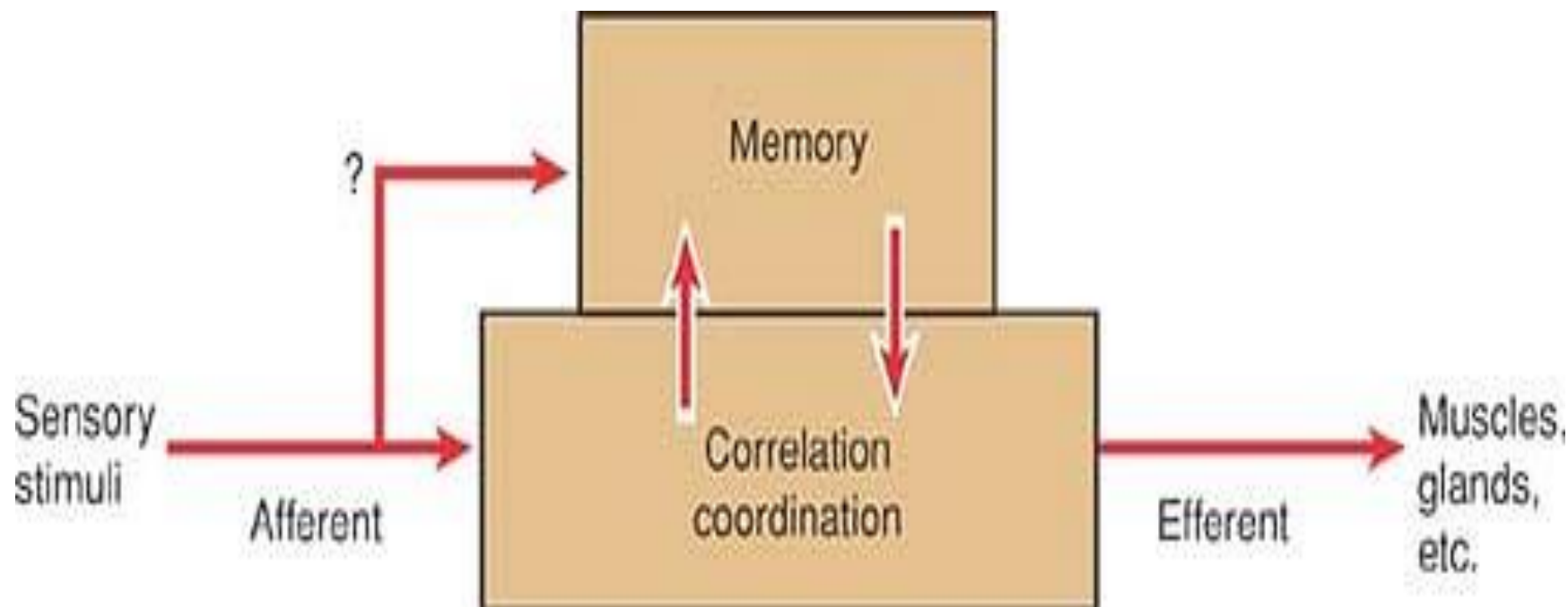




كاتب





The number of neurons in human brain is about

A. 086 billion

B. 186 billion

C. 286 billions

D. 386 billions

E. 486 billions

The number of neurons in human brain is about

A. 086 billion /

B. 186 billion

C. 286 billions

D. 386 billions

E. 486 billions

The neuroglial cells outnumber the neurons by

- A. 5 to 10 times**
- B. 11 to 15 times**
- C. 16 to 20 times**
- D. 21 to 25 times**
- E. 26 to 30 times**

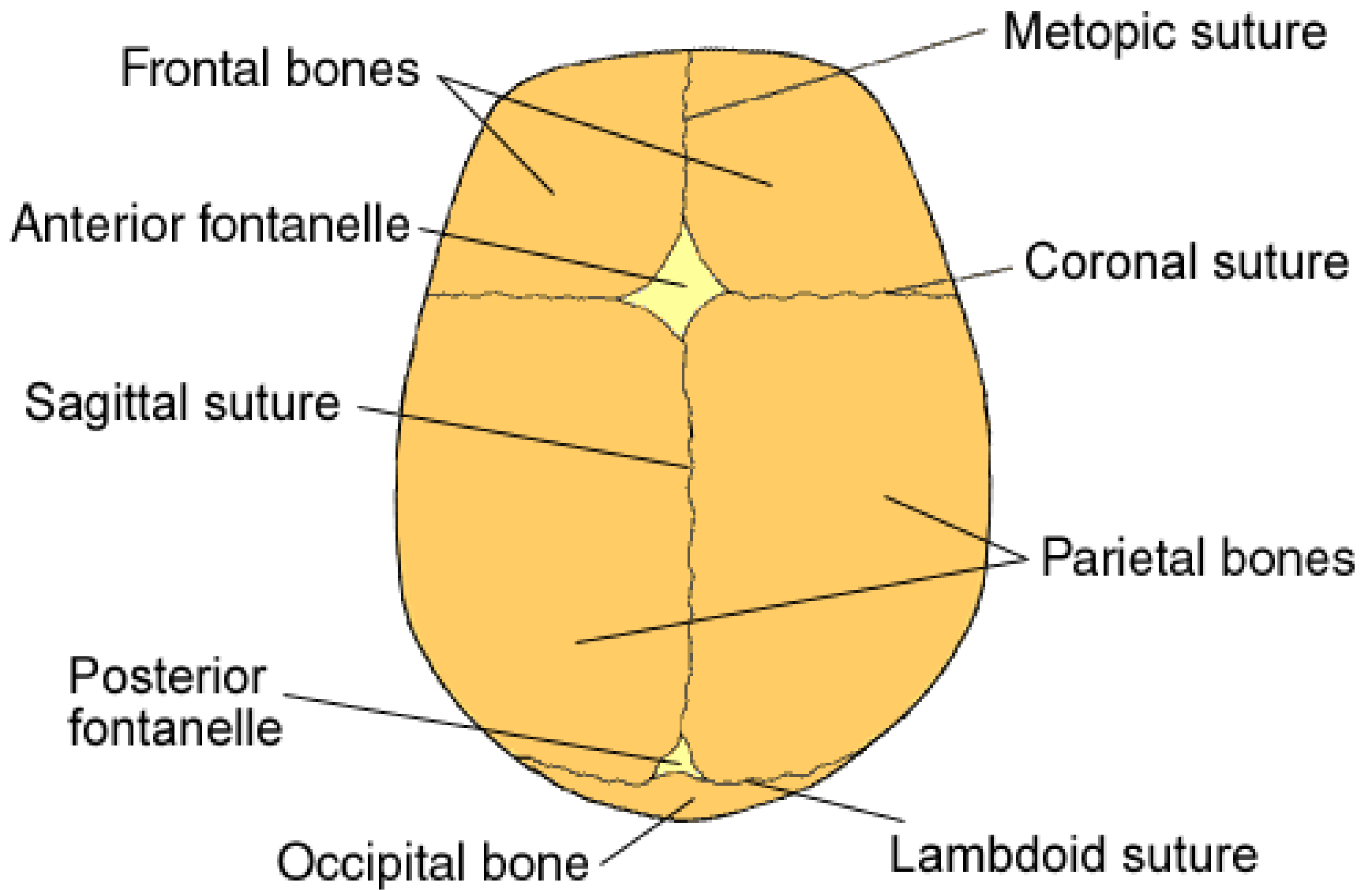
The neuroglial cells outnumber the neurons by

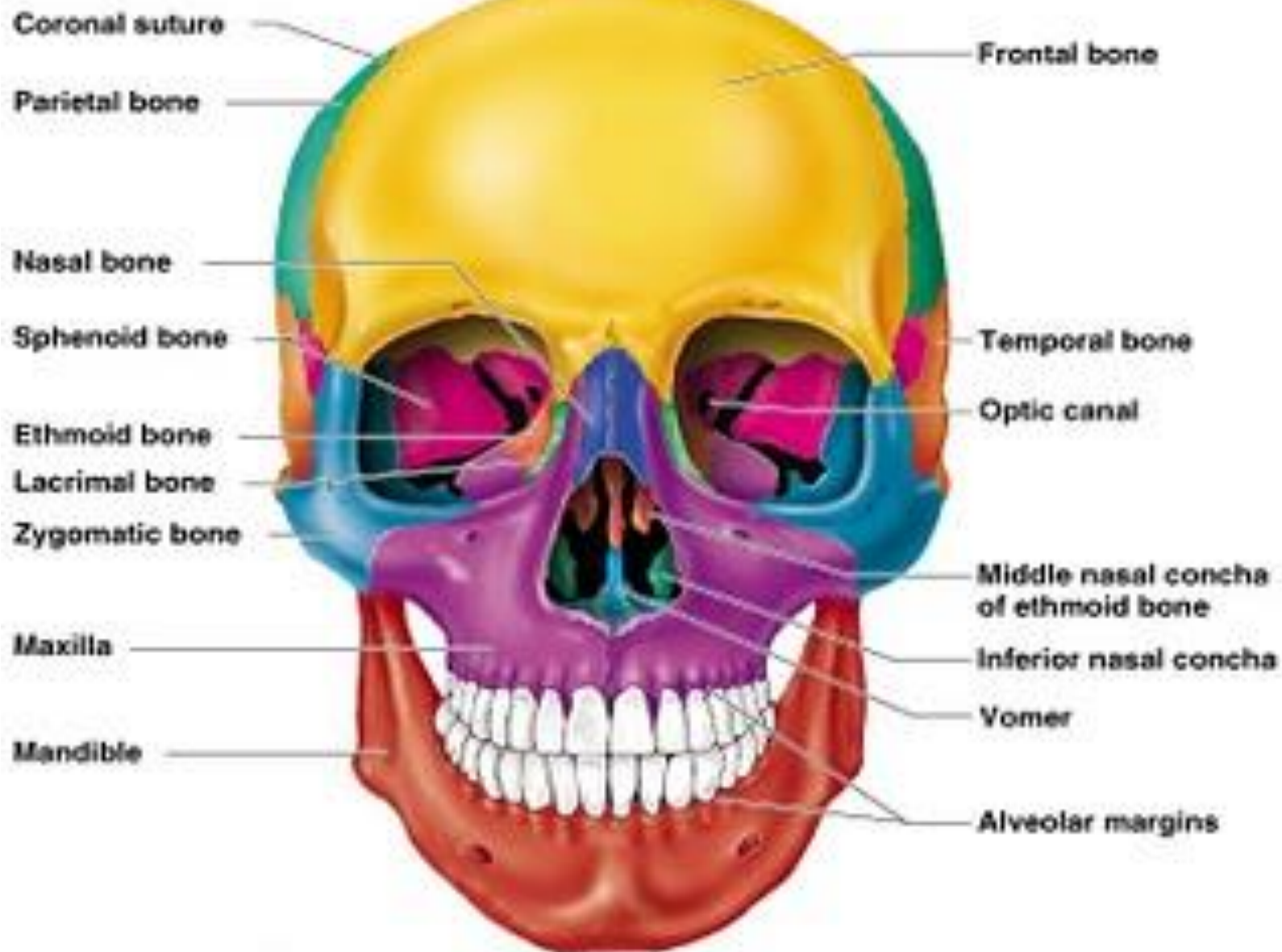
- A. 5 to 10 times /**
- B. 11 to 15 times**
- C. 16 to 20 times**
- D. 21 to 25 times**
- E. 26 to 30 times**

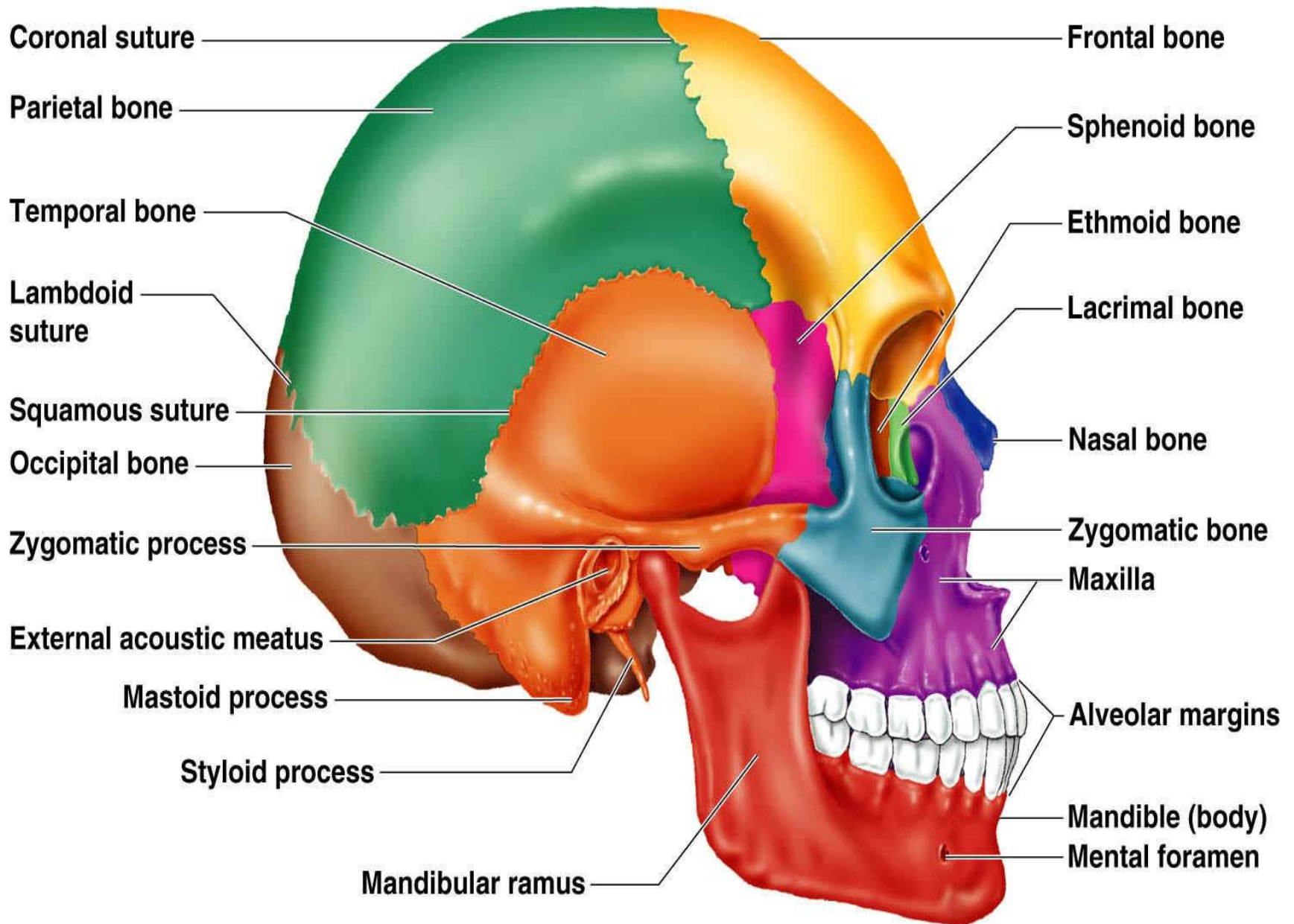
Cranial Nerve	General Function	Cranial Exit Opening
I Olfactory	Sense of Smell	Cribriform Plate of the Ethmoid
II Optic	Sight	Optic Foramen
III Oculomotor	Eye Movement	Superior Orbital Fissure
IV Trochlear	Eye Movement	Superior Orbital Fissure
V Trigeminal	Face: sensory, motor	Superior Orbital Fissure
VI Abducens	Eye Movement	Superior Orbital Fissure

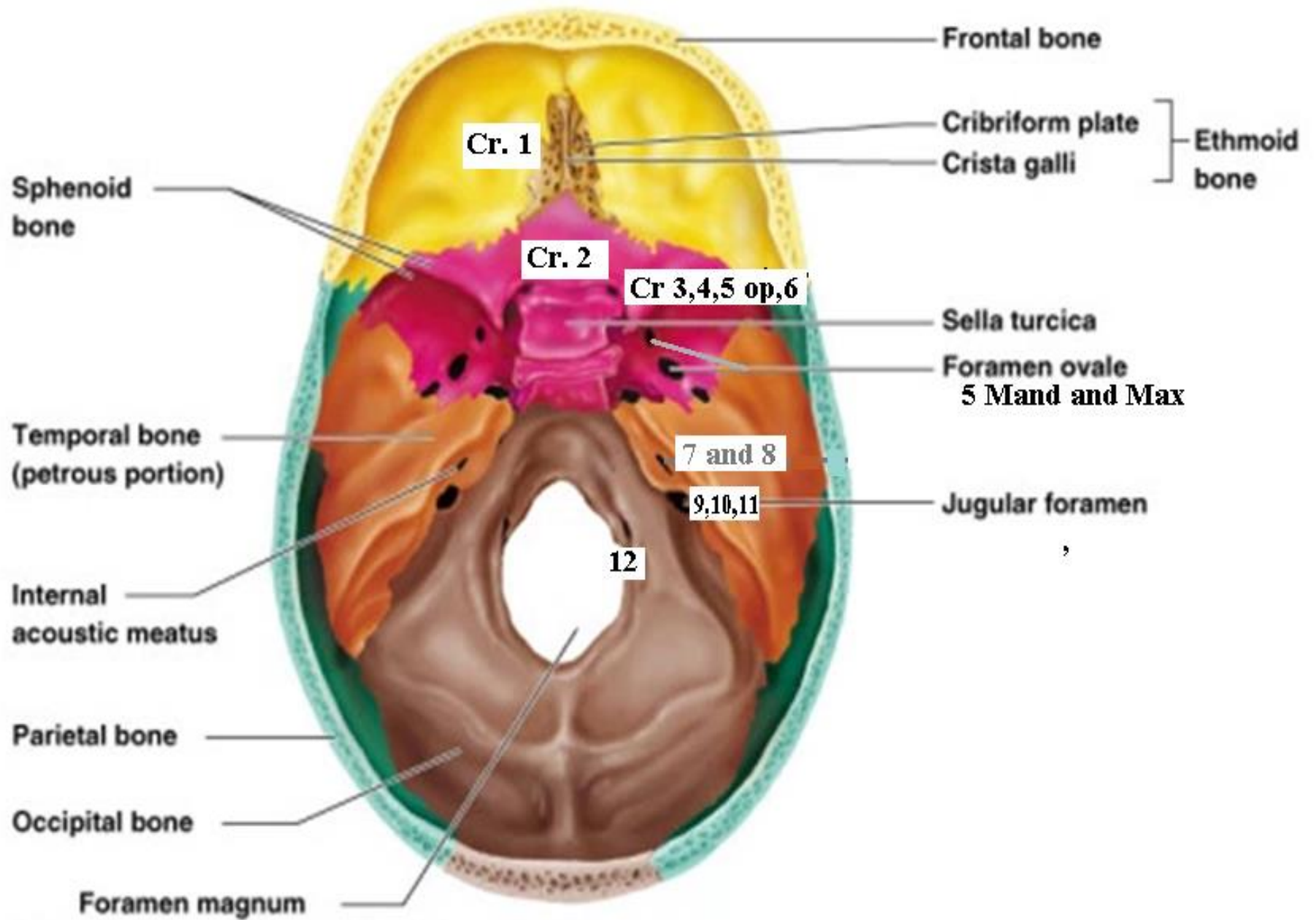
VII	Facial	Face: expression, and sensory	Stylomastoid Foramen
VIII	Vestibulocochlear	Hearing and Balance	Internal Acoustic Meatus
IX	Glossopharyngeal	Tongue and Throat - motor and sensory	Jugular Foramen
X	Vagus	Parasympathetic	Jugular Foramen
XI	Accessory	Head, neck, shoulder - movement & swallowing	Jugular Foramen
XII	Hypoglossal	Speech, Chewing and Swallowing	Hypoglossal Canal

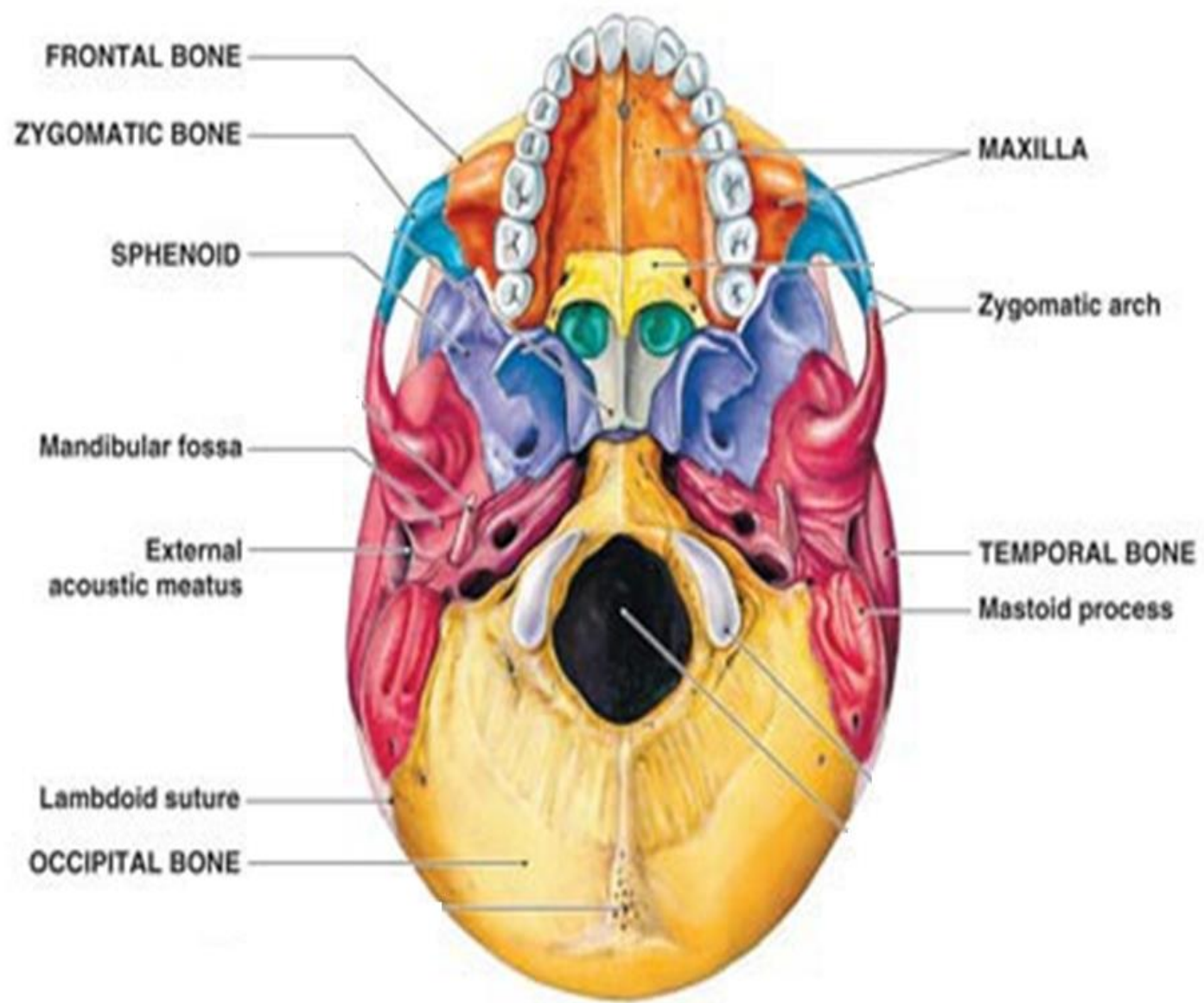
Normal Skull of the Newborn



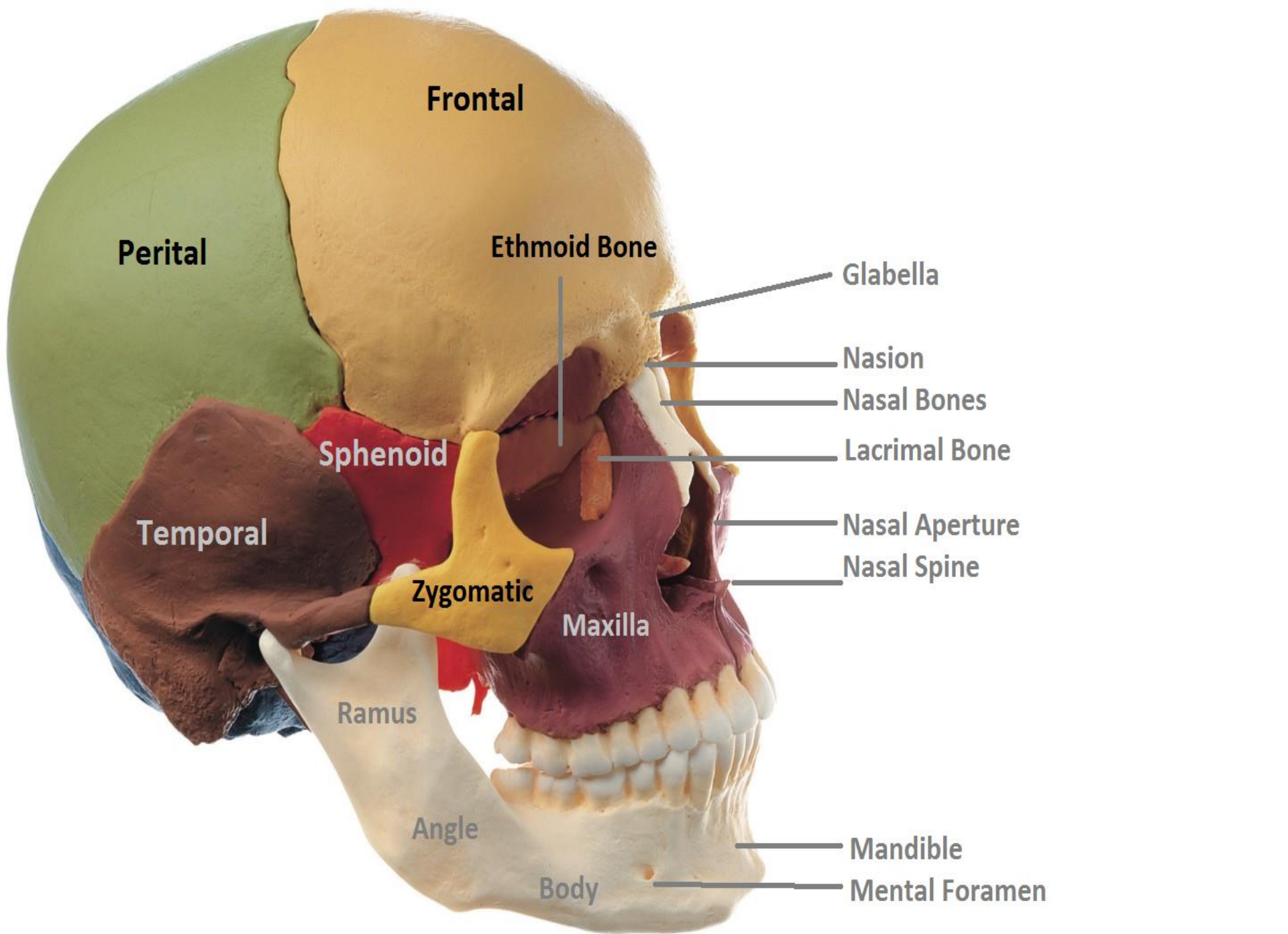


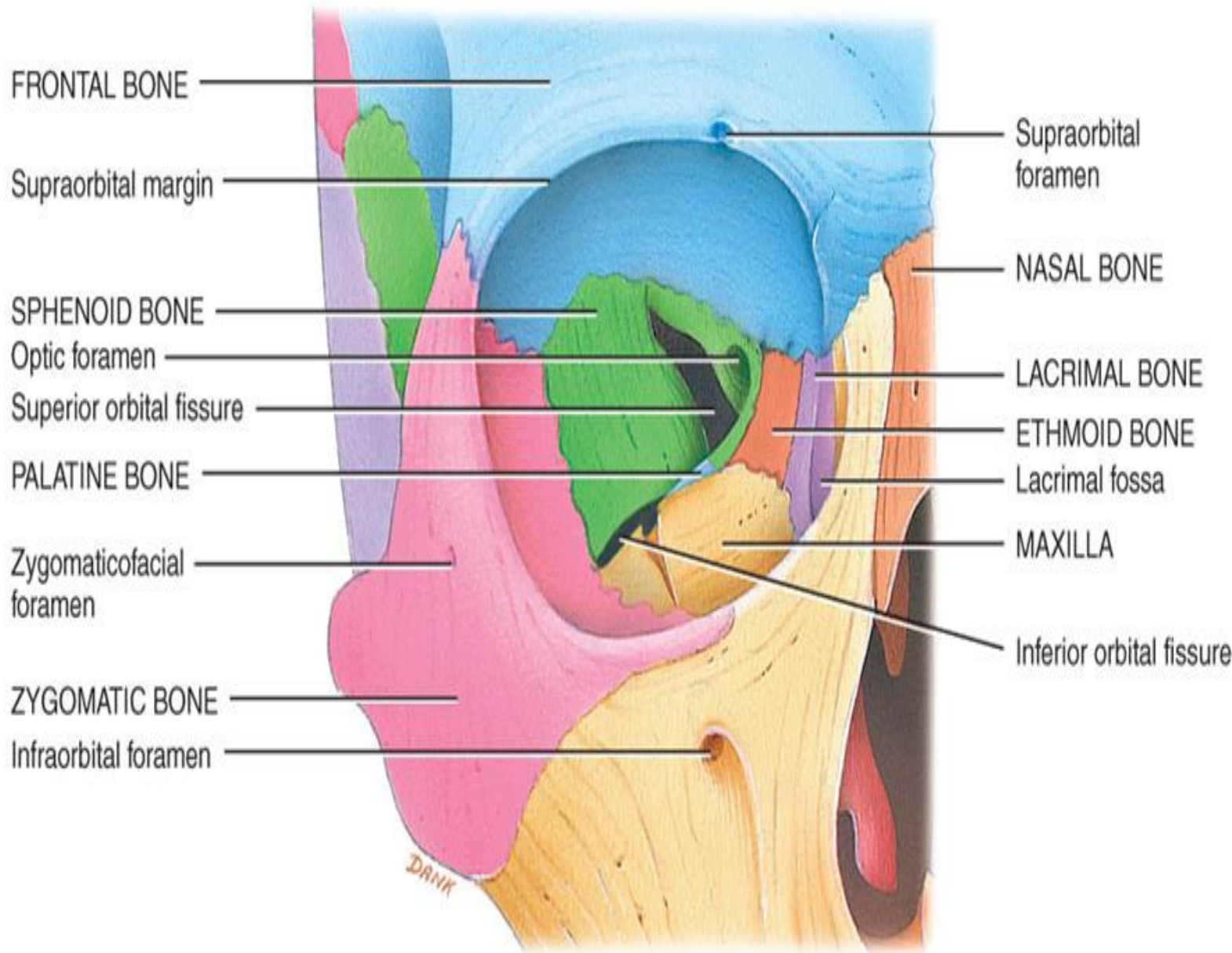
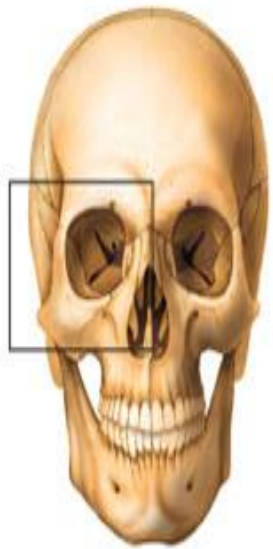






(b) Inferior view

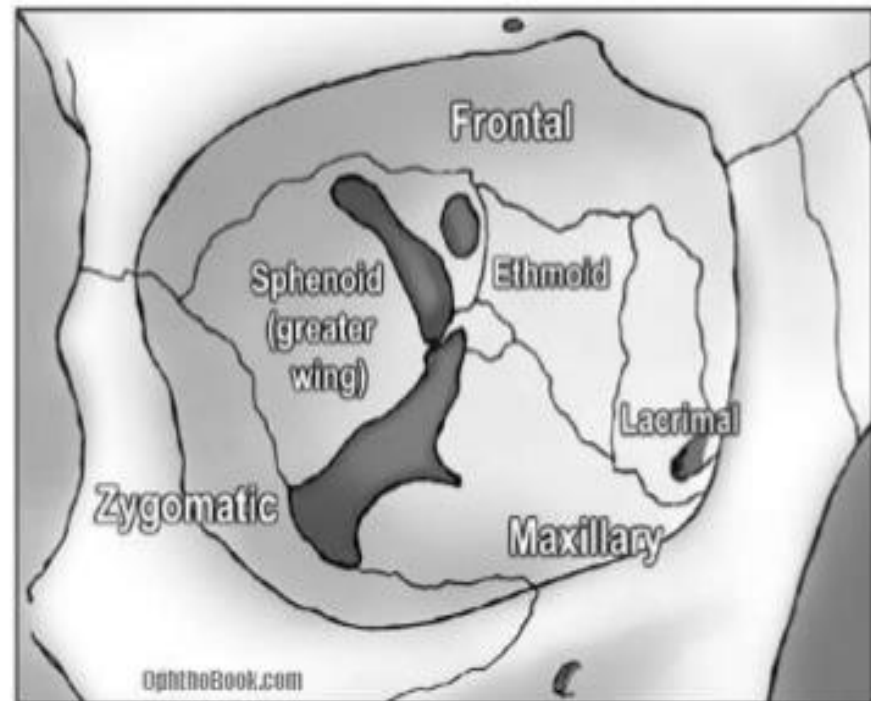


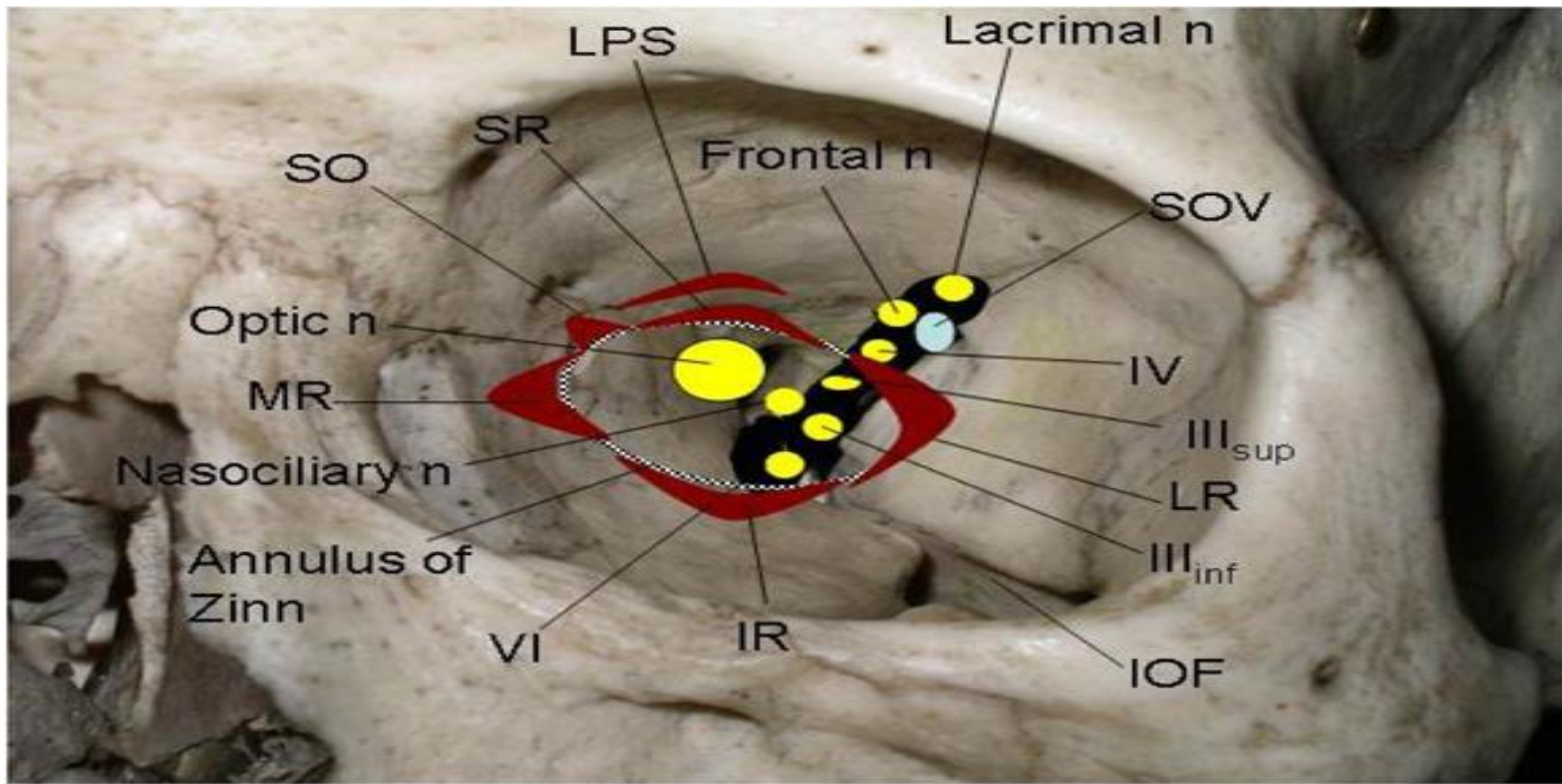


Anterior view showing the bones of the right orbit

1. **Roof:** frontal bone, sphenoid bone
2. **Lateral Wall:** sphenoid bone, zygomatic bone
3. **Floor:** maxillary bone, zygomatic bone
4. **Medial Wall:** ethmoid, lacrimal bone, frontal bone, maxillary bone

Orbital Walls





Key: LPS, levator muscle; SR, superior rectus; LR, lateral rectus; IR, inferior rectus; MR, medial rectus; SO, superior oblique; SOV, superior ophthalmic vein; III_{sup}, superior division of oculomotor nerve; III_{inf}, inferior division of oculomotor nerve; IOF, inferior orbital fissure.

1. Central

2. Peripheral Nervous Systems

- **Autonomic Nervous System**
- For heart etc

SPINAL CORD

- Conus medullaris
- Filum terminale
- 31 pairs of spinal nerves

Structure of the Spinal Cord

- Gray matter
- The white matter is divided into
 - Anterior white columns
 - Lateral white columns
 - Posterior white column
-

BRAIN

Meninges

Continuous with spinal cord

Cerebrospinal fluid

The brainstem

Medulla oblongata

Pons

Midbrain

Midbrain

The midbrain is the narrow part of the brain that connects the forebrain to the hindbrain.

Diencephalon

Thalamus and a hypothalamus .

Cerebrum

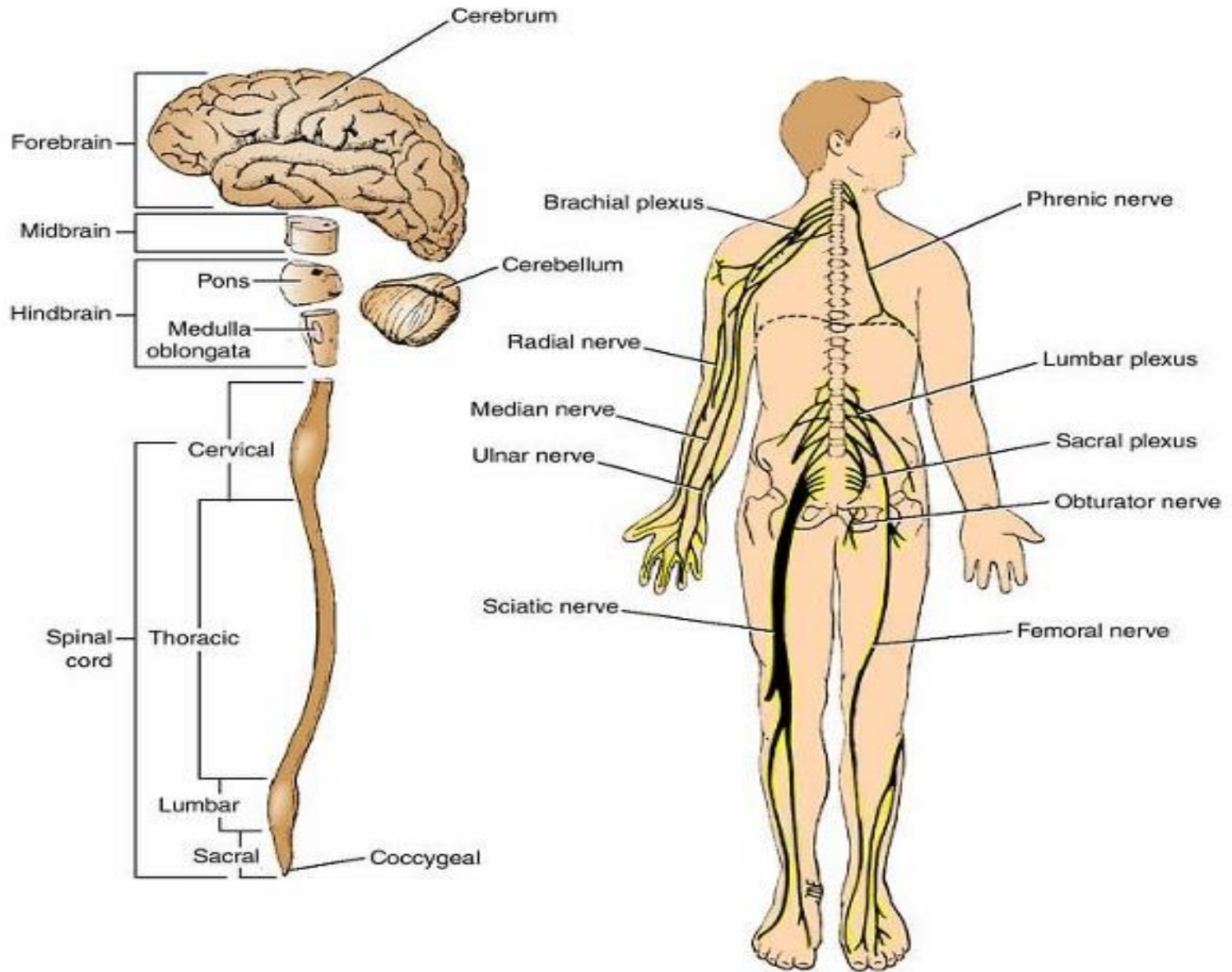
Cerebral hemispheres

- The outer cortex is composed of gray matter. The cerebral cortex is thrown into folds. Each hemisphere divides into lobes
- **Certain important masses of gray** matter are situated deeply within the white matter.

- **Major Divisions of the Peripheral Nervous System**
- Cranial and
- Spinal nerves

GANGLIA

- Sensory ganglia
- Autonomic ganglia.



A

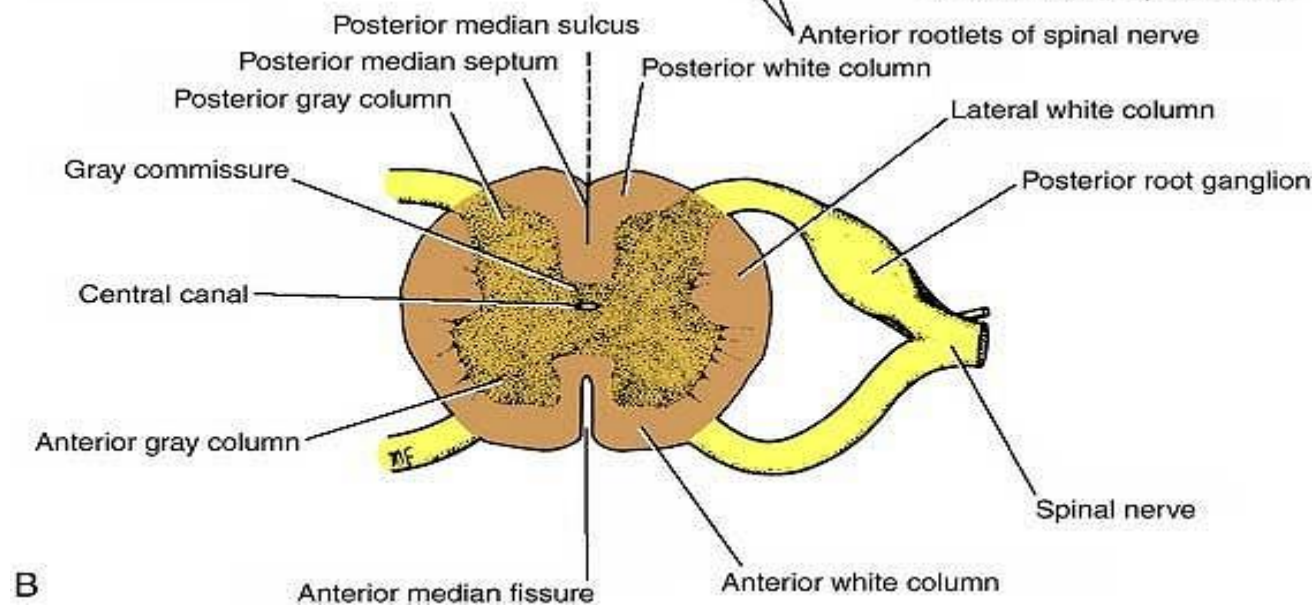
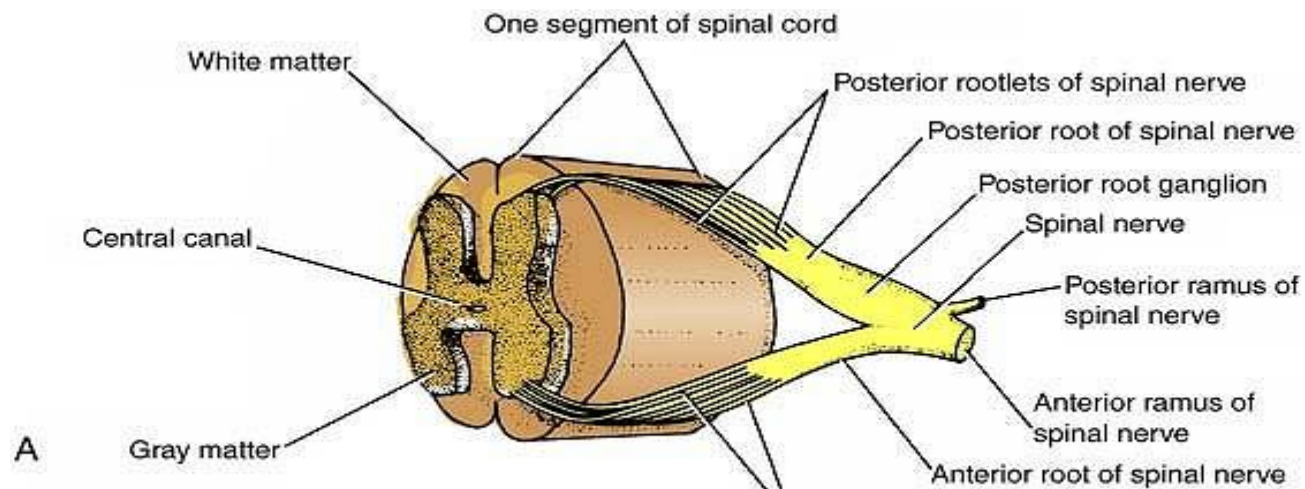
B

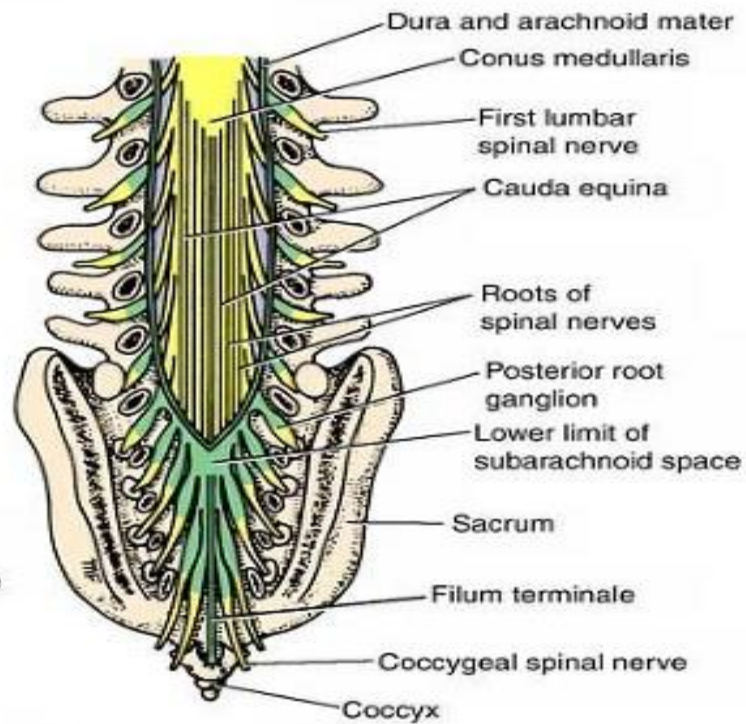
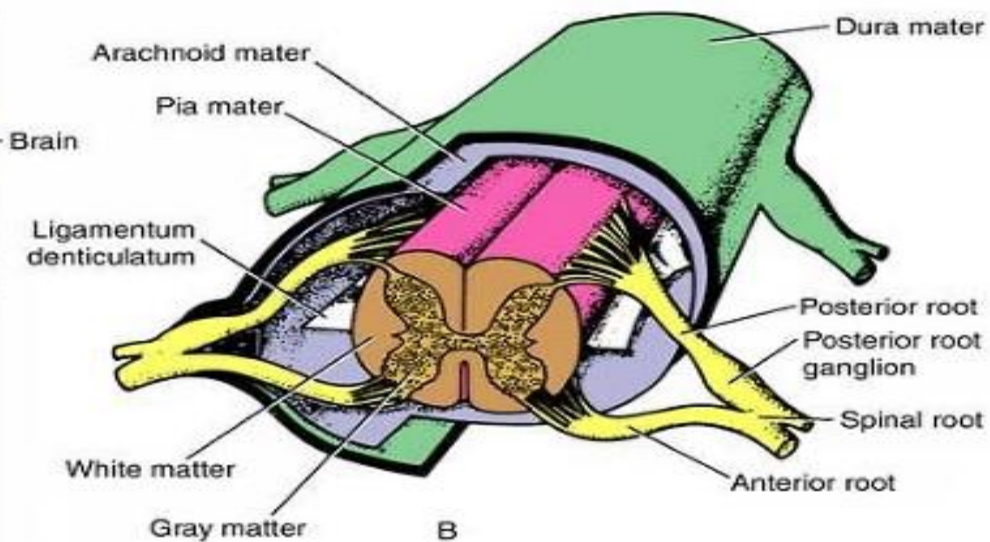
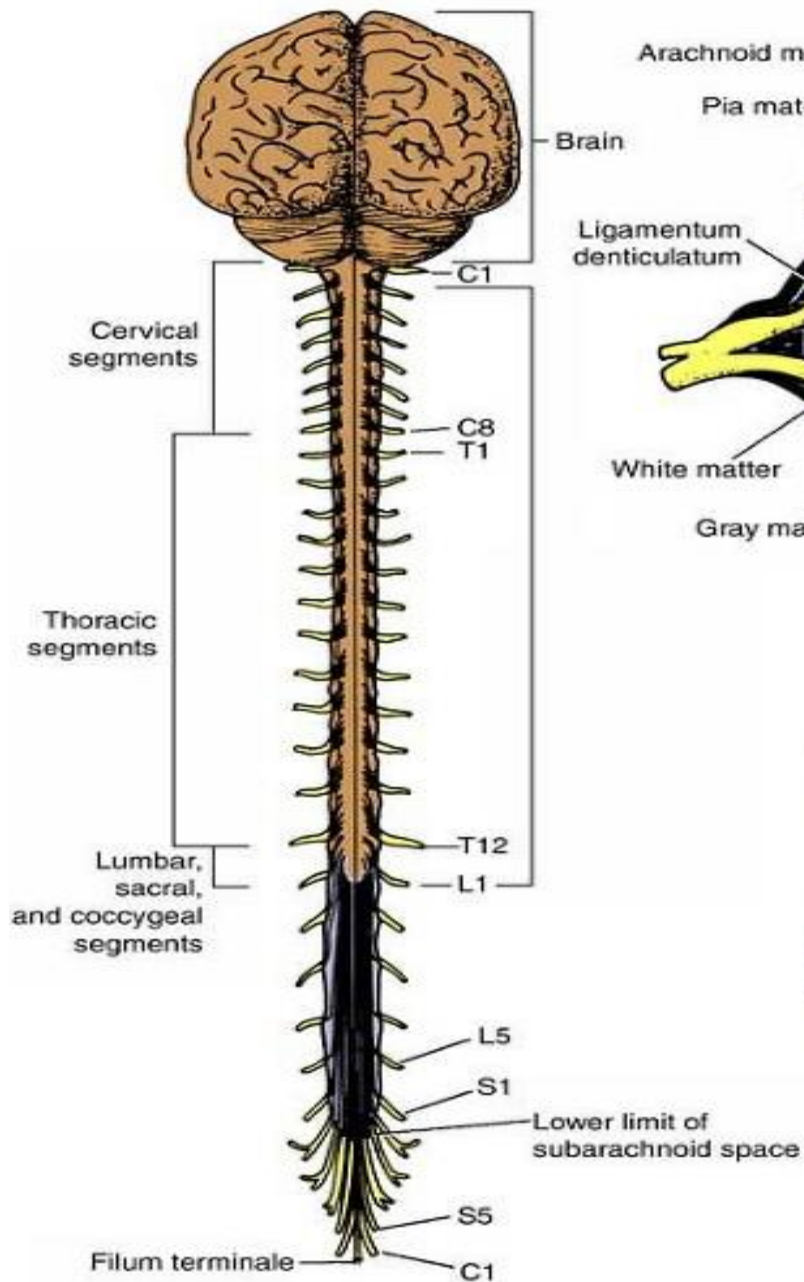
Table 1-2 The Primary Divisions of the Developing Brain

Primary Vesicle	Primary Division	Subdivision	Adult Structures
Forebrain vesicle	Prosencephalon (forebrain)	Telencephalon	Cerebral hemisphere, basal ganglia, hippocampus
		Diencephalon	Thalamus, hypothalamus, pineal body, infundibulum
Midbrain vesicle	Mesencephalon (midbrain)	Mesencephalon (midbrain)	Tectum, tegmentum, crus cerebri
Hindbrain vesicle	Rhombencephalon (hindbrain)	Metencephalon	Pons, cerebellum
		Myelencephalon	Medulla oblongata

Table 1-3 Relationship of Spinal Cord Segments to Vertebral Numbers

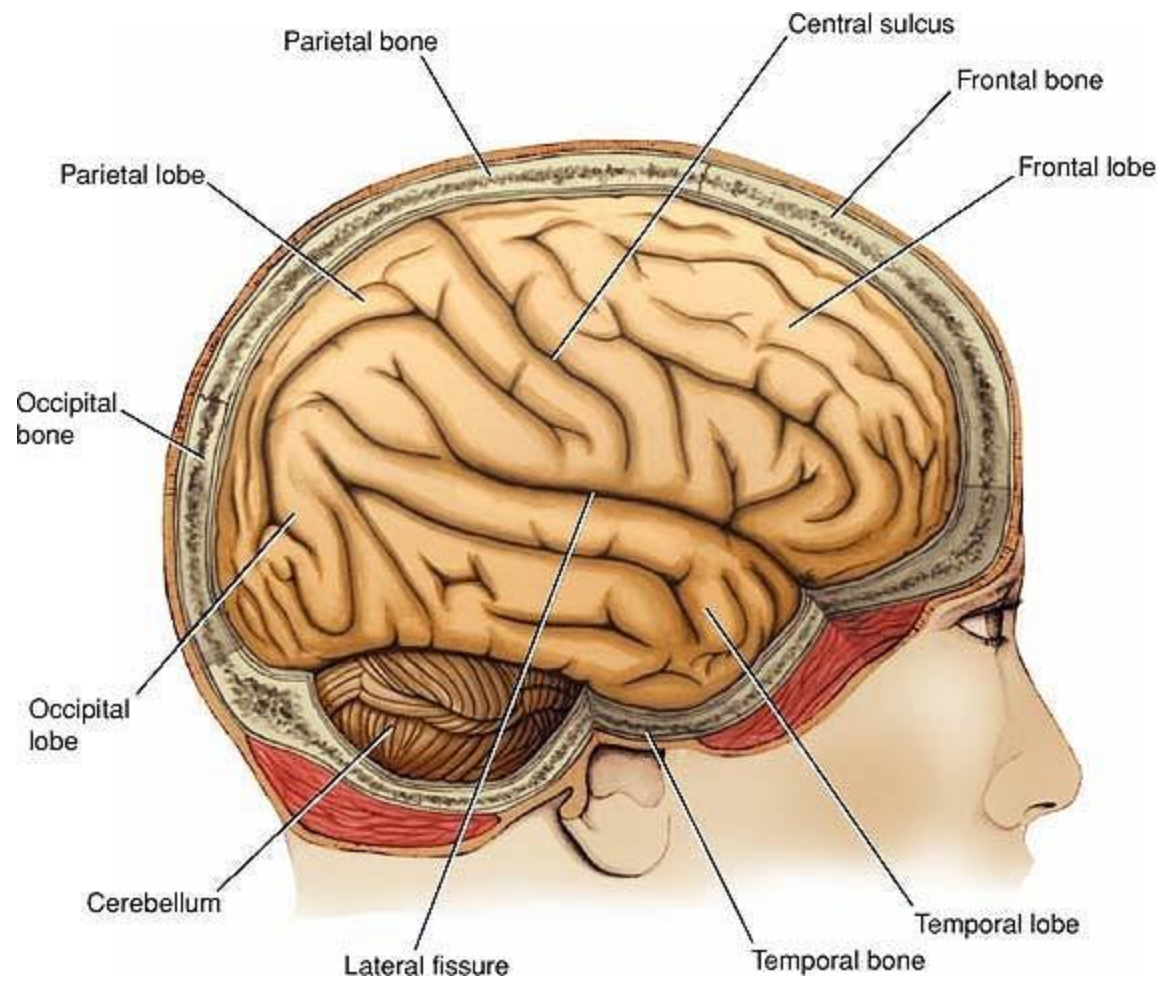
Vertebrae	Spinal Segment
Cervical vertebrae	Add 1
Upper thoracic vertebrae	Add 2
Lower thoracic vertebrae (7-9)	Add 3
10th thoracic vertebra	L1-2 cord segments
11th thoracic vertebra	L3-4 cord segments
12th thoracic vertebra	L5 cord segment
1st lumbar vertebra	Sacral and coccygeal cord segments

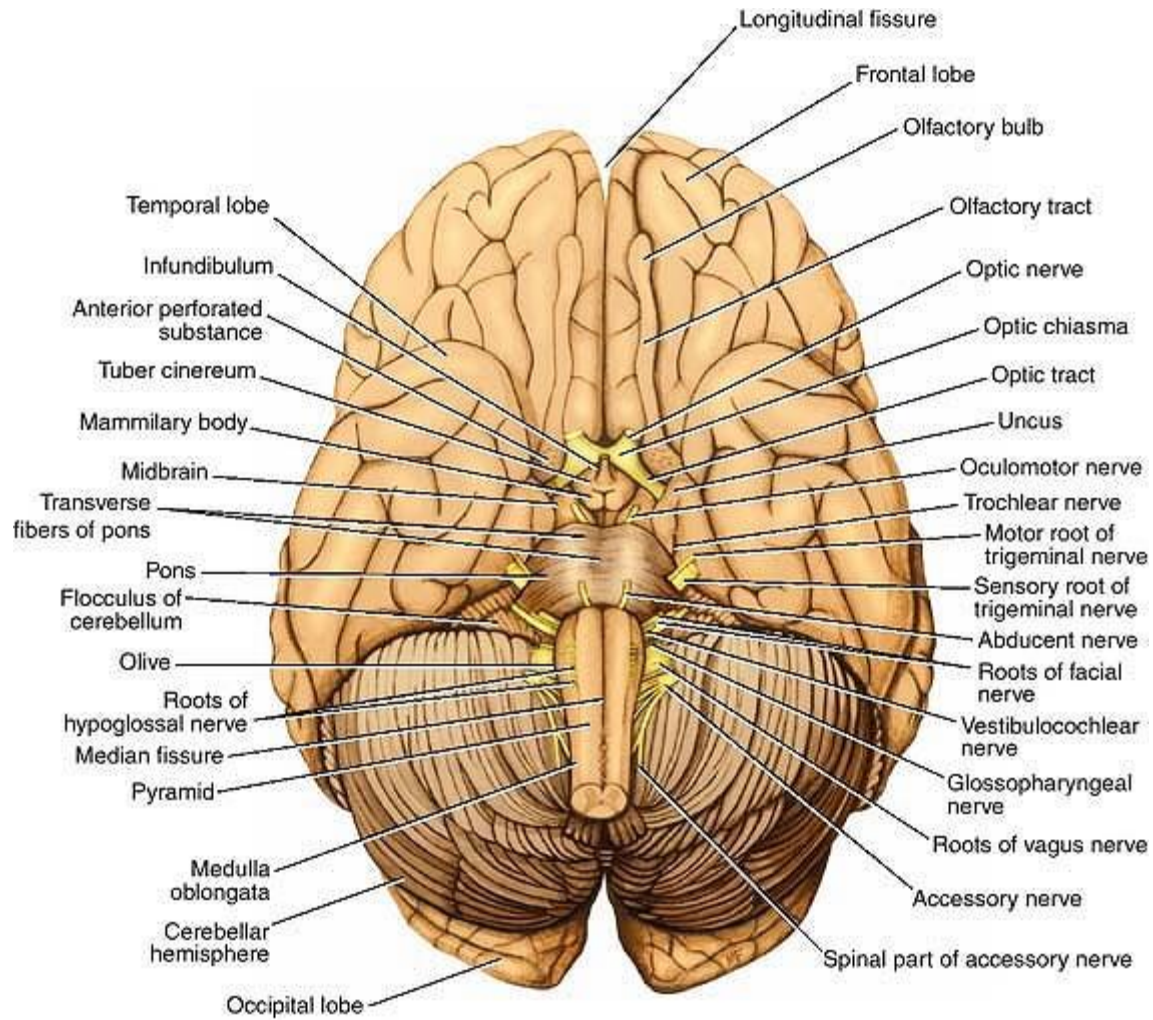


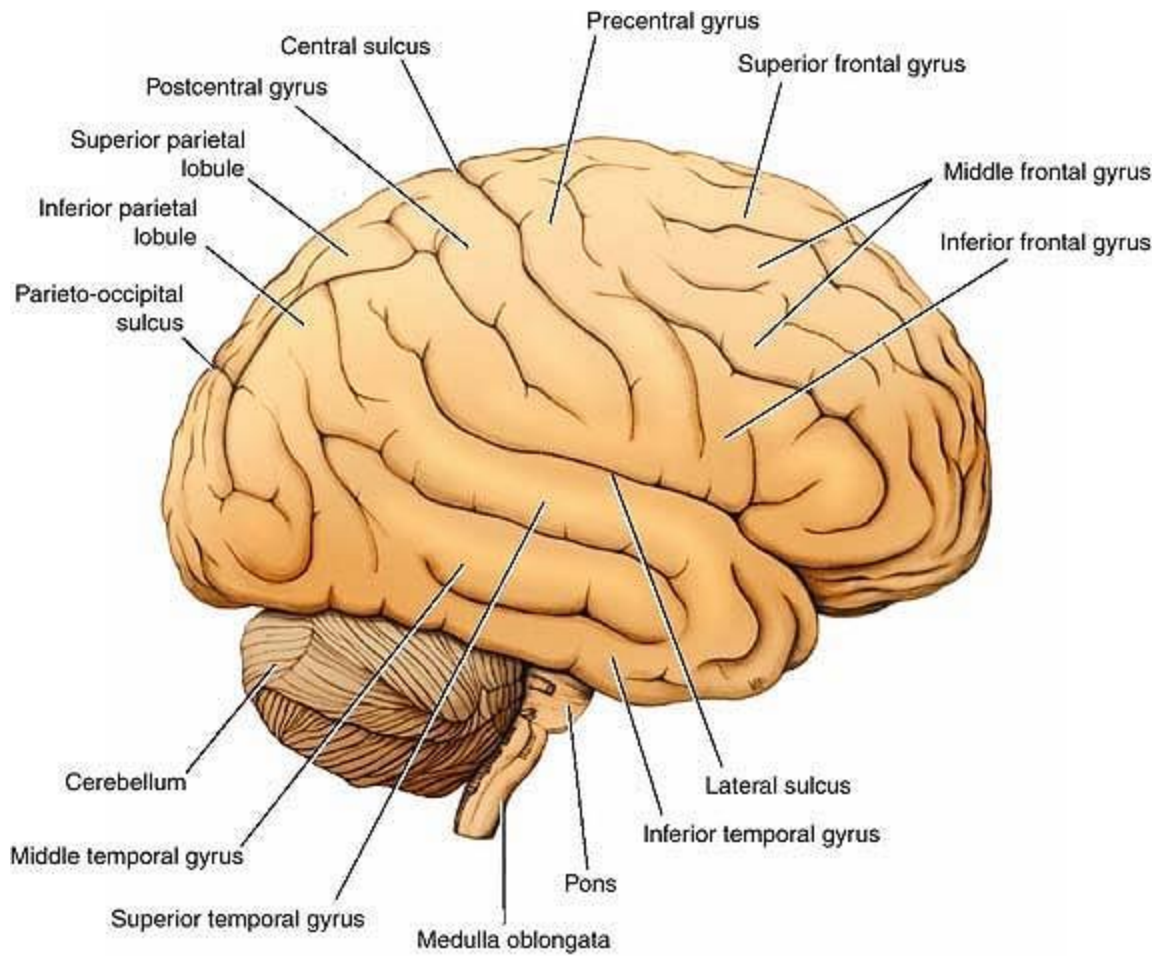


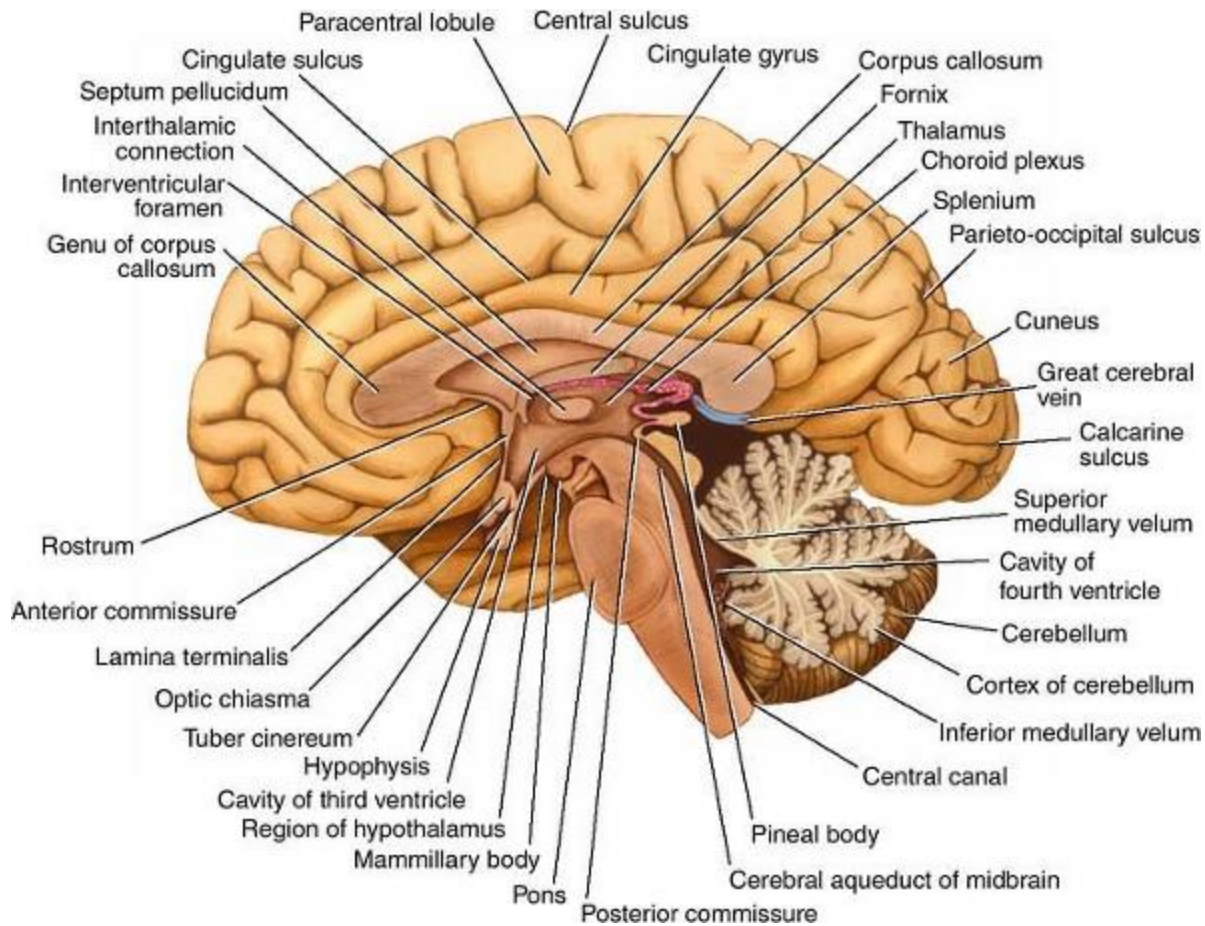
A

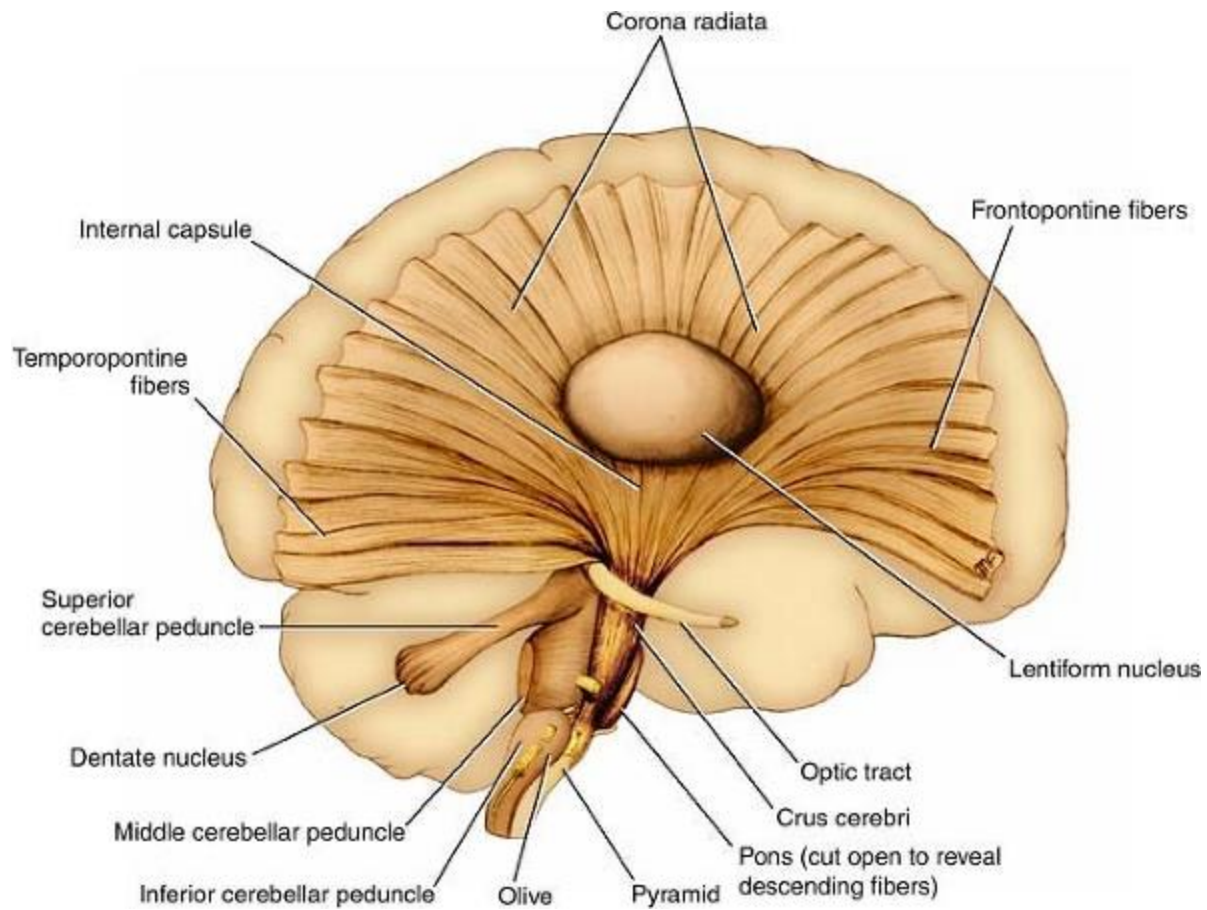
C

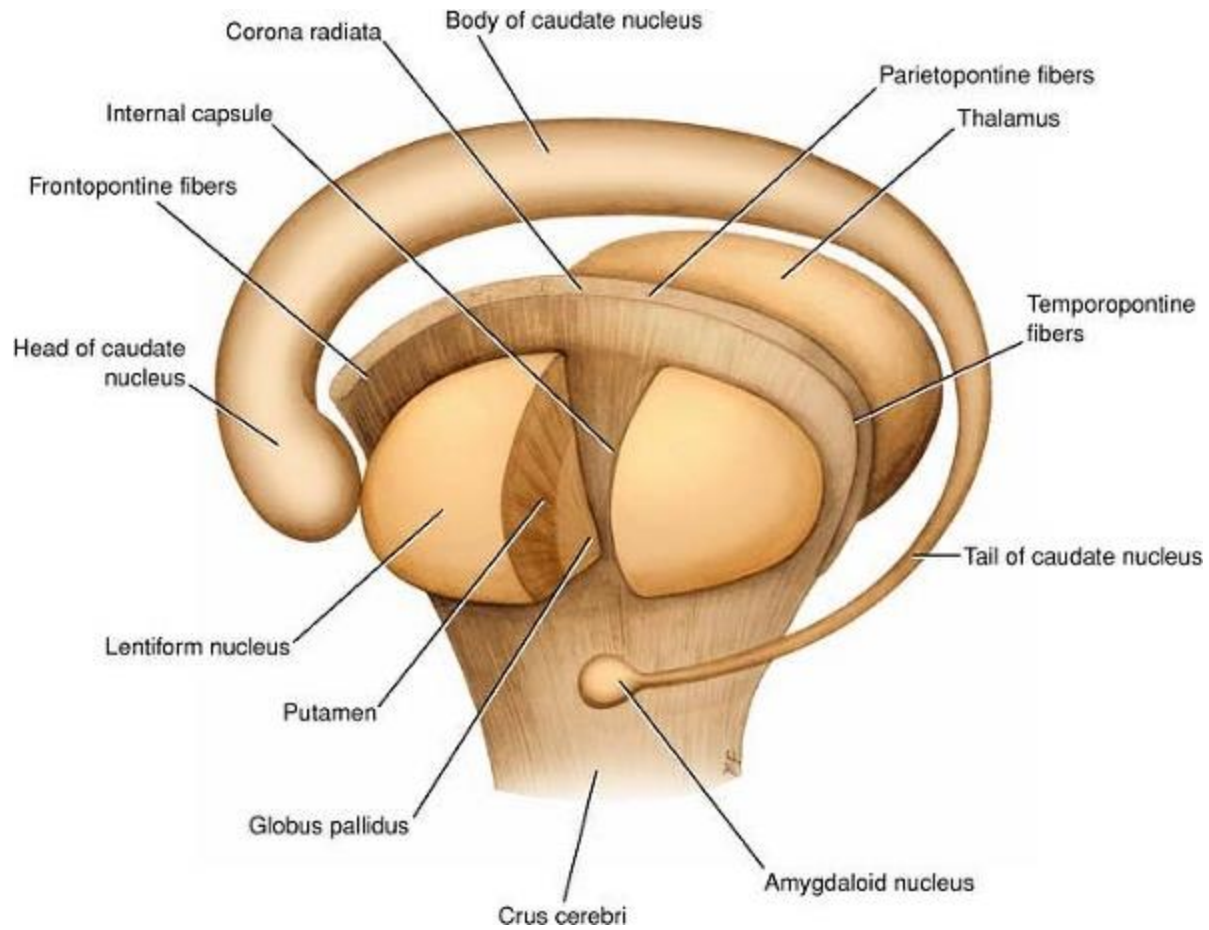


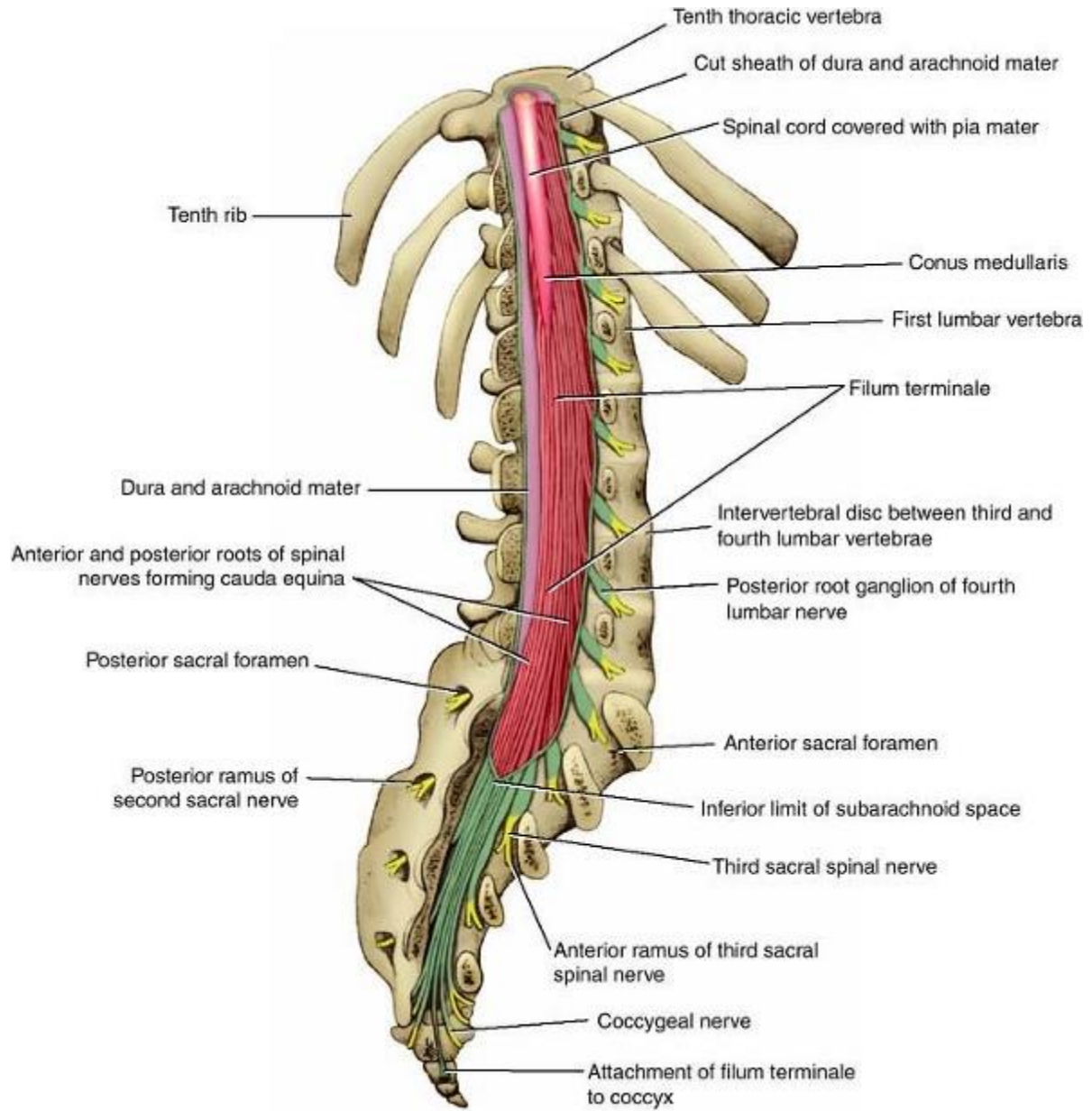












1. Cribriform plate is related to

- a. Optic nerve**
- b. Oculomotor nerve**
- c. Trochlear nerve**
- d. Olfactory nerve**
- e. Abducent nerve**

1. Cribriform plate is related to

- a. Optic nerve**
- b. Oculomotor nerve**
- c. Trochlear nerve**
- d. Olfactory nerve /**
- e. Abducent nerve**

2. Opening for optic nerve is in the

a. Temporal bone

b. Ethmoid bone

c. Parietal bone

d. Frontal bone

e. Sphenoid bone

2. Opening for optic nerve is in the

- a. Temporal bone**
- b. Ethmoid bone**
- c. Parietal bone**
- d. Frontal bone**
- e. Sphenoid bone /**

3. Foramen ovale transmits the

- a. Maxillary nerve**
- b. Mandibular nerve**
- c. Ophthalmic nerve**
- d. Inferior ophthalmic vein**
- e. Superior ophthalmic vein**

3. Foramen ovale transmits the

- a. Maxillary nerve**
- b. Mandibular nerve /**
- c. Ophthalmic nerve**
- d. Inferior ophthalmic vein**
- e. Superior ophthalmic vein**

4. Jugular foramen transmit

a. Vagus nerve

b. Olfactory nerve

c. Facial nerve

d. Oculomotor nerve

e. Hypoglossal nerve

4. Jugular foramen transmit

a. Vagus nerve /

b. Olfactory nerve

c. Facial nerve

d. Oculomotor nerve

e. Hypoglossal nerve

5. The cerebrospinal fluid is formed by

- a. Arachnoid granulations**
- b. Tela chorioidea**
- c. The pia mater**
- d. Choroid plexuses**
- e. Ependymal cells**

5. The cerebrospinal fluid is formed by

a. Arachnoid granulations

b. Tela chorioidea

c. The pia mater

d. Choroid plexuses /

e. Ependymal cells

6. Hydrocephalus is commonly due to obstruction at the level of

a. Aqueduct of Sylvius

b. Subarachnoid space

c. Third ventricle

d. Fourth ventricle

e. Central canal

6. Hydrocephalus is commonly due to obstruction at the level of

a. Aqueduct of Sylvius /

b. Subarachnoid space

c. Third ventricle

d. Fourth ventricle

e. Central canal

- 7. The arachnoid mater ends at the level of the**
- a. Upper border of the S2 vertebra**
 - b. Lower border of S3 vertebra**
 - c. Lower border of the S2 vertebra**
 - d. Upper border of L1 vertebra**
 - e. Lower border of L2 vertebra**

- 7. The arachnoid mater ends at the level of the**
- a. Upper border of the S2 vertebra**
 - b. Lower border of S3 vertebra**
 - c. Lower border of the S2 vertebra /**
 - d. Upper border of L1 vertebra**
 - e. Lower border of L2 vertebra**

8. The midbrain has nucleus for which of the following cranial nerves?

a. Trigeminal nerve

b. Trochlear nerve

c. Abducent nerve

d. The vagus nerve

e. Accessory nerve

8. The midbrain has nucleus for which of the following cranial nerves?

- a. Trigeminal nerve**
- b. Trochlear nerve /**
- c. Abducent nerve**
- d. The vagus nerve**
- e. Accessory nerve**

- 9. The jugular vein is direct continuation of**
- a. Superior sagittal sinus**
 - b. Inferior sagittal sinus**
 - c. The sigmoid sinus**
 - d. The transverse sinus**
 - e. The cavernous sinus**

- 9. The jugular vein is direct continuation of**
- a. Superior sagittal sinus**
 - b. Inferior sagittal sinus**
 - c. The sigmoid sinus /**
 - d. The transverse sinus**
 - e. The cavernous sinus**

10. Cavity of spinal cord containing CSF is the

a. Aqueduct of Sylvius

b. The foramen of Magendie

c. Foramina of Luschka

d. The central canal

e. The foramina of Monro

10. Cavity of spinal cord containing CSF is the

a. Aqueduct of Sylvius

b. The foramen of Magendie

c. Foramina of Luschka

d. The central canal /

e. The foramina of Monro

- 11. The cauda equina is**
- a. Lower end of filum terminale**
 - b. The group of spinal nerves**
 - c. The lower end of spinal cord**
 - d. Group of spinal nerve roots**
 - e. Lower limit of subarachnoid space**

- 11. The cauda equina is**
- a. Lower end of filum terminale**
 - b. The group of spinal nerves**
 - c. The lower end of spinal cord**
 - d. Group of spinal nerve roots /**
 - e. Lower limit of subarachnoid space**

12. Which of the following part of brain is called the relay station

a. Hypothalamus

b. Spinal cord

c. Pons

d. Midbrain

e. Thalamus

12. Which of the following part of brain is called the relay station

a. Hypothalamus

b. Spinal cord

c. Pons

d. Midbrain

e. Thalamus /

13. Central sulcus is related anteriorly to

a. Motor area

b. Sensory area

c. Lateral sulcus

d. Occipital lobe

e. Parietal lobe

13. Central sulcus is related anteriorly to

a. Motor area /

b. Sensory area

c. Lateral sulcus

d. Occipital lobe

e. Parietal lobe

- 14. Sympathetic nervous system regarded as a**
- a. Central nervous system**
 - b. Thoracolumbar outflow**
 - c. Craniosacral outflow**
 - d. Sensory nervous system**
 - e. Motor nervous system**

- 14. Sympathetic nervous system regarded as a**
- a. Central nervous system**
 - b. Thoracolumbar outflow /**
 - c. Craniosacral outflow**
 - d. Sensory nervous system**
 - e. Motor nervous system**

15. Cranial nerve which is mainly responsible for most of parasympathetic component is the

a. Olfactory nerve

b. Optic nerve

c. Vagus nerve

d. Accessory nerve

e. Hypoglossal nerve

15. Cranial nerve which is mainly responsible for most of parasympathetic component is the

a. Olfactory nerve

b. Optic nerve

c. Vagus nerve/

d. Accessory nerve

e. Hypoglossal nerve

16. The nerve mainly responsible for accommodation reflex for near vision, is the

a. Optic nerve

b. Vagus nerve

c. Accessory nerve

d. Hypoglossal nerve

e. Oculomotor nerve

16. The nerve mainly responsible for accommodation reflex for near vision, is the

a. Optic nerve

b. Vagus nerve

c. Accessory nerve

d. Hypoglossal nerve

e. Oculomotor nerve /

17. Lateral sulcus lies superior to

a. Frontal lobe

b. Parietal lobe

c. Occipital lobe

d. Temporal lobe

e. Central sulcus

17. Lateral sulcus lies superior to

a. Frontal lobe

b. Parietal lobe

c. Occipital lobe

d. Temporal lobe /

e. Central sulcus

18. The part of fourth ventricle lies

a. Posterior to the pons

b. Anterior to the pons

c. Anterior to the midbrain

d. Posterior to the cerebellum

e. In between the two thalami

18. The part of fourth ventricle lies

a. Posterior to the pons /

b. Anterior to the pons

c. Anterior to the midbrain

d. Posterior to the cerebellum

e. In between the two thalami

19. Trochlear nerve

a. Supply inferior oblique muscle

b. Leave posterior surface of brainstem

c. Is also called fifth cranial nerve

d. Arise from pons mainly

e. Arise from medulla oblongata

19. Trochlear nerve

- a. Supply inferior oblique muscle**
- b. Leave posterior surface of brainstem /**
- c. Is also called fifth cranial nerve**
- d. Arise from pons mainly**
- Arise from medulla oblongata**

20. Superior cerebellar peduncle is connected to

a. Hypothalamus

b. Medulla oblongata

c. The pons

d. Midbrain

e. Thalamus

20. Superior cerebellar peduncle is connected to

a. Hypothalamus

b. Medulla oblongata

c. The pons

d. Midbrain /

e. Thalamus

21. A groove on anterior surface of the pons is related to

a. Basilar artery

b. Internal carotid artery

c. Vertebral arteries

d. Posterior cerebral arteries

e. Superior cerebellar arteries

21. A groove on anterior surface of the pons is related to

a. Basilar artery /

b. Internal carotid artery

c. Vertebral arteries

d. Posterior cerebral arteries

e. Superior cerebellar arteries

22. Regarding spinal meninges, cerebrospinal fluid lies in

a.Epidural space

b.Subdural space

c.Subarachnoid space

d.Between pia and spinal cord

e.Sub periosteal space

22. Regarding spinal meninges, cerebrospinal fluid lies in

a.Epidural space

b.Subdural space

c.Subarachnoid space/

d.Between pia and spinal cord

e.Sub periosteal space

23. Crista galli is related to

a. Frontal bone

b. Sphenoid bone

c. Occipital bone

d. Temporal bone

e. Ethmoid bone

23. Crista galli is related to

a. Frontal bone

b. Sphenoid bone

c. Occipital bone

d. Temporal bone

e. Ethmoid bone /

24. Which of the following nerve has parasympathetic component?

a. Olfactory nerve

b. The optic nerve

c. Oculomotor nerve

d. Trochlear nerve

e. Abducent nerve

24. Which of the following nerve has parasympathetic component?

a. Olfactory nerve

b. The optic nerve

c. Oculomotor nerve /

d. Trochlear nerve

e. Abducent nerve

THANKS