

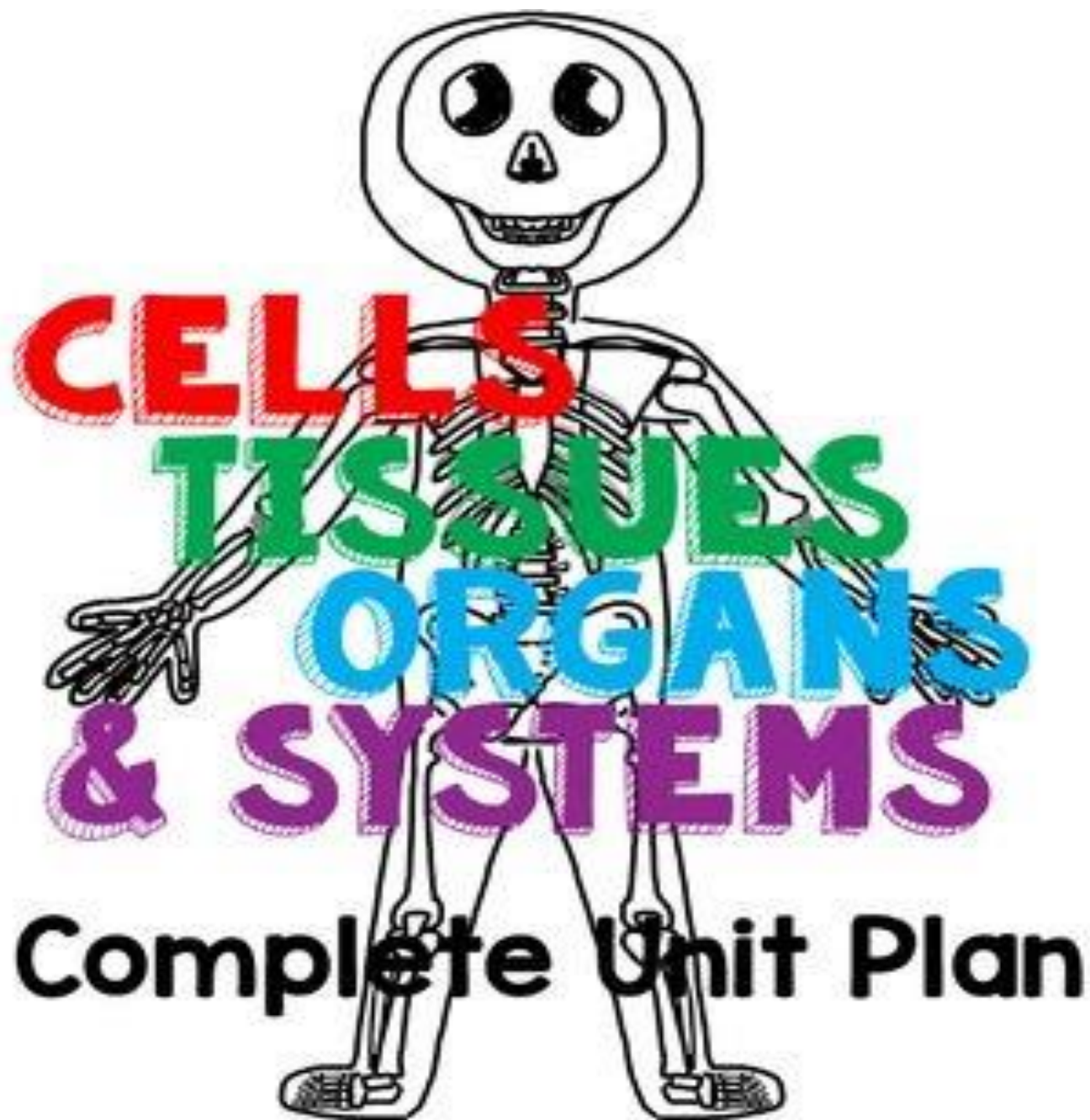
مبانی علوم اعصاب، جلسه اول

نگرشی بر دستگاه های تنظیم کننده بدن و عملکرد آنها

تمایز سلولی، هدف و نتیجه آن

لزوم هماهنگی بین سلول ها، بافت ها، اندام ها و دستگاه های بدن

دستگاه های هماهنگ کننده (تنظیم کننده) و عملکرد آنها



CELLS
TISSUES
ORGANS
& SYSTEMS

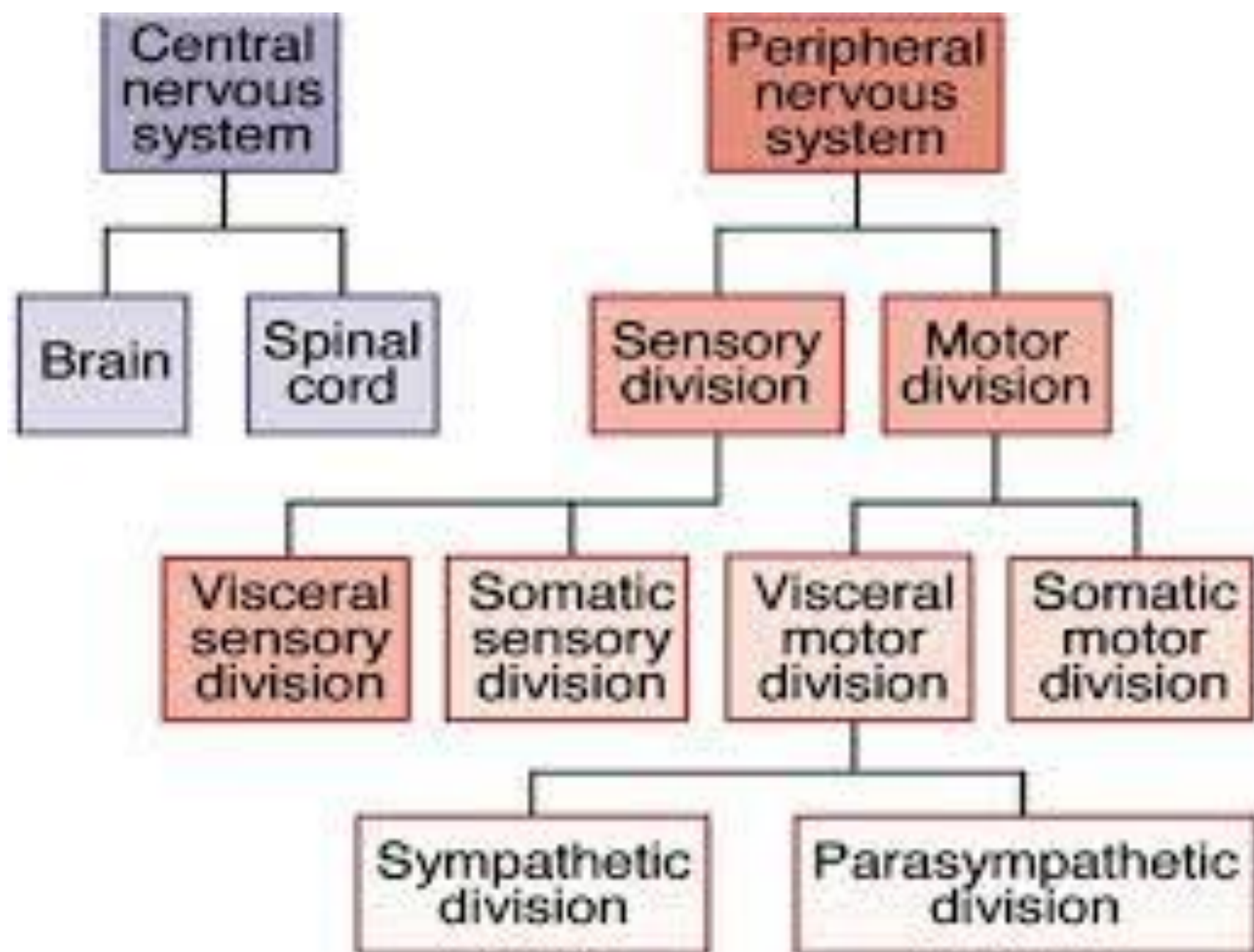
Complete Unit Plan

مبانی علوم اعصاب، جلسه دوم

دستگاه های عصبی مرکزی و محیطی

معرفی بخش های عملکردی دستگاه عصبی

سطوح سه گانه دستگاه عصبی مرکزی



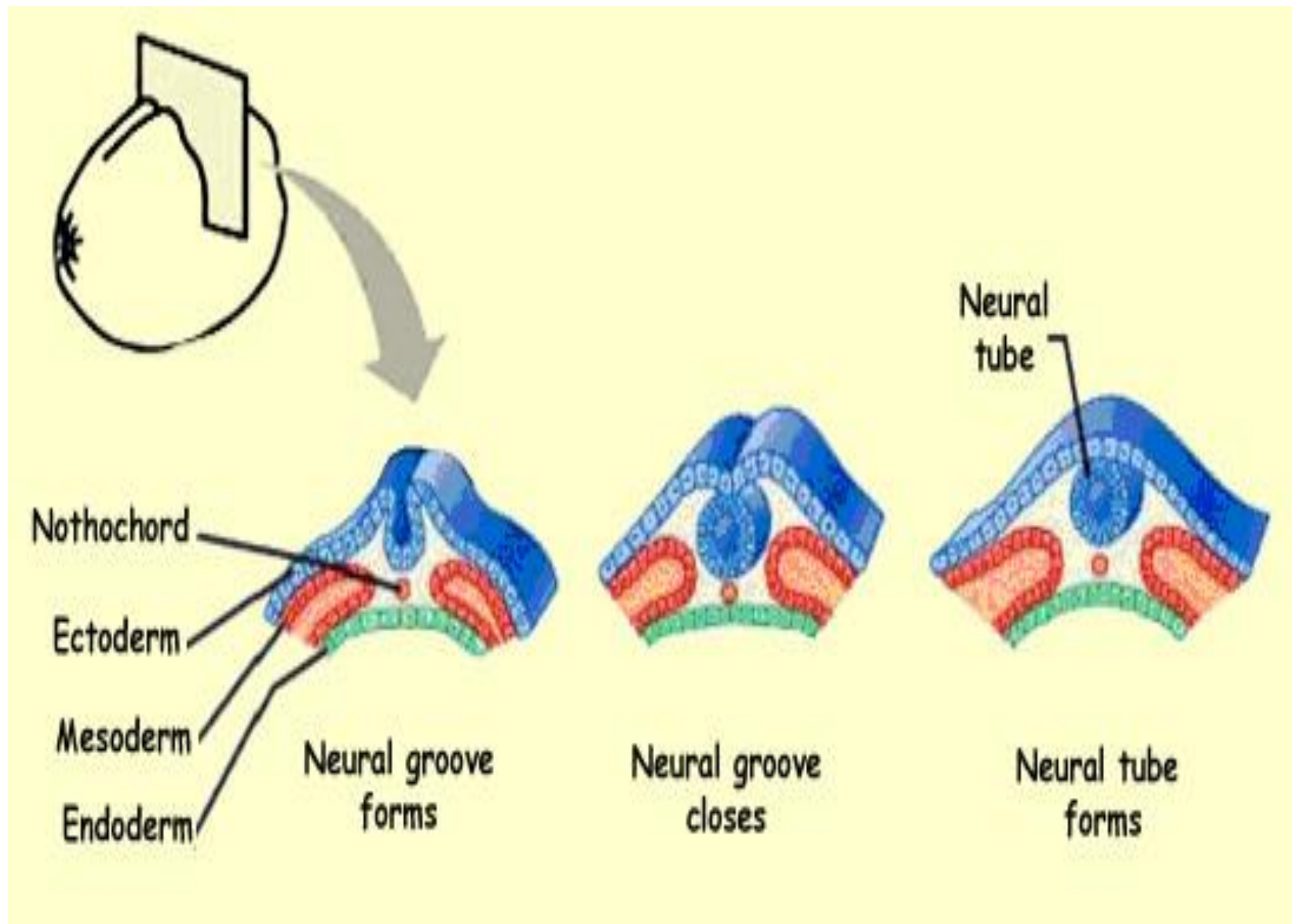


مبانی علوم اعصاب، جلسه سوم

تکوین جنینی مغز و نخاع

مواد خاکستری و سفید

مایع مغزی نخاعی و پرده های مننژ



Forebrain

Diencephalon

Telencephalon
(cerebral
vesicles)

Optic
stalk

Midbrain

Mesencephalon

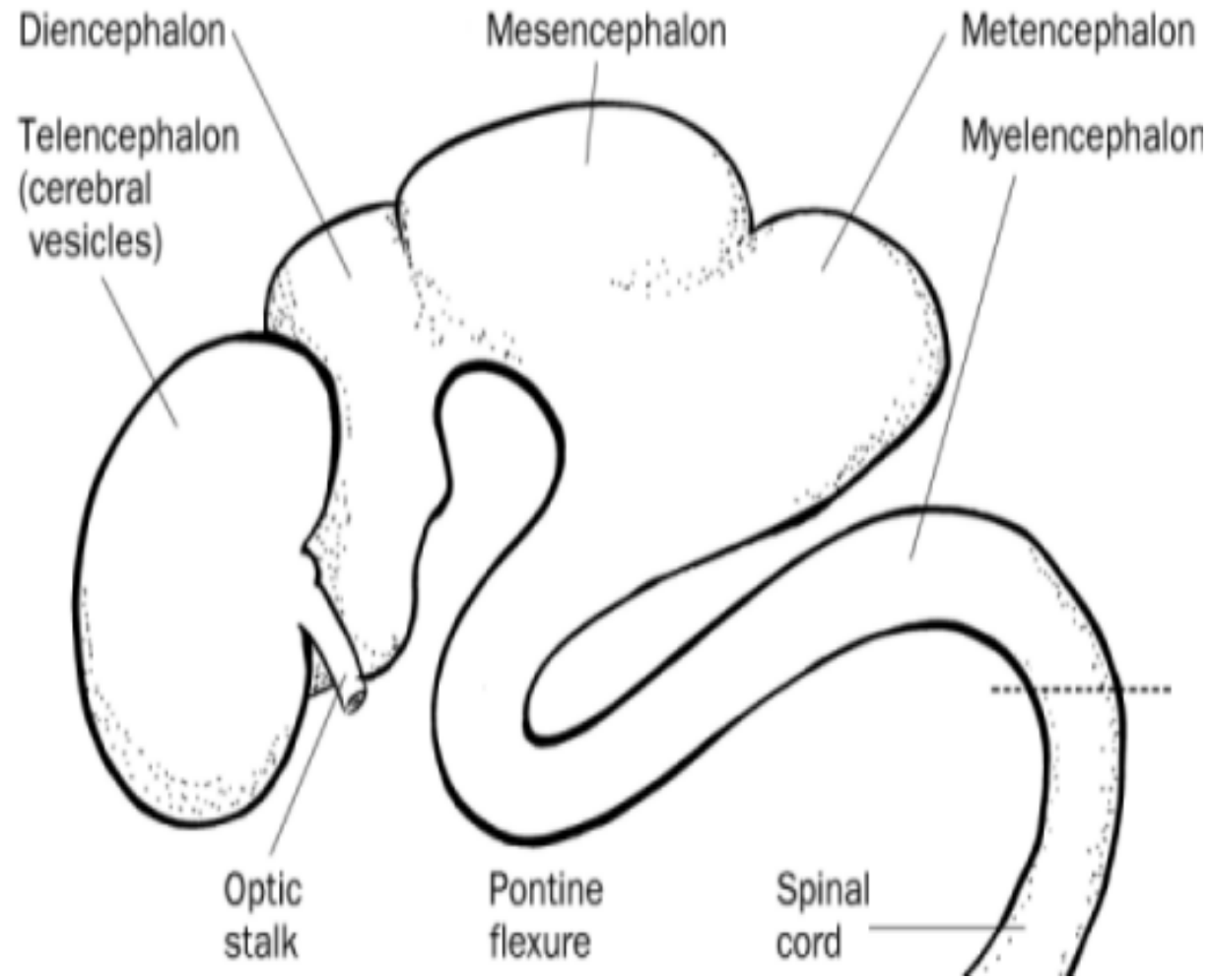
Pontine
flexure

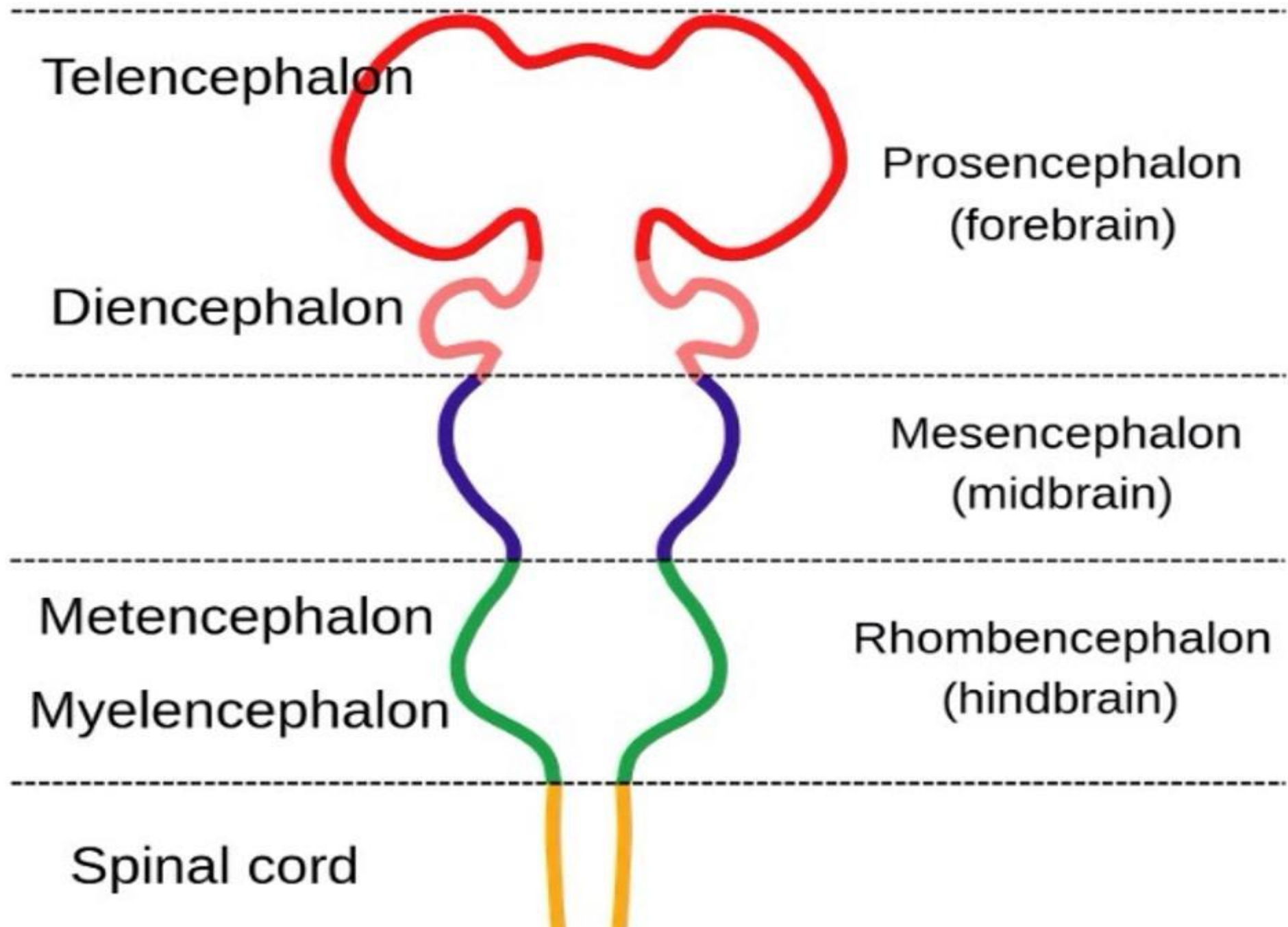
Hindbrain

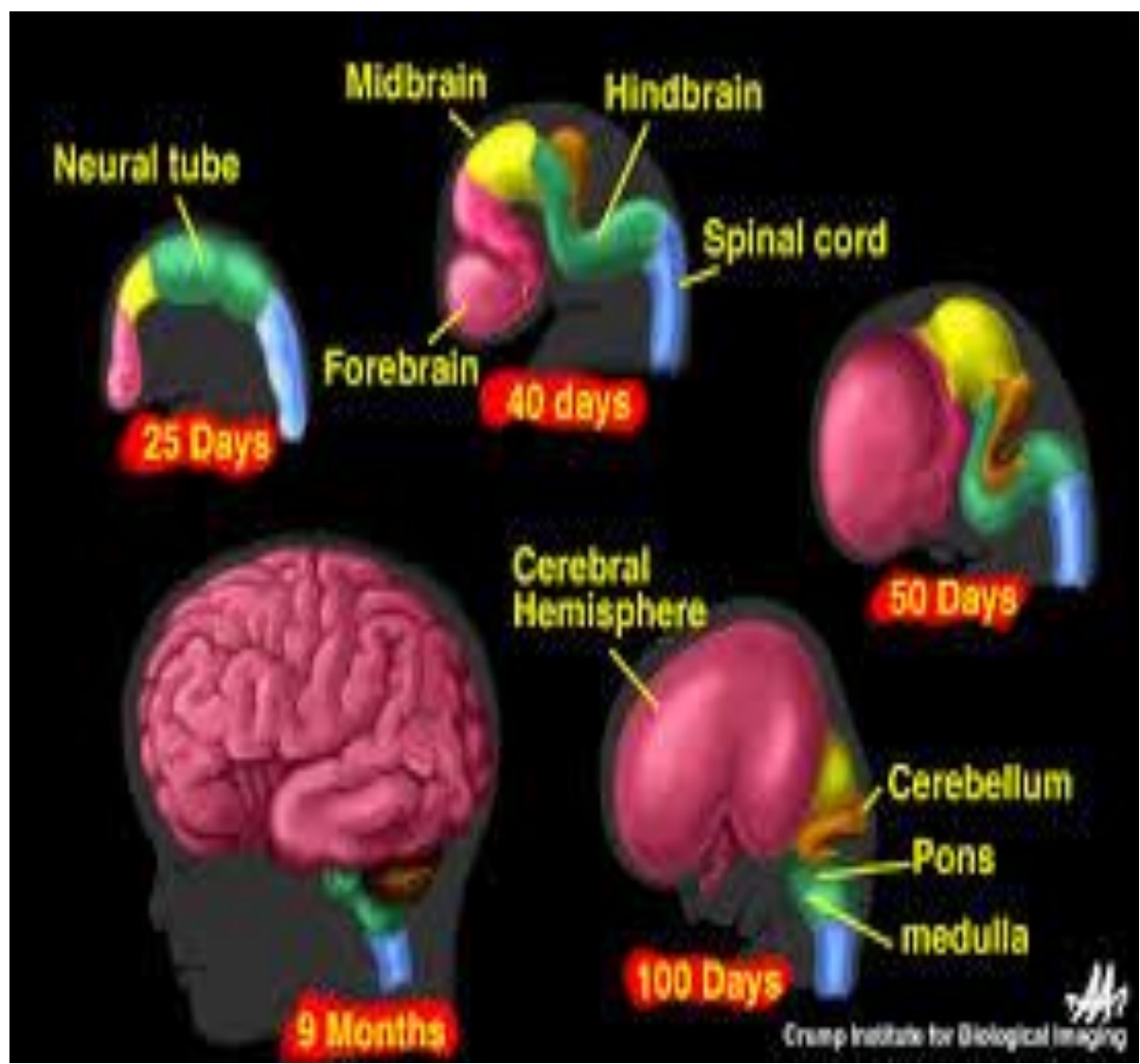
Metencephalon

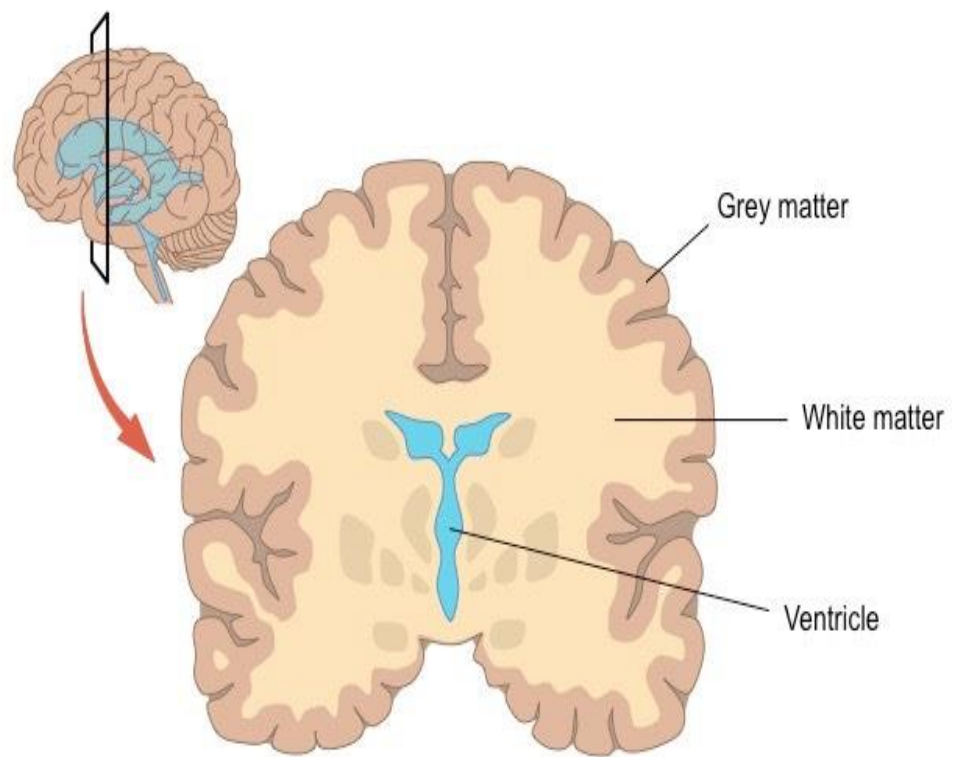
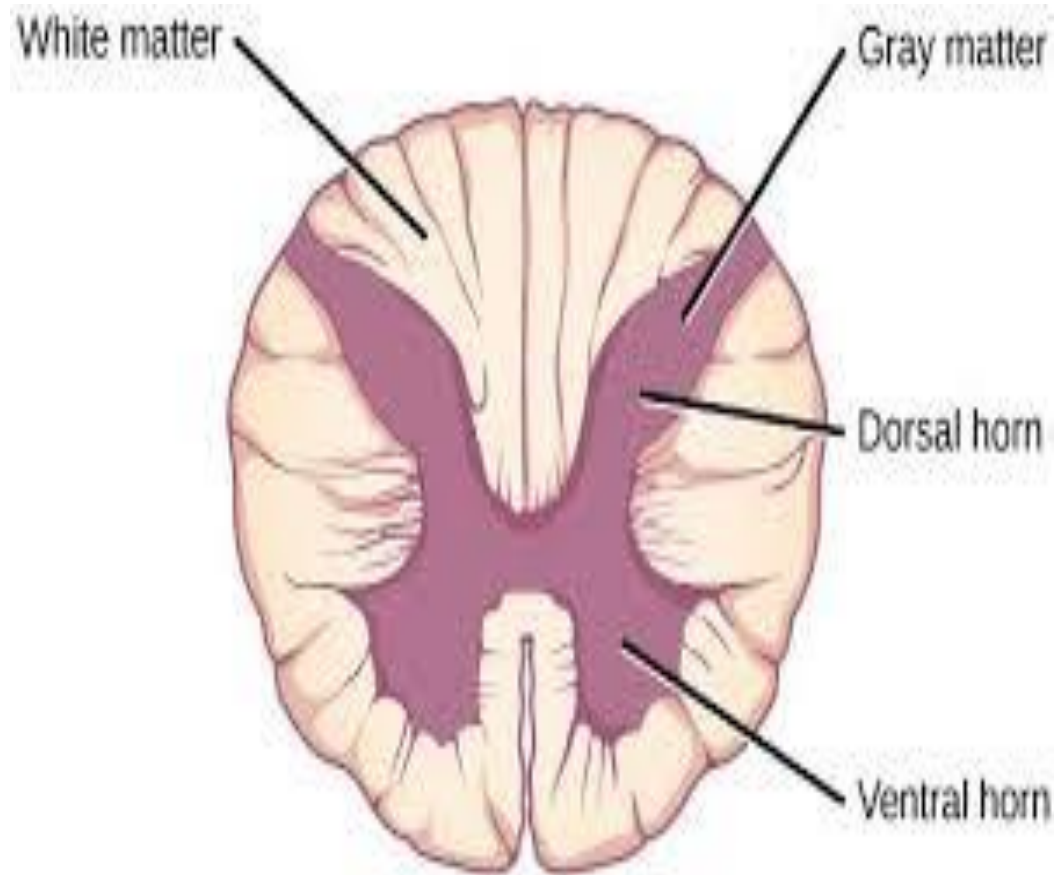
Myelencephalon

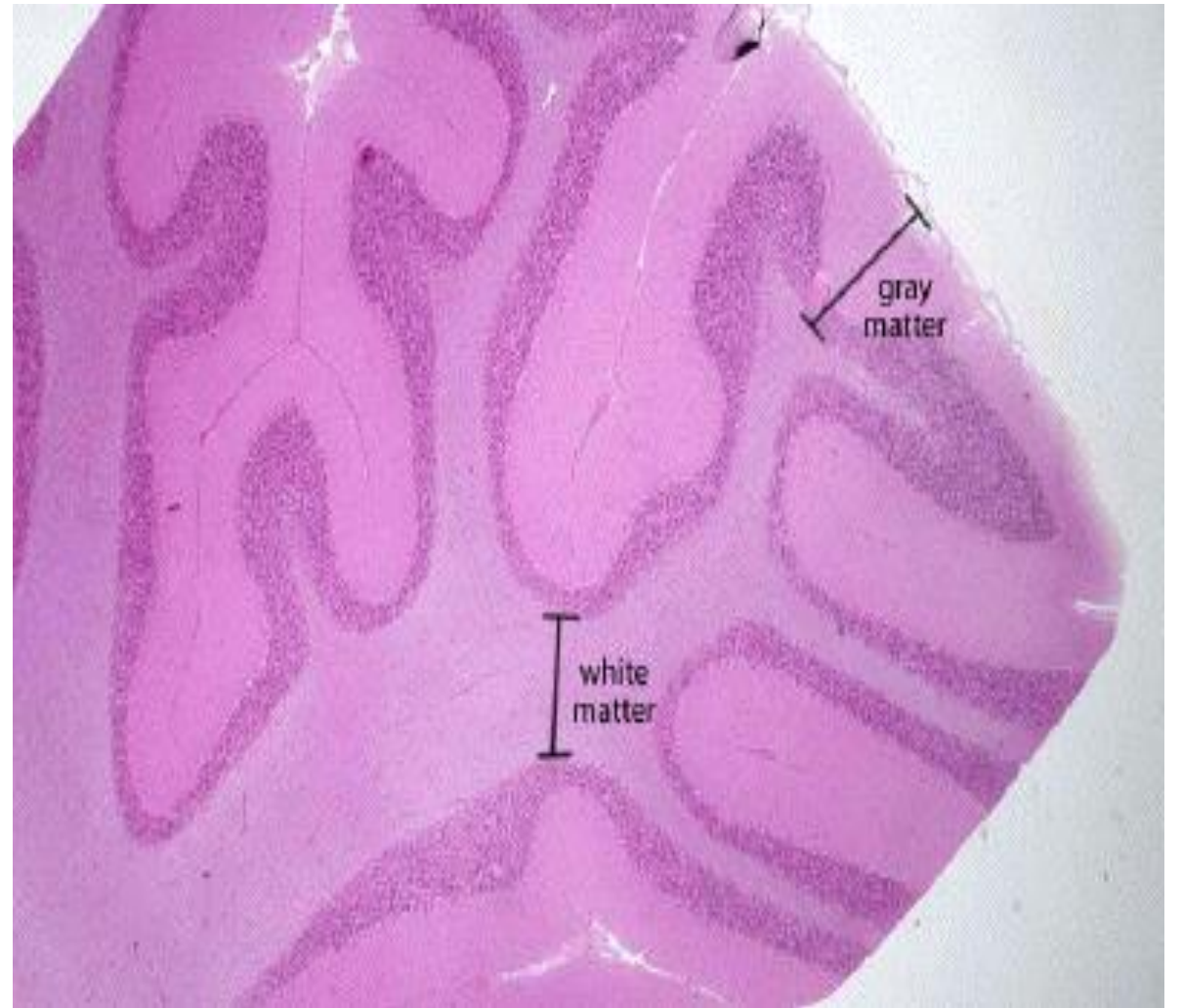
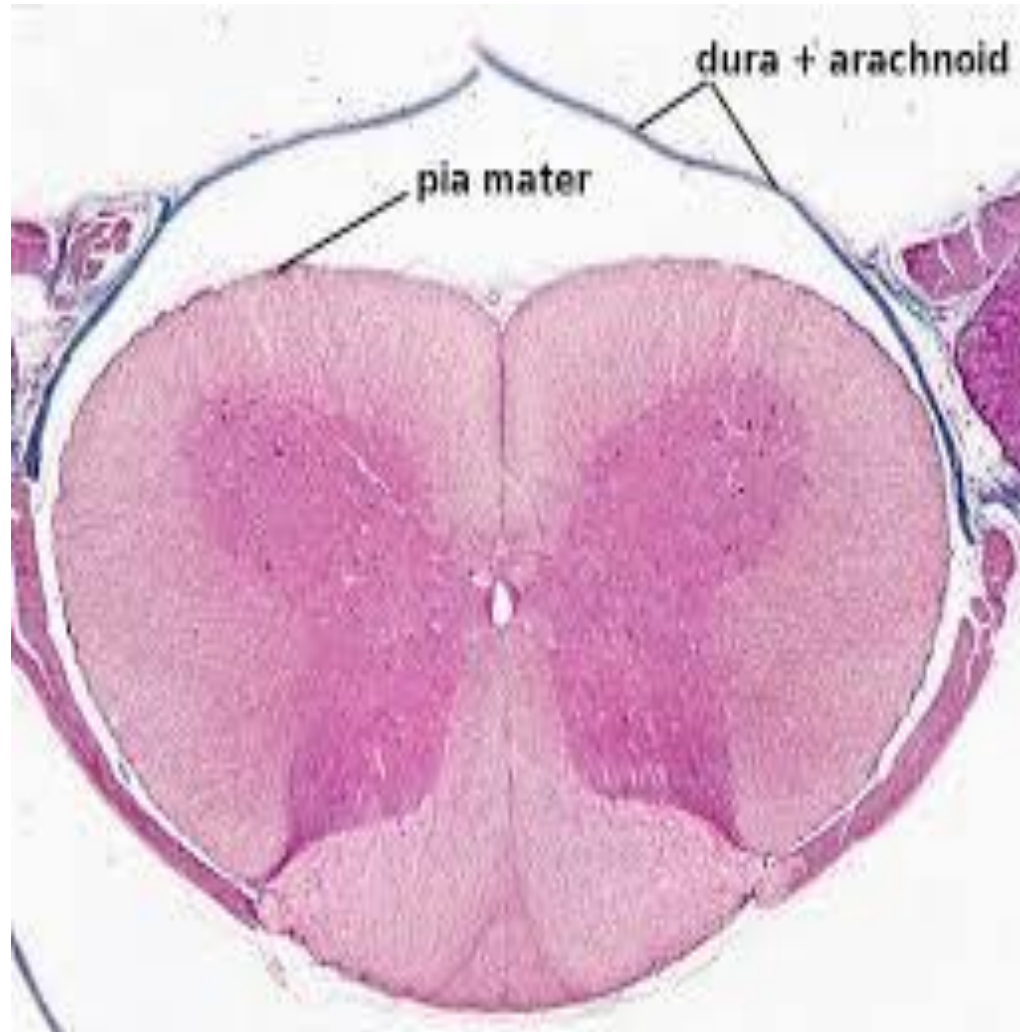
Spinal
cord



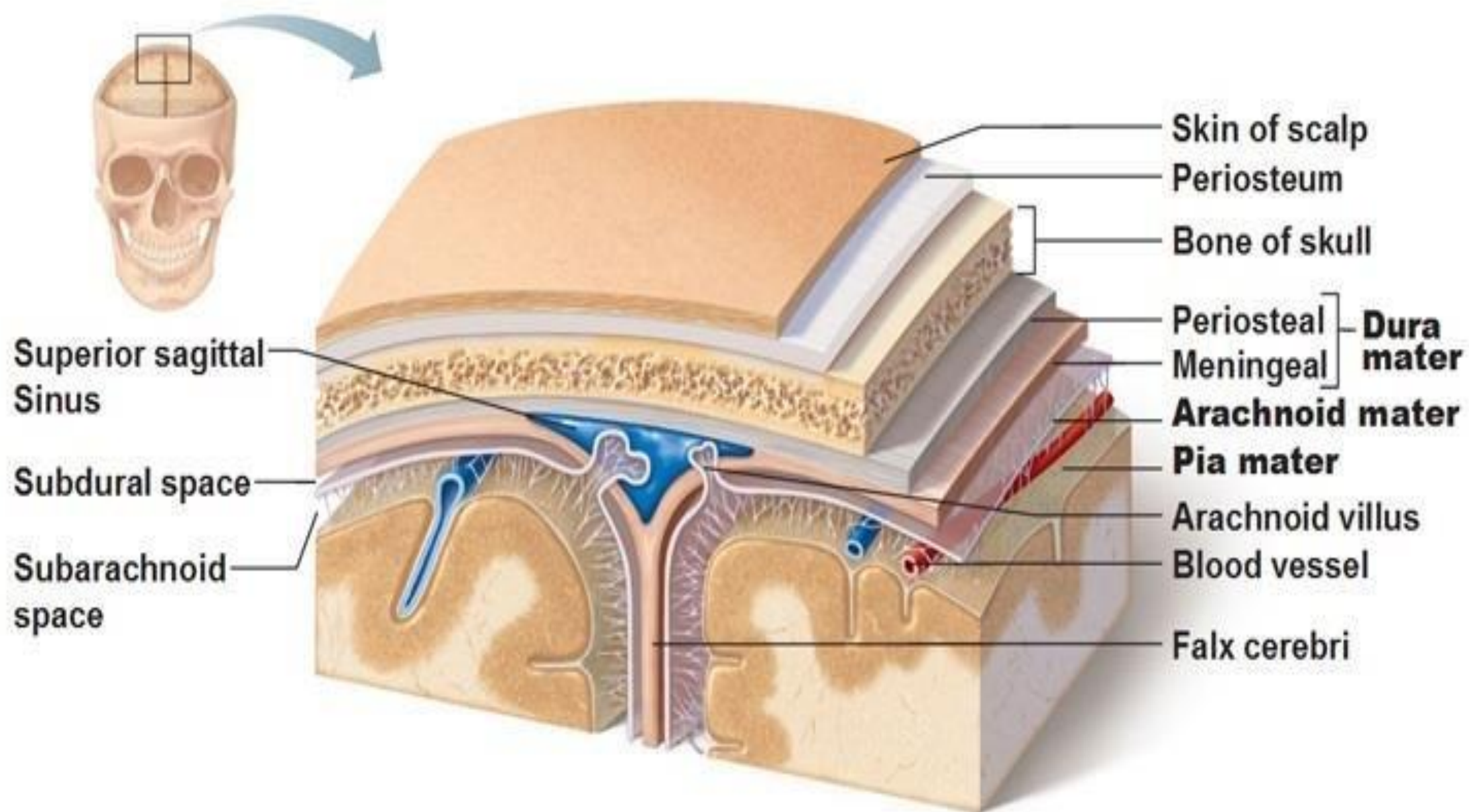


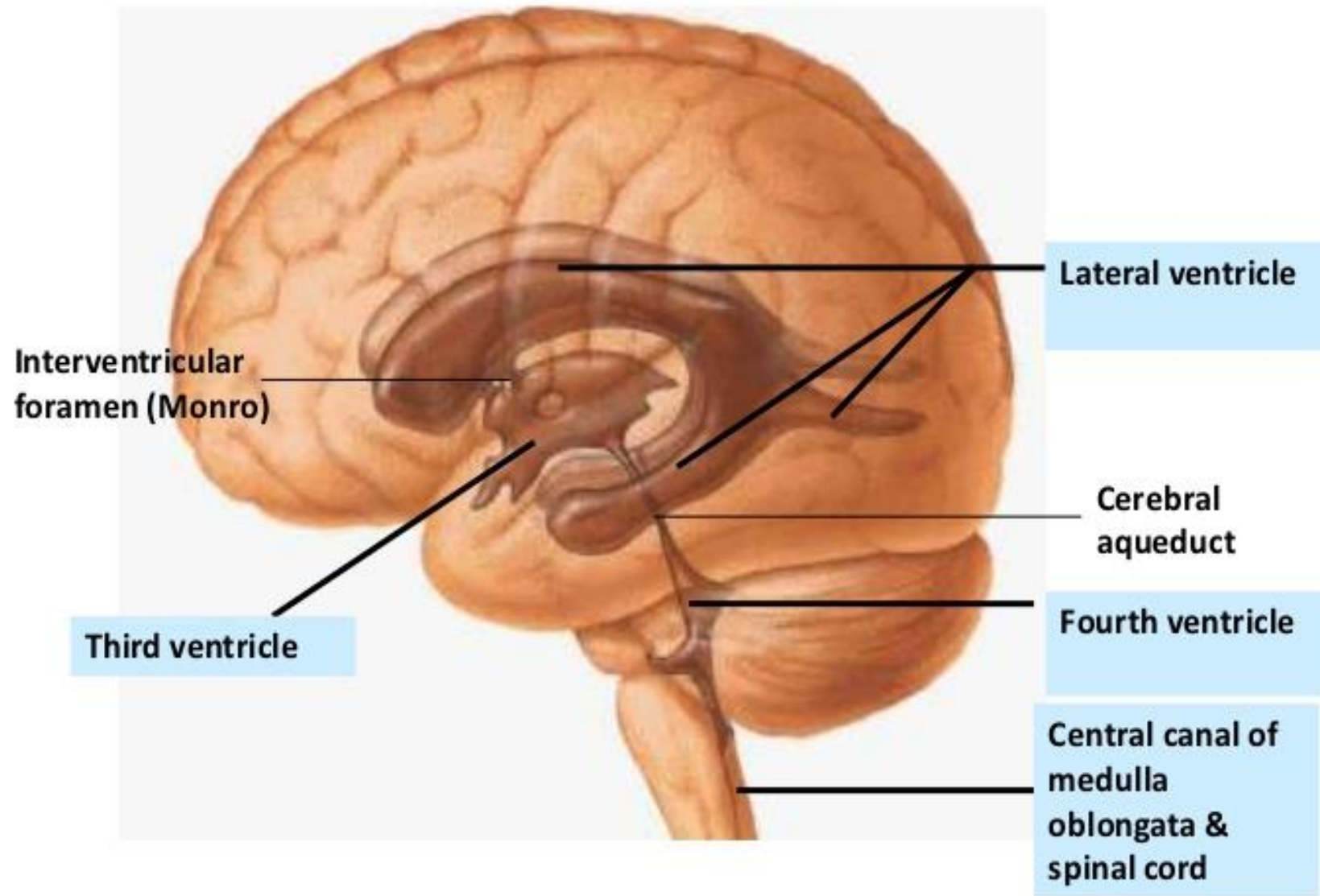












Lateral view to show the ventricular system of the CNS

مبانی علوم اعصاب، جلسه چهارم

نیمکره های مغزی و قشر مغز

دیانسفال

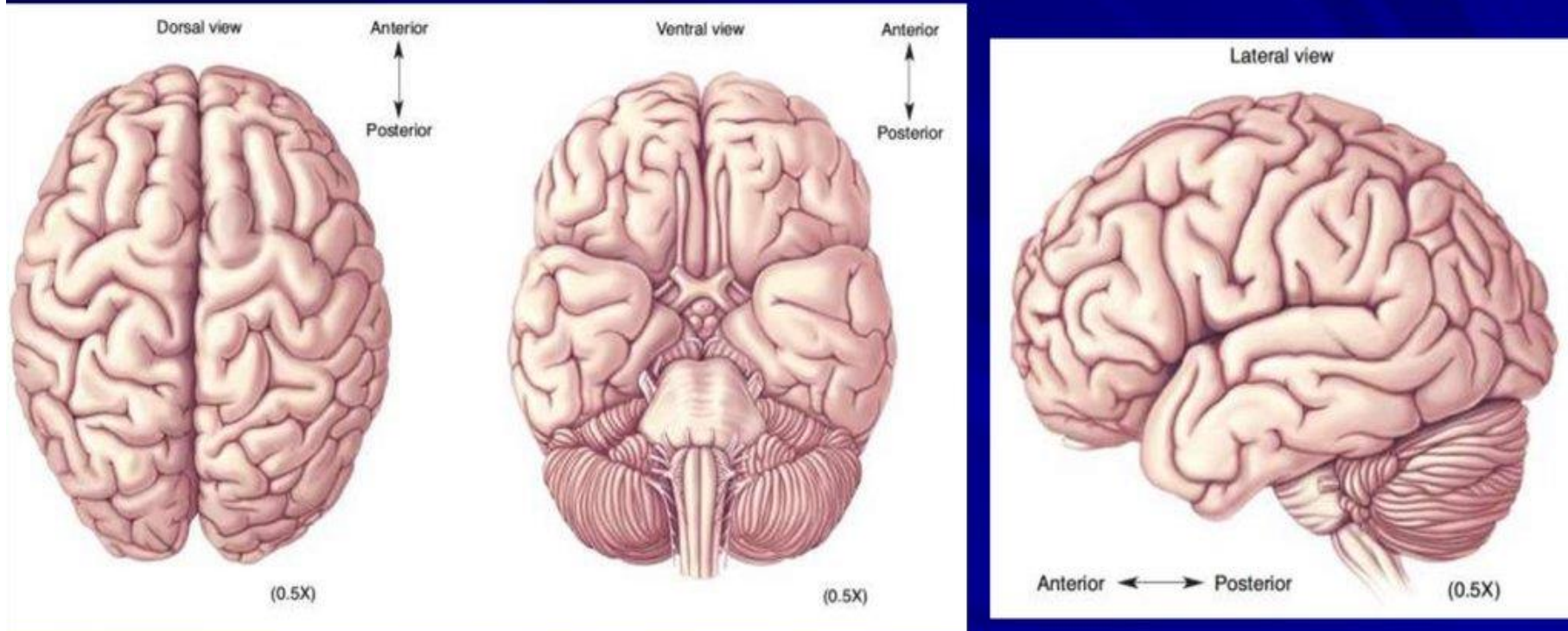
مغز میانی

پل مغزی

بصل النخاع

Anatomy of the human brain

- Surface anatomy of the brain



Cerebrum

**Parietal
Lobe**

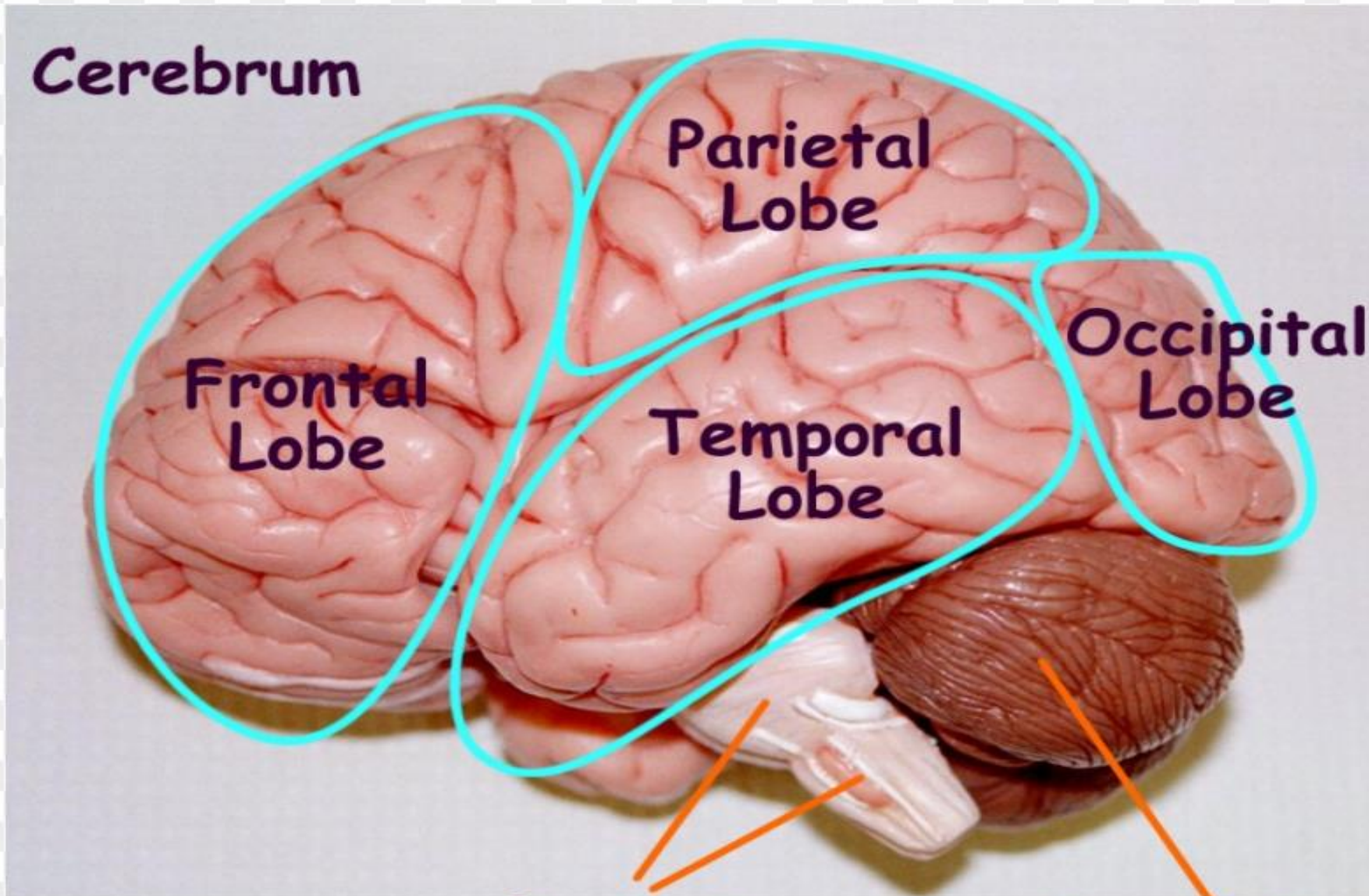
**Frontal
Lobe**

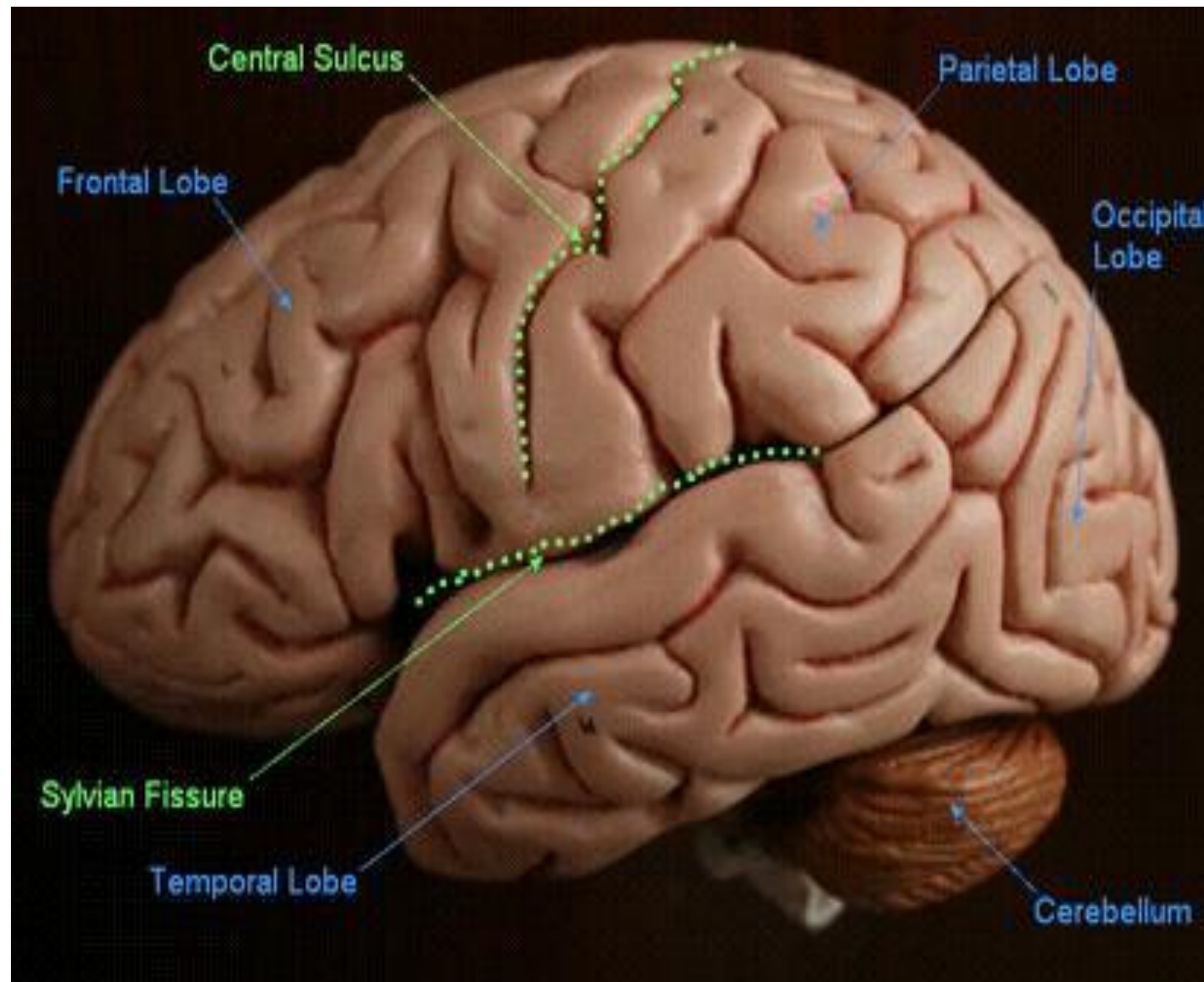
**Temporal
Lobe**

**Occipital
Lobe**

Brainstem

Cerebellum

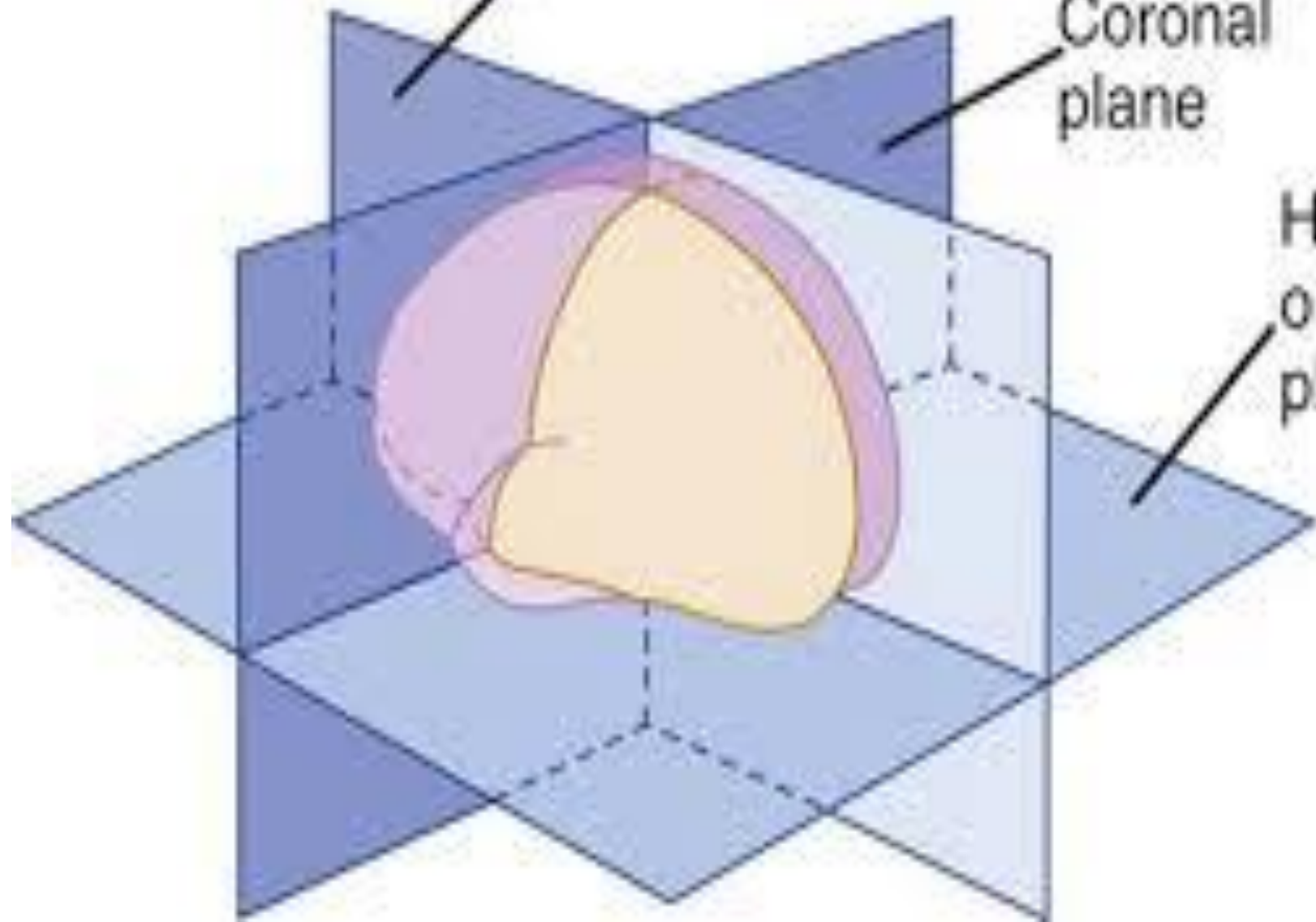


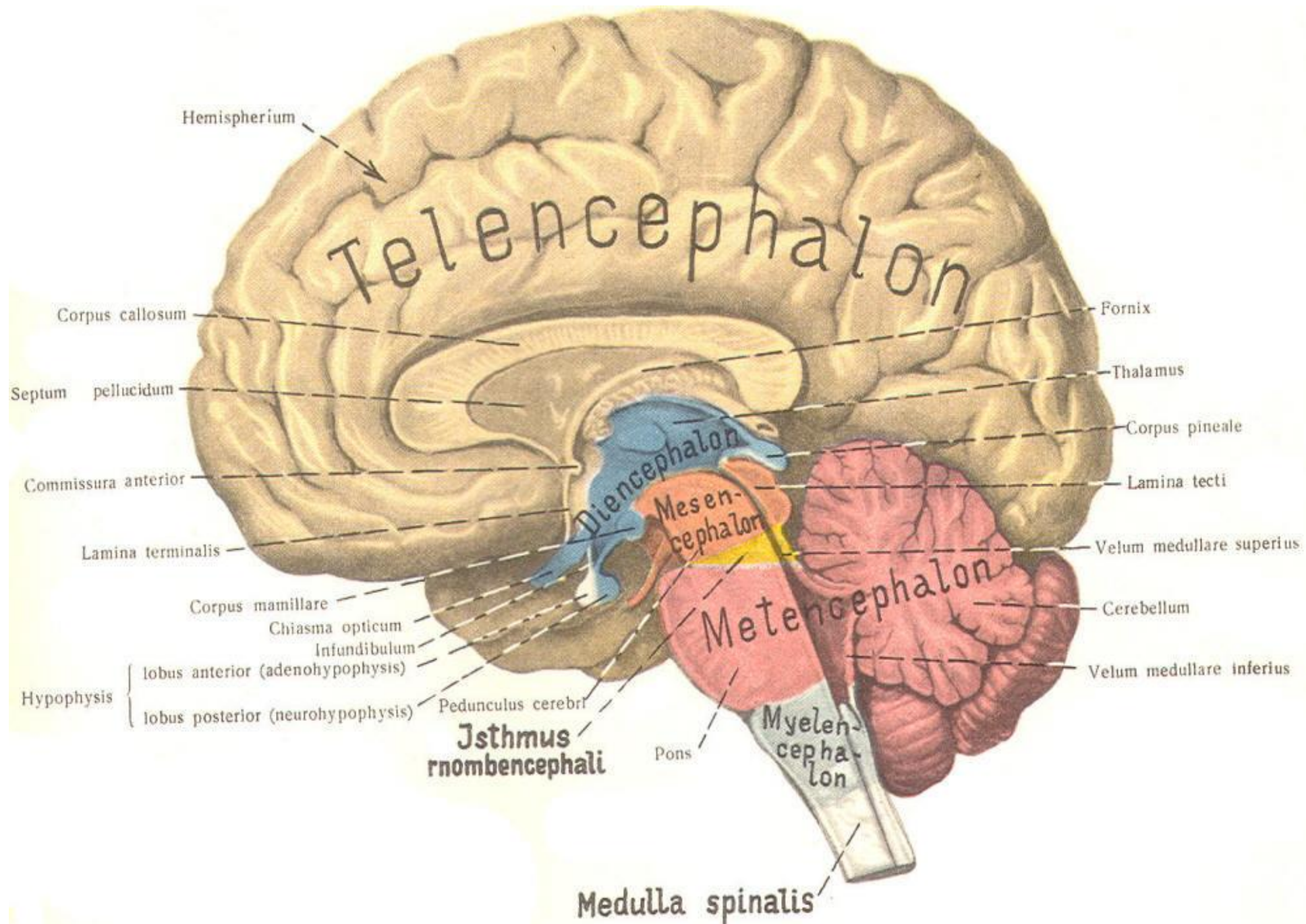


Sagittal (midsagittal) plane

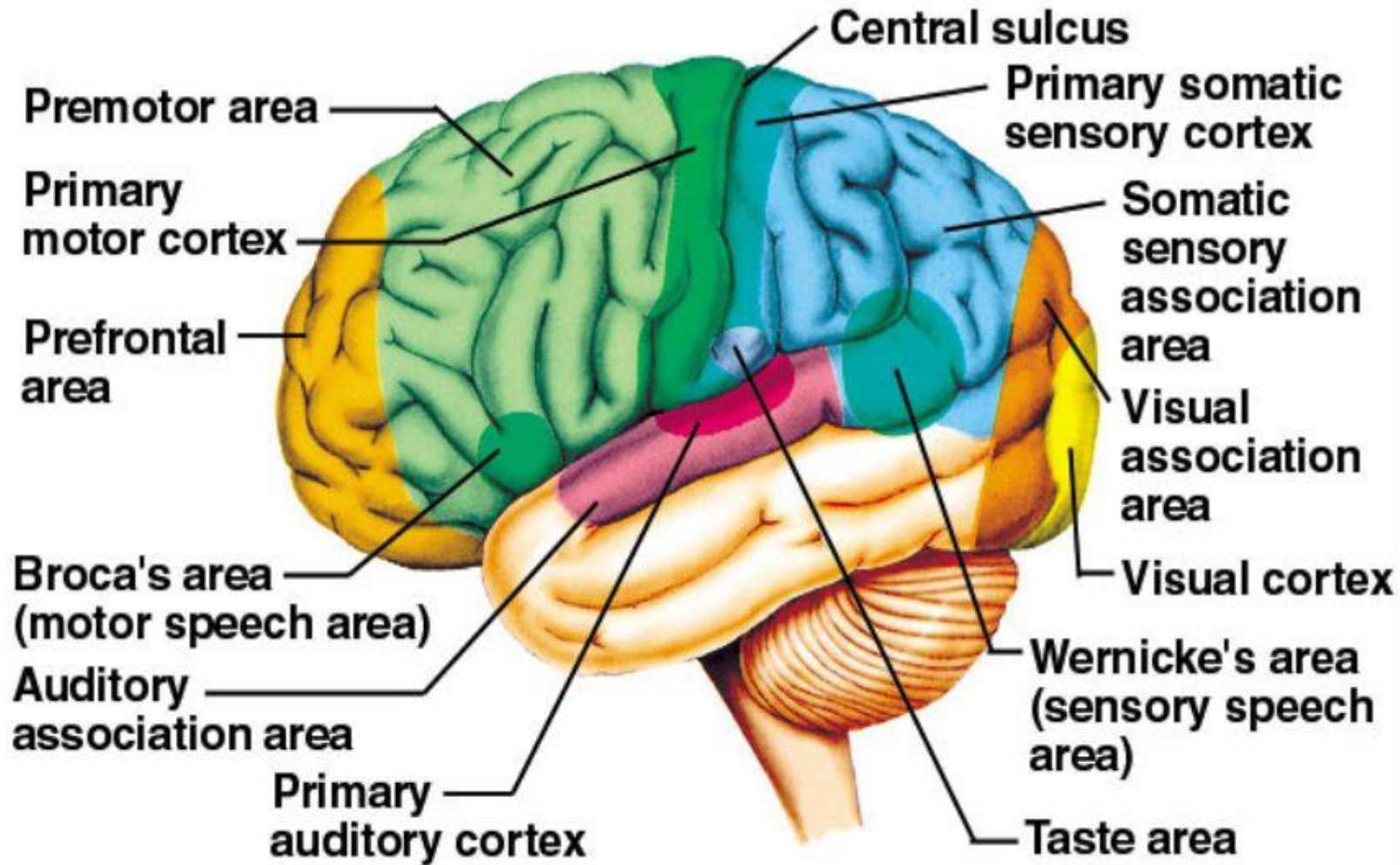
Coronal
plane

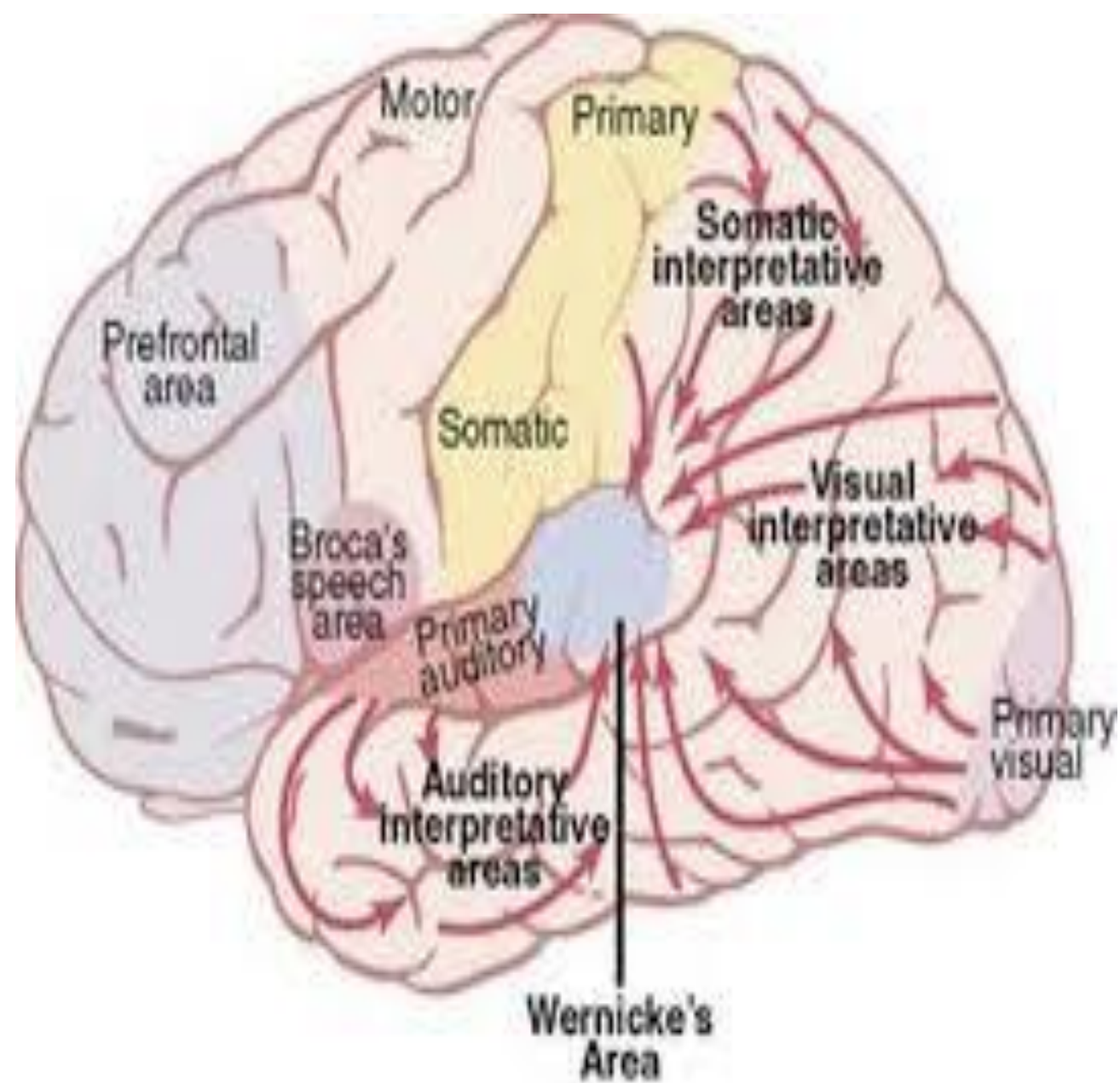
Horizontal,
or axial,
plane

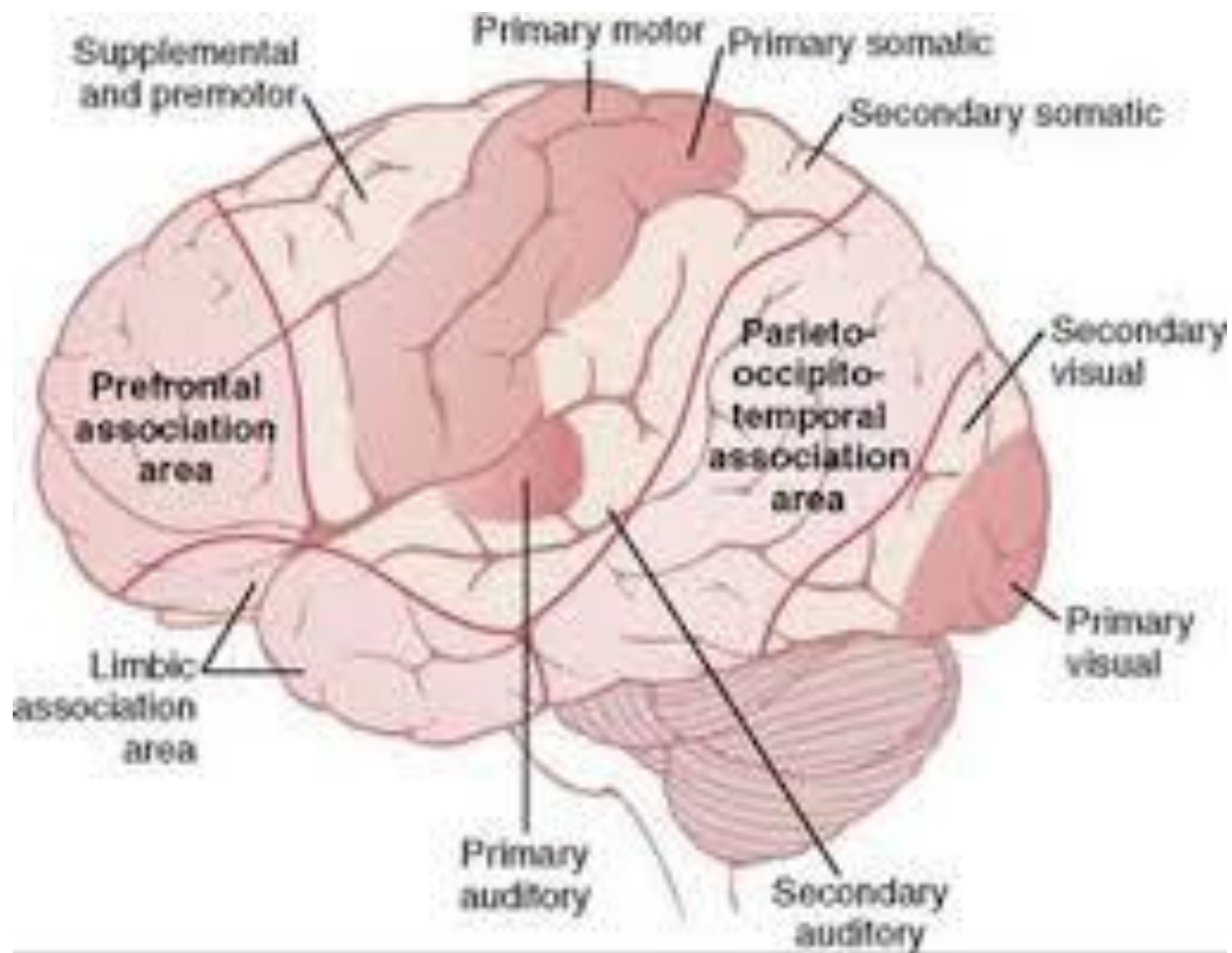


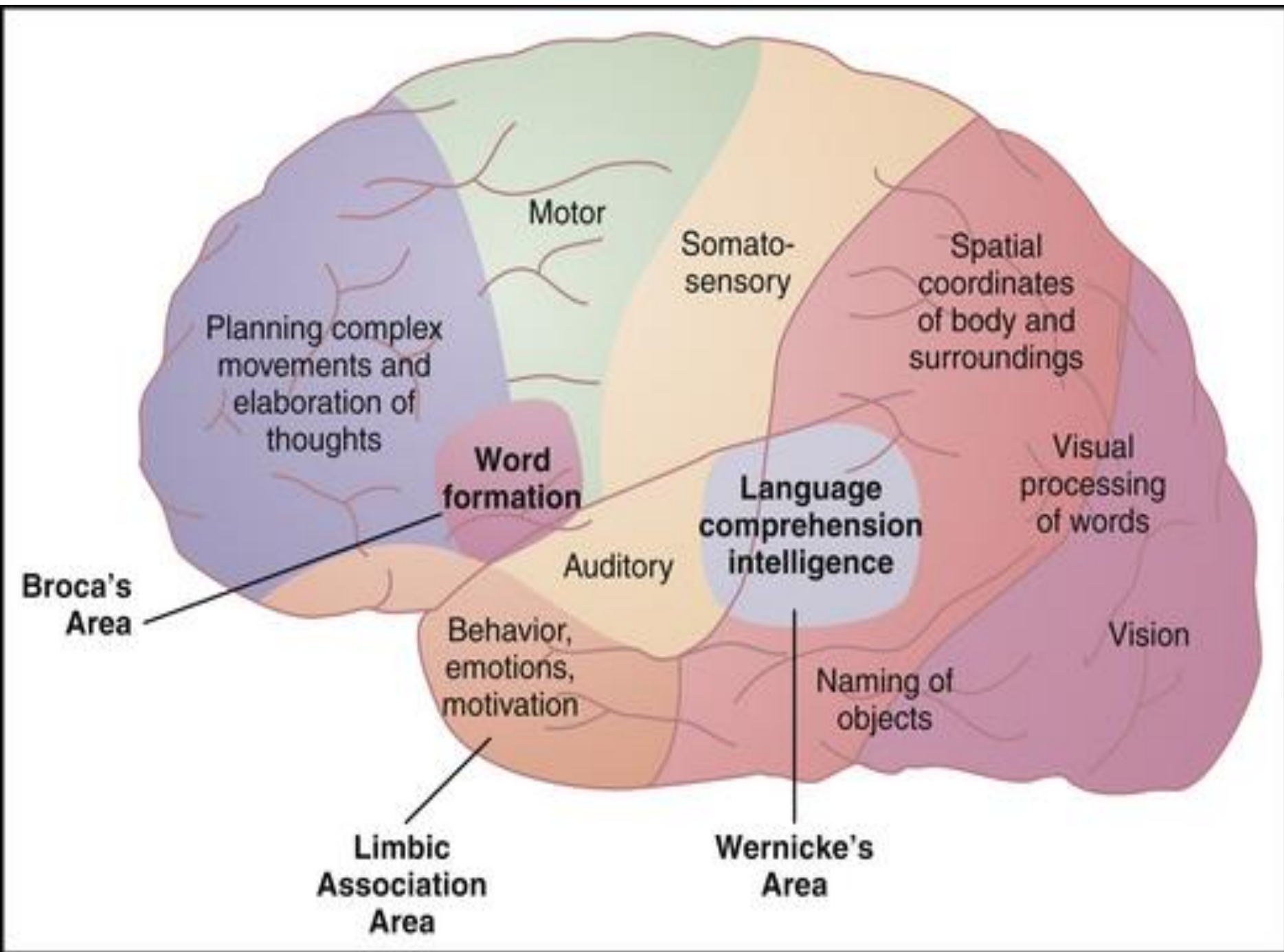


Some Functional Areas of the Lateral Side of the Left Cerebral Cortex









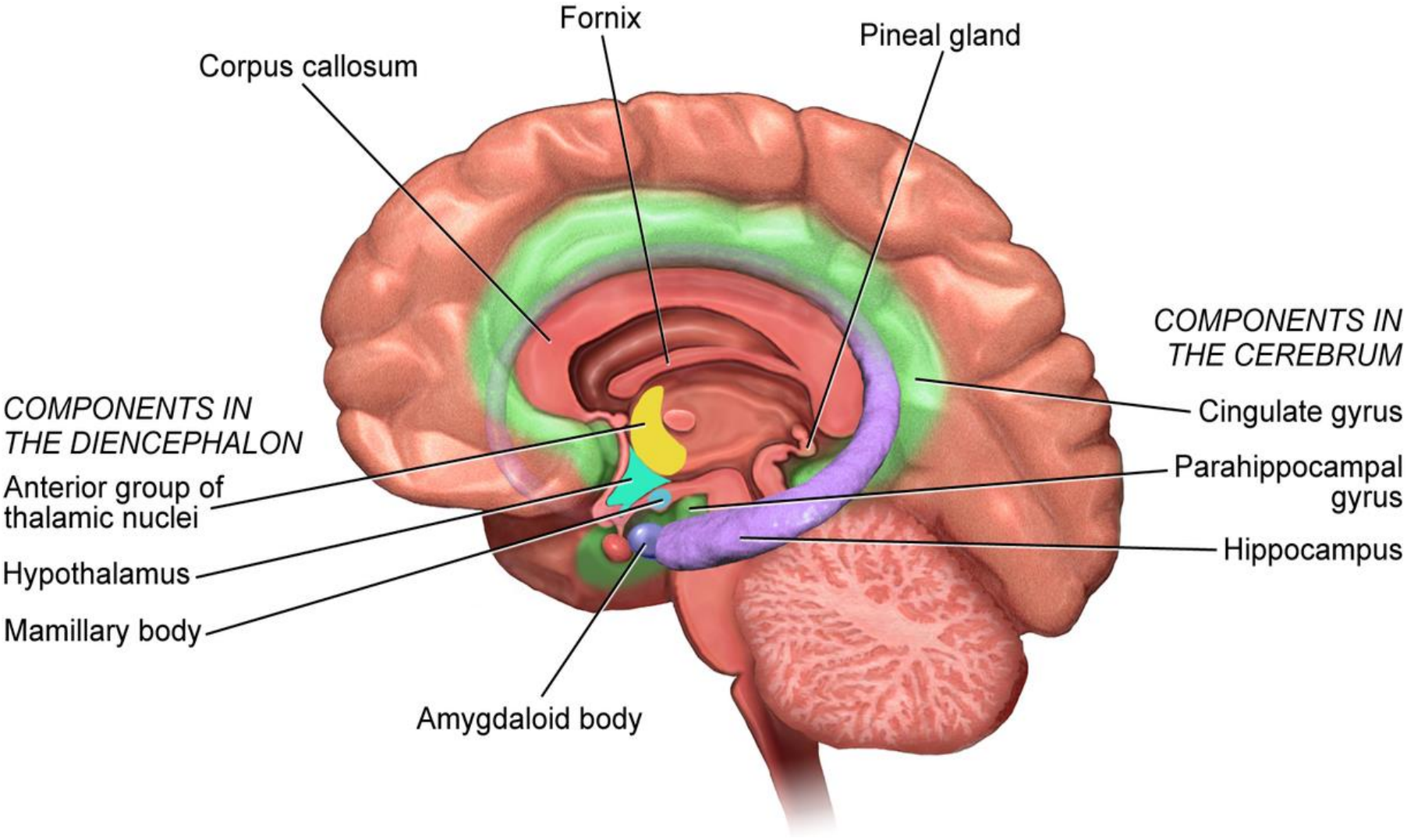
مبانی علوم اعصاب، جلسه پنجم

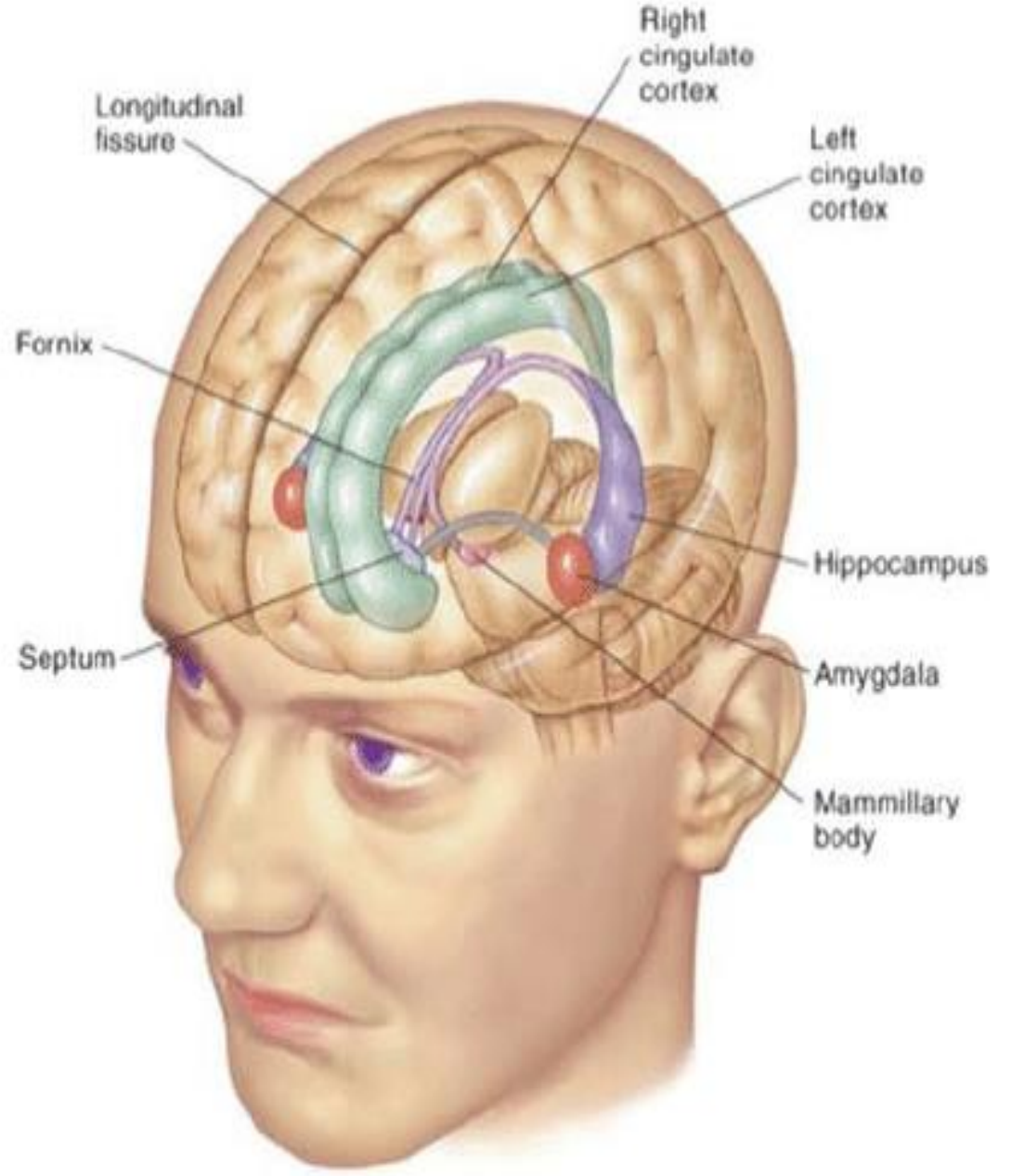
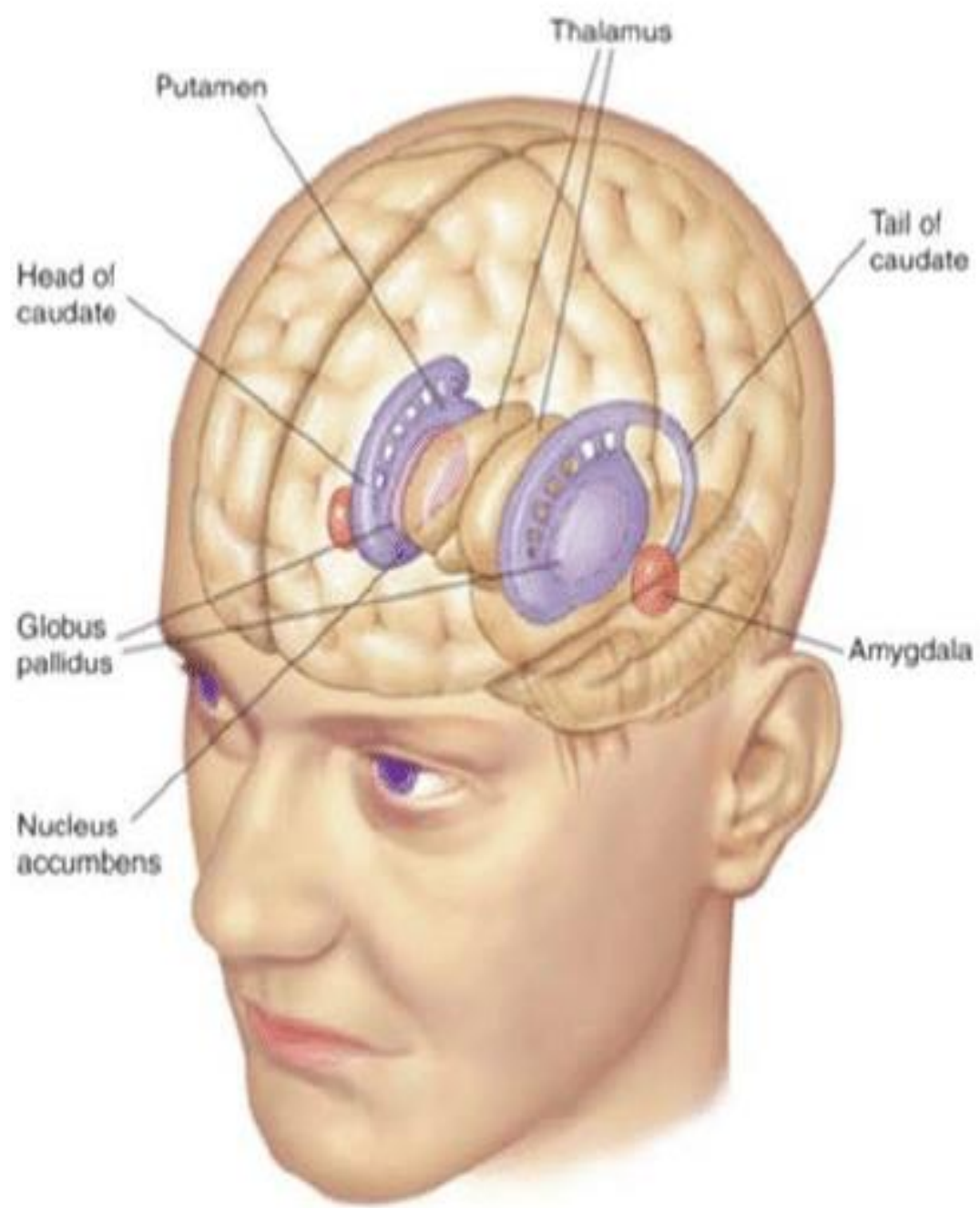
دستگاه لیمبیک

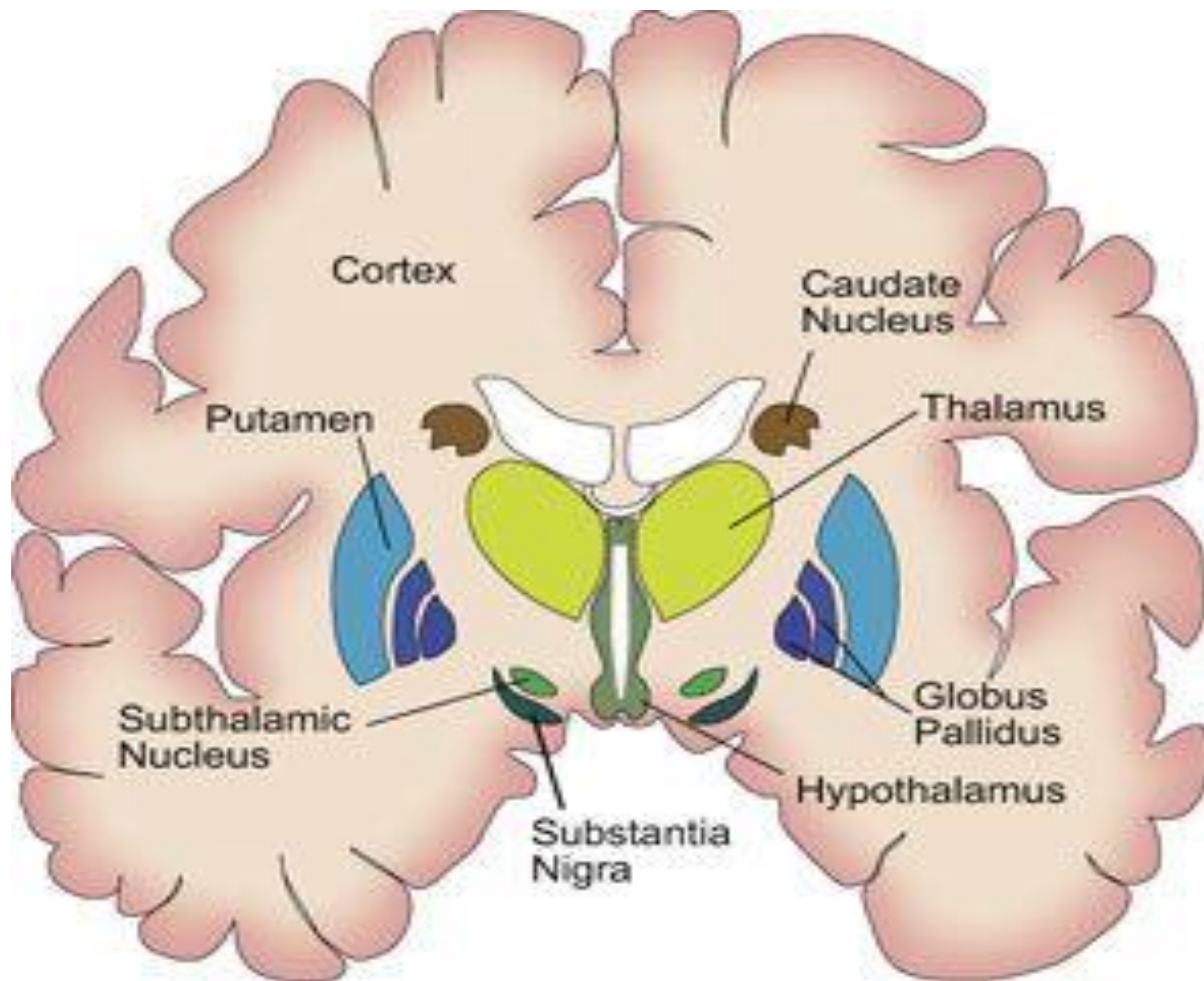
عقدہ های قاعده ای مغز

نخاع

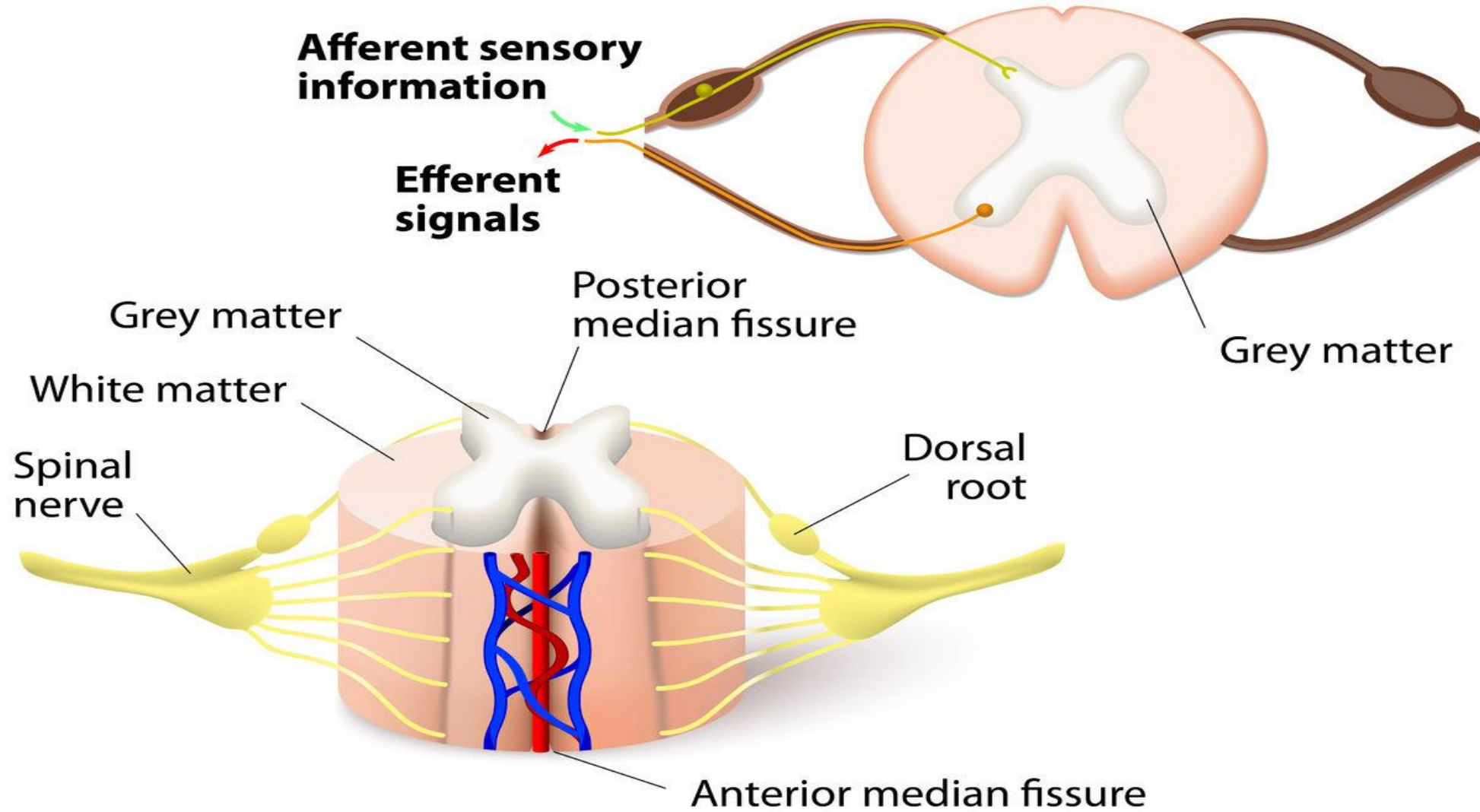
The Limbic System







SPINAL CORD

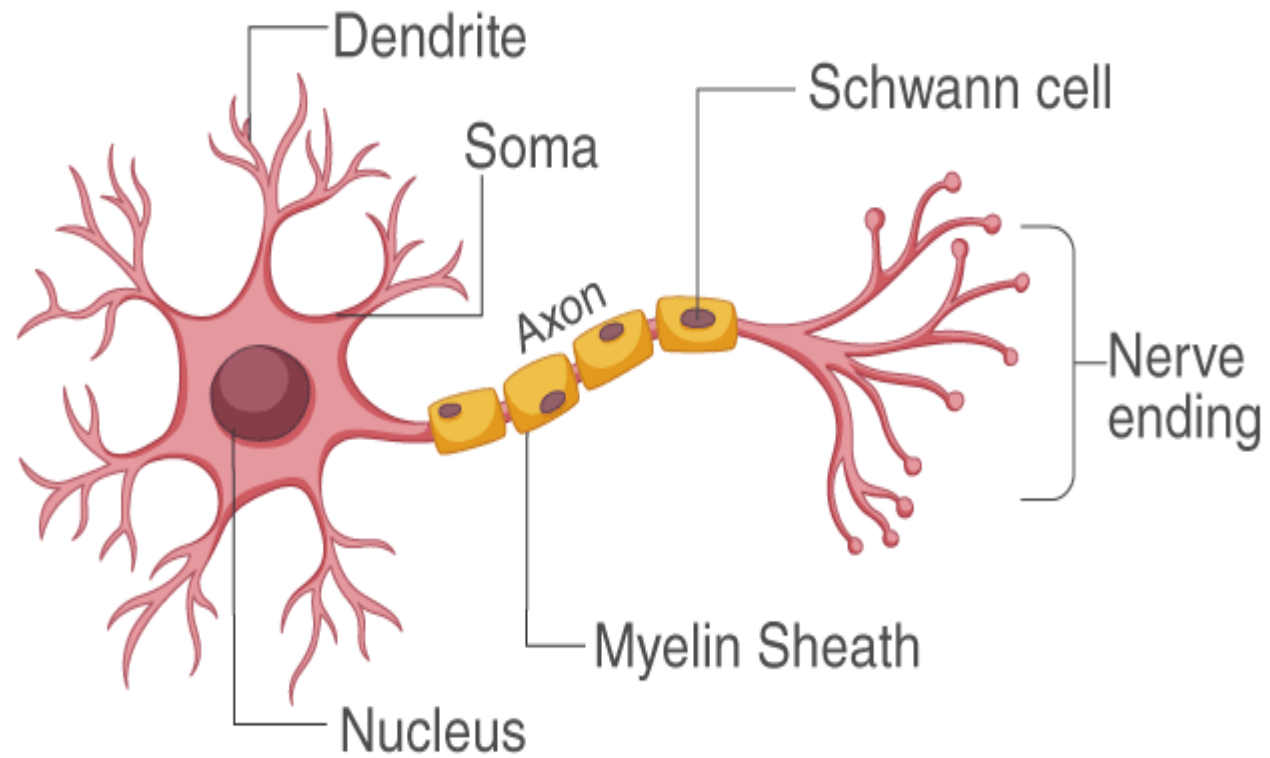


مبانی علوم اعصاب، جلسه ششم

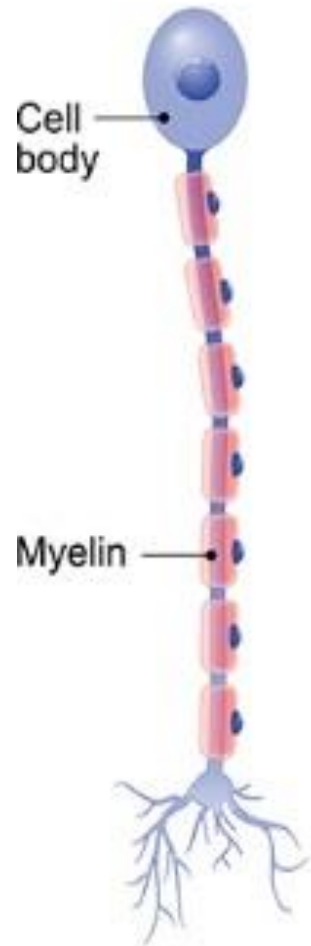
نورون

نوروگلی

STRUCTURE OF NEURON



Unipolar



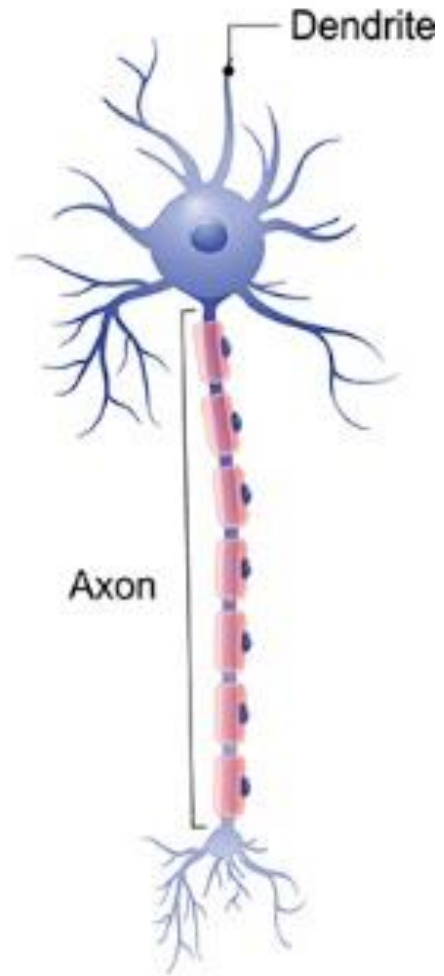
Bipolar

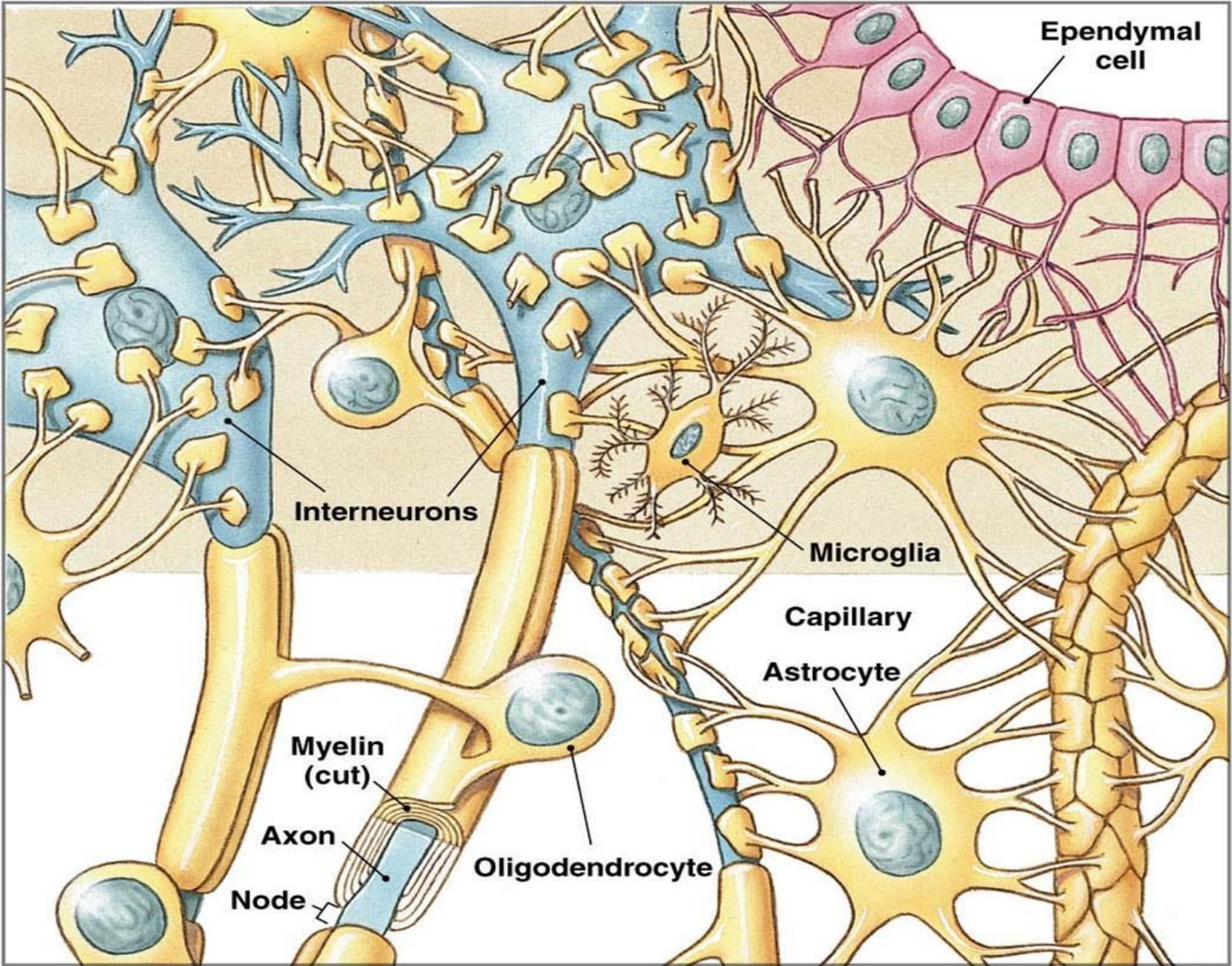


Pseudounipolar

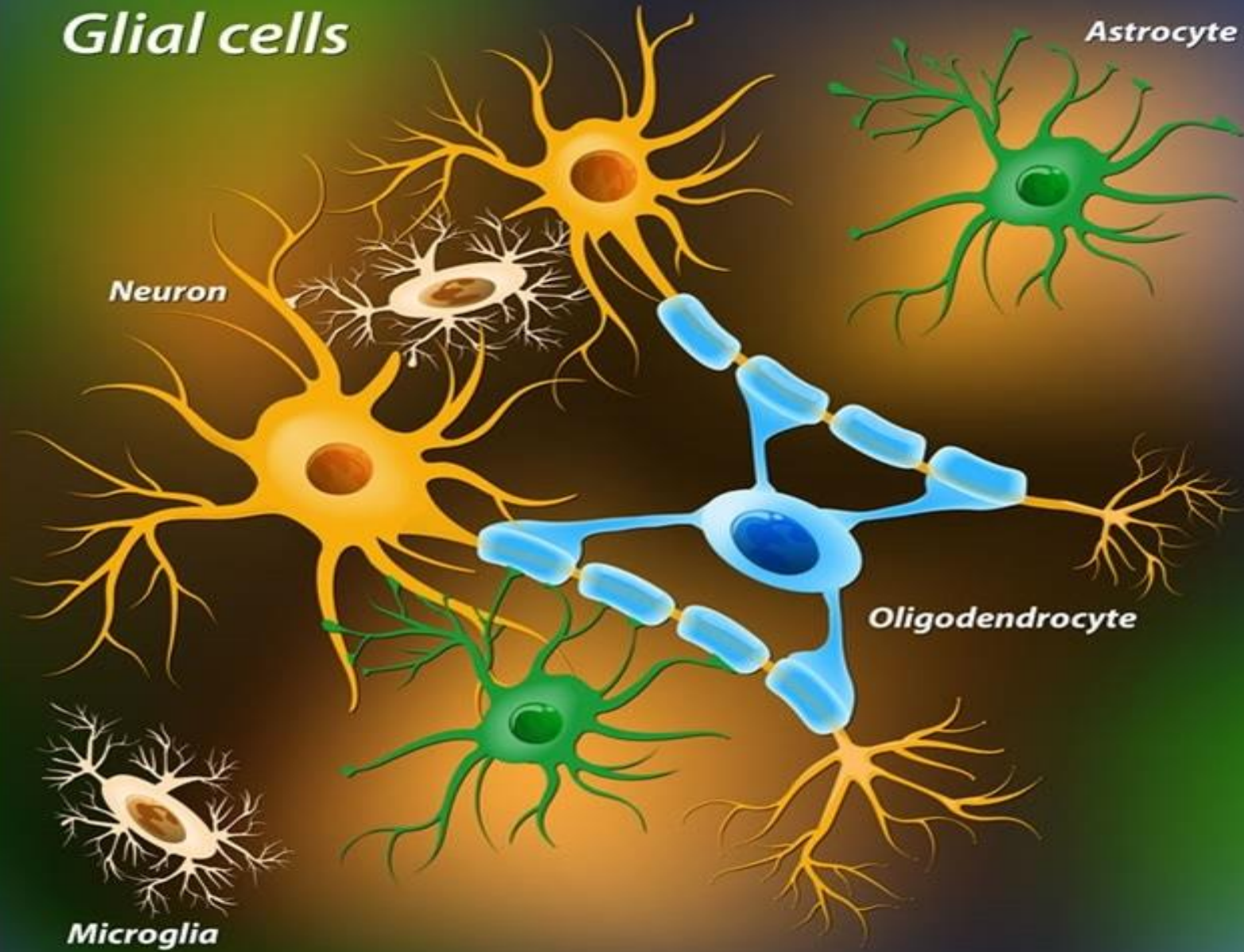


Multipolar





Glial cells



Neuron

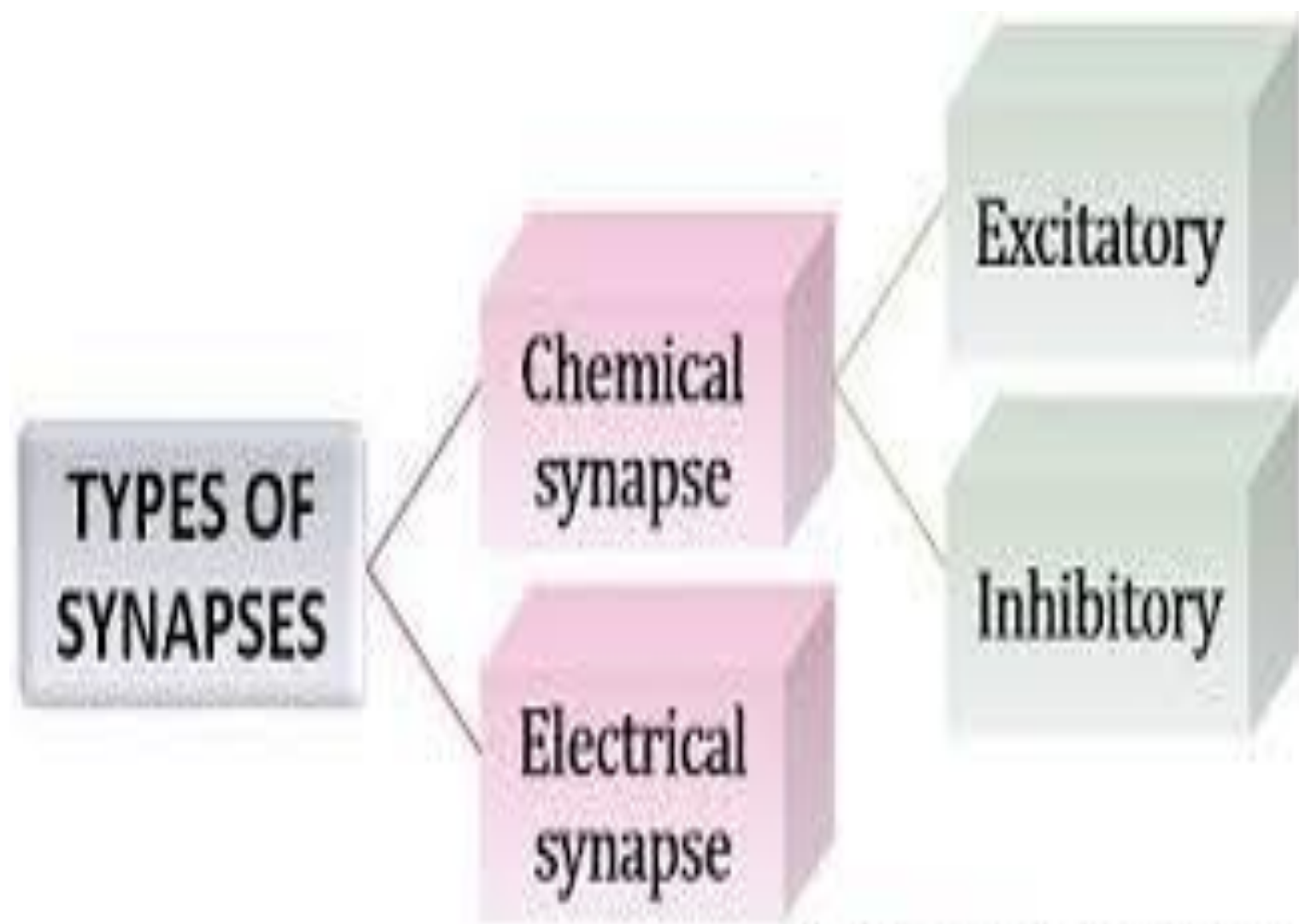
Astrocyte

Oligodendrocyte

Microglia

مبانی علوم اعصاب، جلسه هفتم

سیناپس ها و اعمال پایه ای آنها

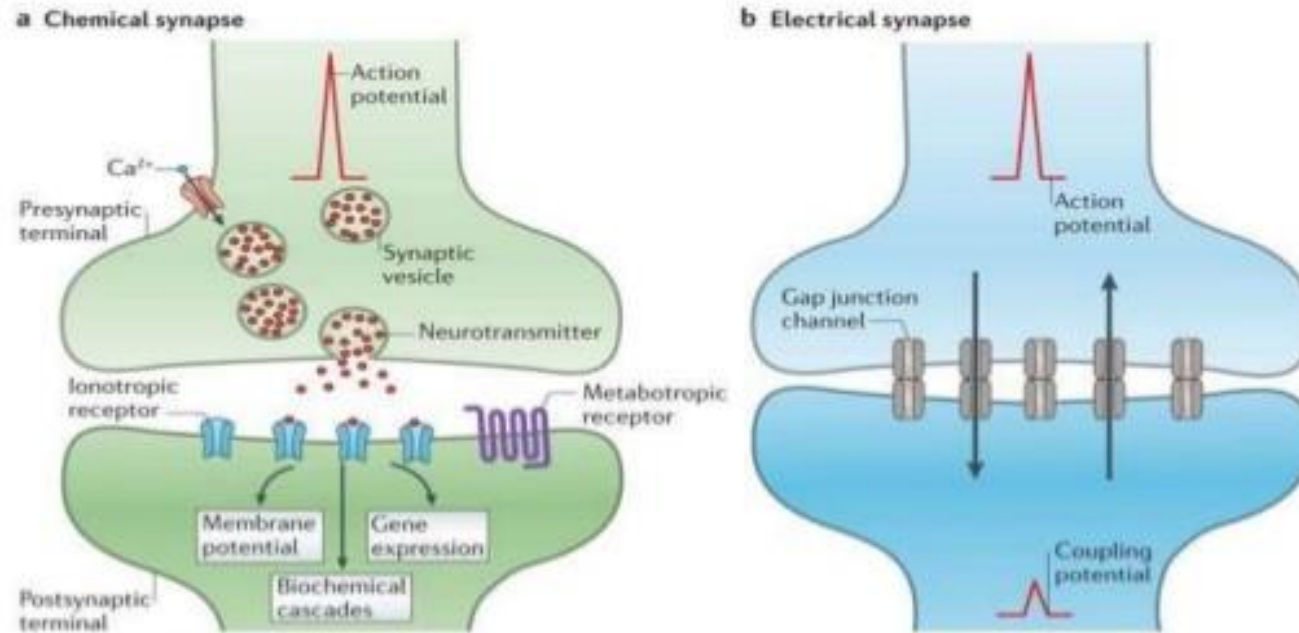


BIOLOGY READER

Synapse

- **Types of synapse**

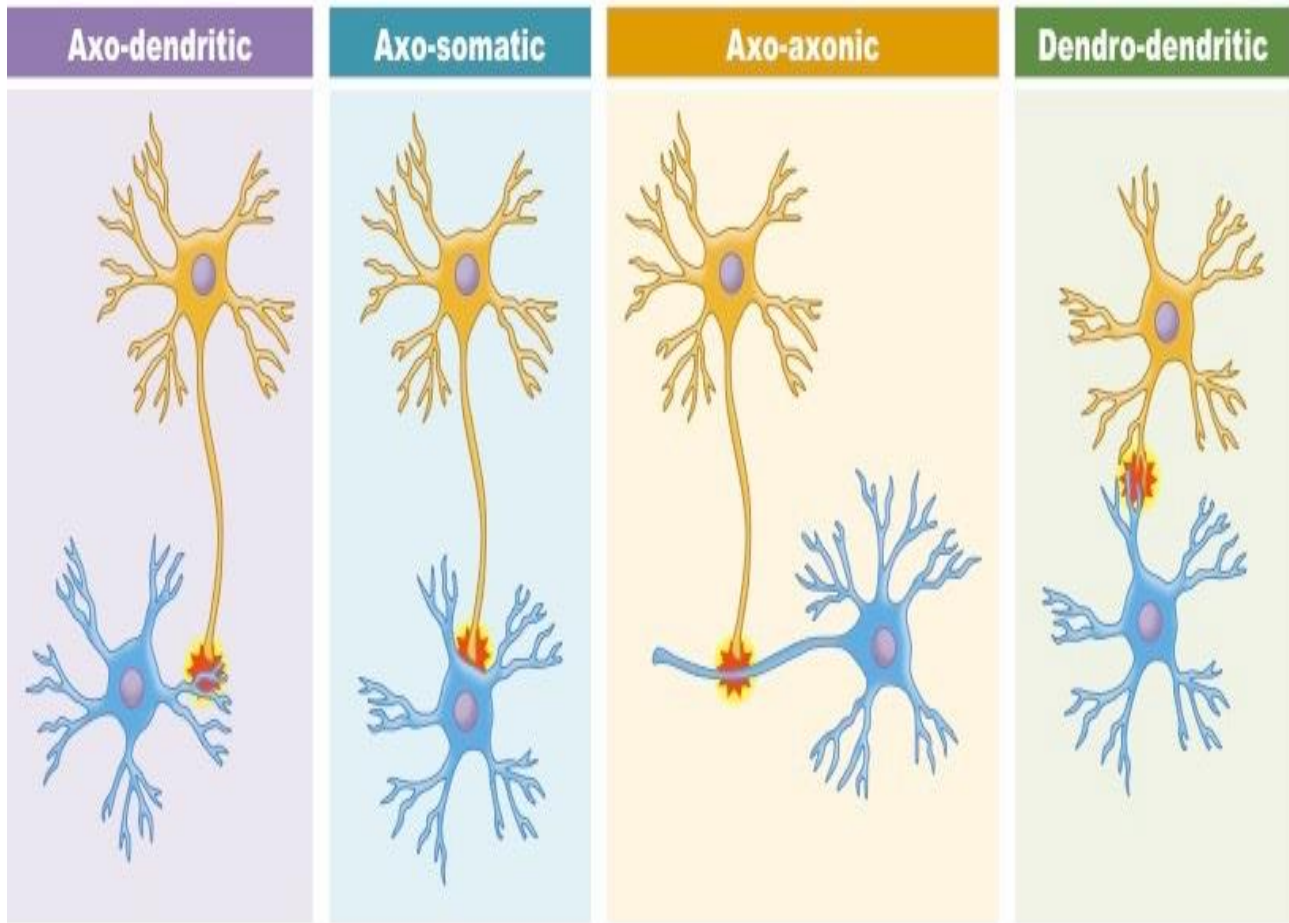
- Electrical synapse Vs Chemical synapse

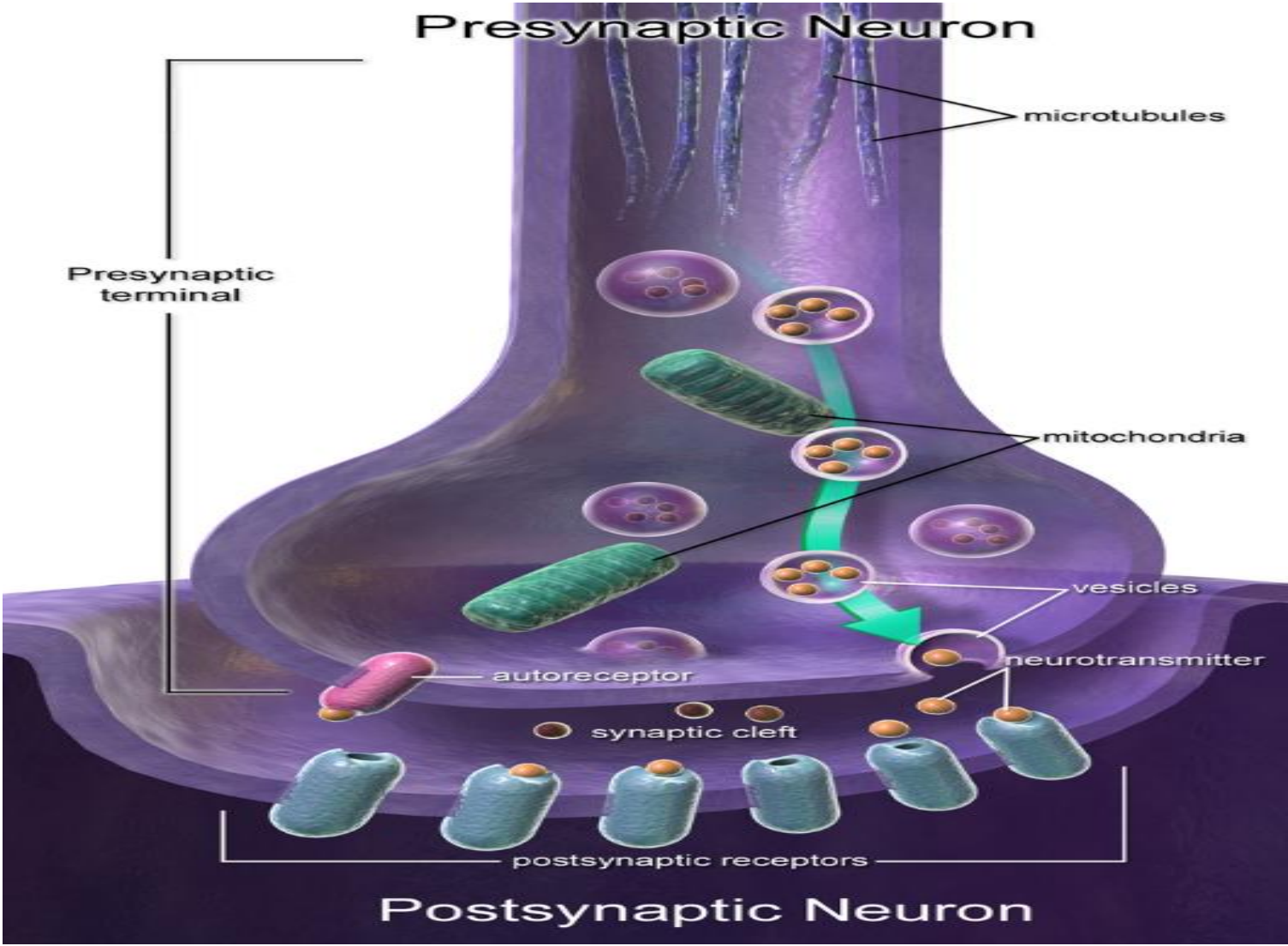


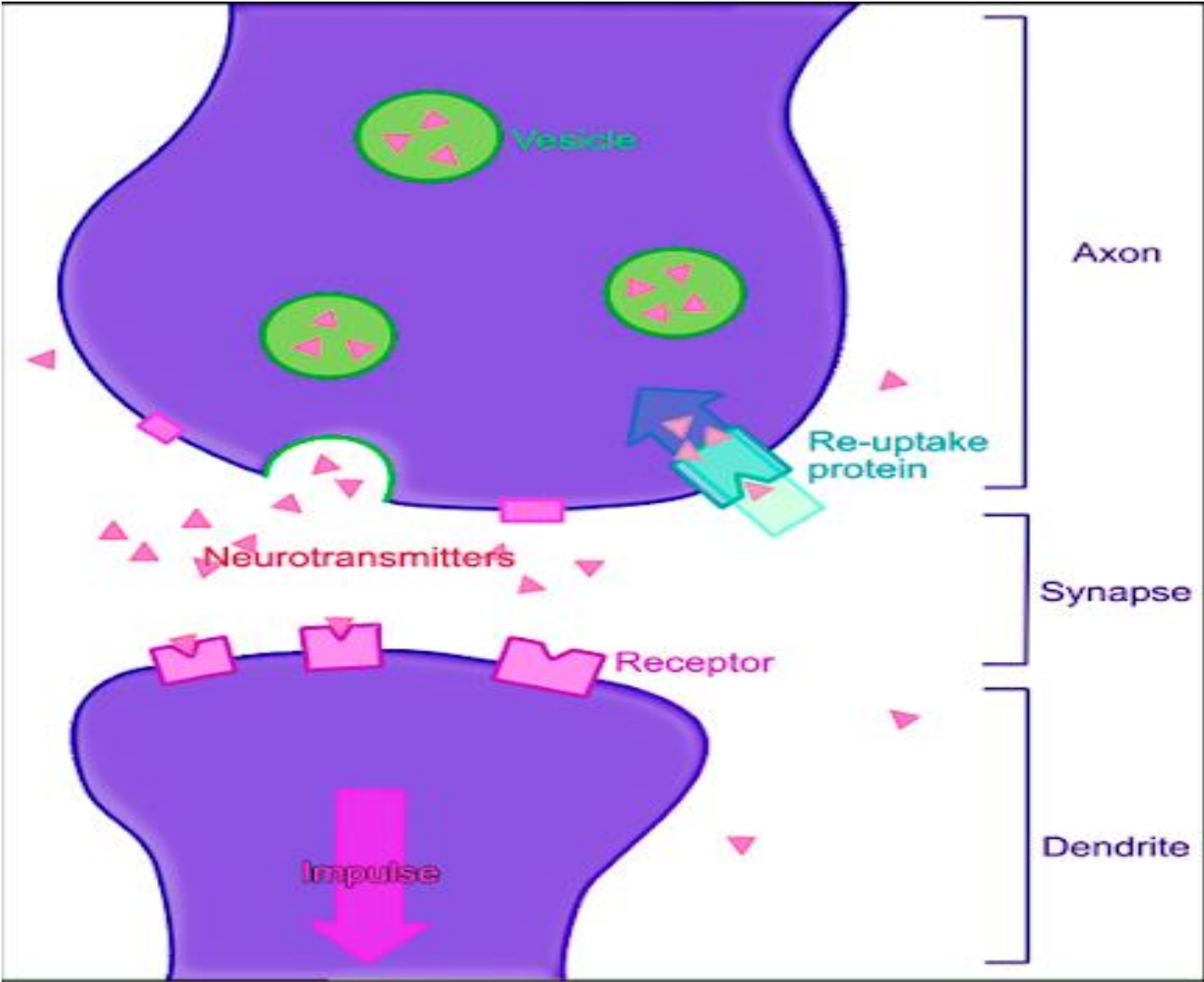
Nature Reviews | Neuroscience

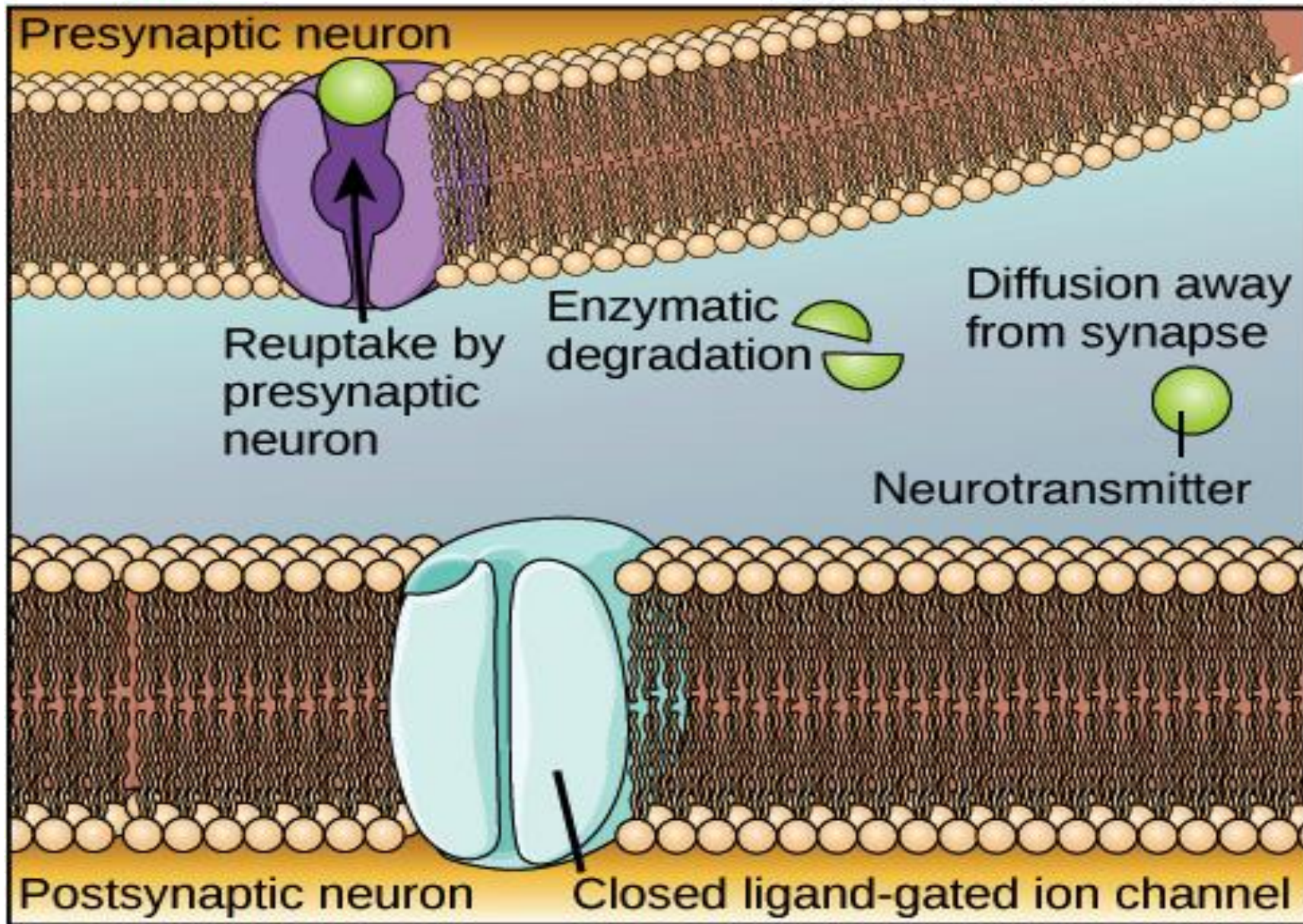
Ref: Pereda AE. Electrical synapses and their functional interactions with chemical synapses. Nature Reviews Neuroscience. 2014 ;15(4):250.

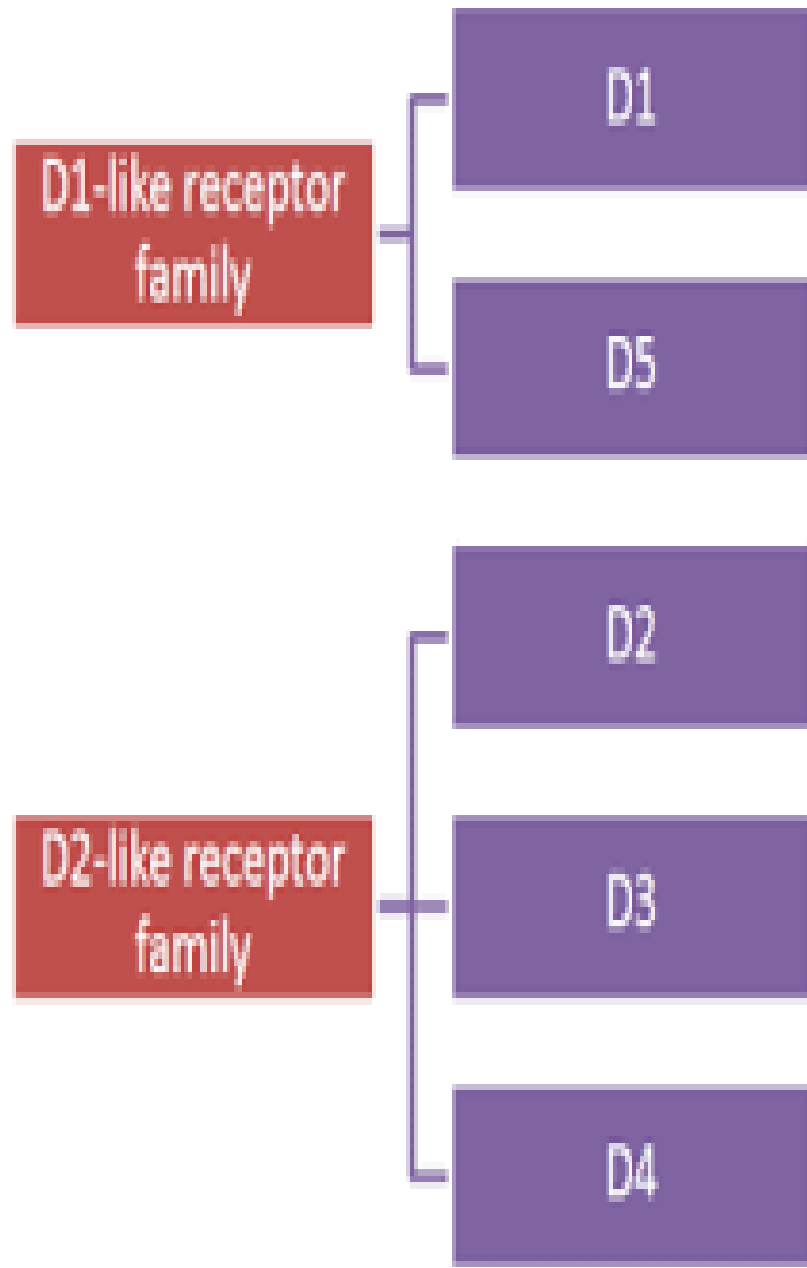












	Location	Function
	Putamen, nucleus accumbens i.e nigrostrial pathway	Inhibition causes extrapyramidal disorders
	Striatum, substantia nigra , pituitary	Control behaviour, voluntary, prolactin release
	Midbrain, nucleus accumbens & hypothalamus	
	Frontal cortex, medulla and midbrain i.e mesocortical pathway	
	Hypothalamus , hippocampus	