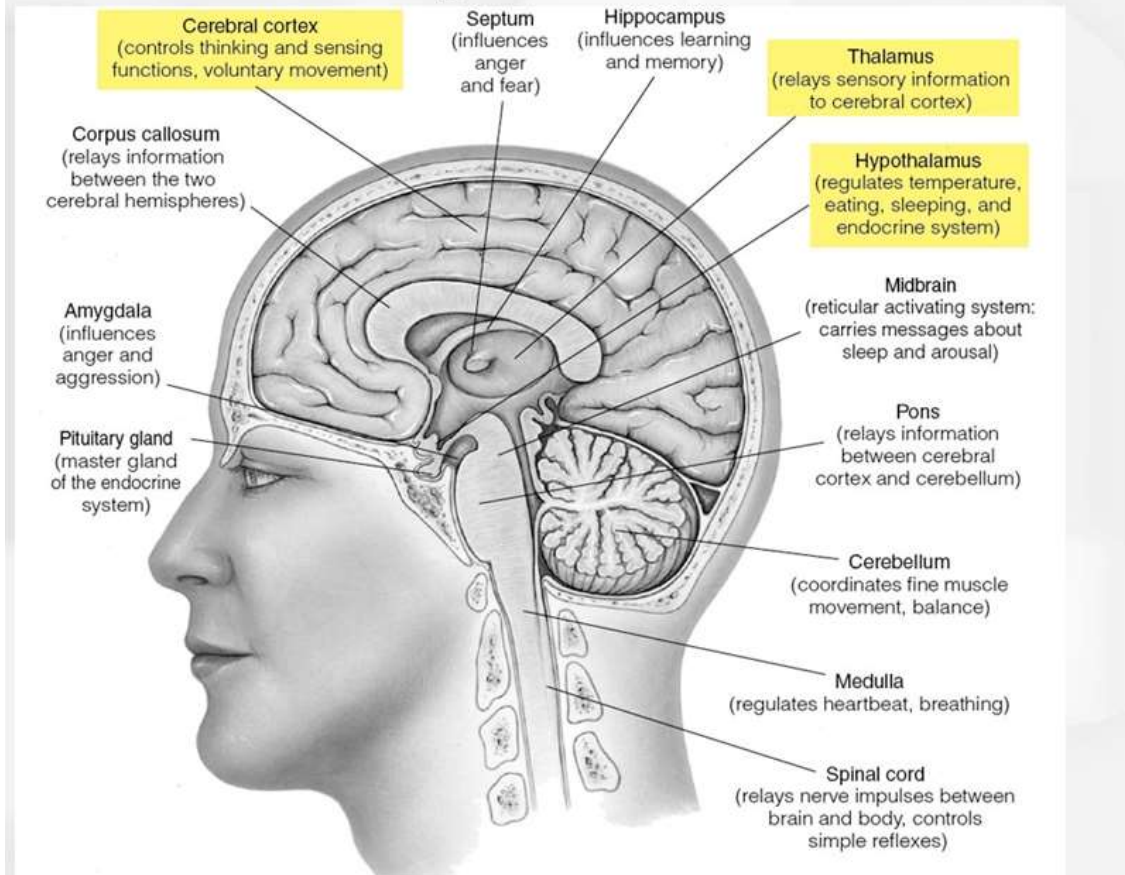


X. Relevant Normal Features

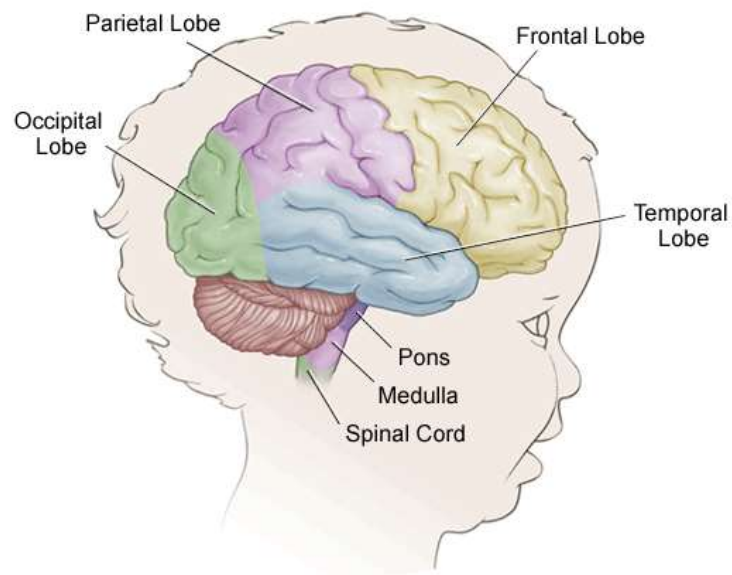
Brain

Anatomy of the Brain



BRAIN			
Weight:	1300—1500 g. (Male) 1250—1350 g. (Female)		
Measurements:			
	Sagittal diameter:	15-17 cm.	
	Vertical diameter:	12—13 cm.	
The brain: Usually removed without its external layer (the dura mater is left in the skull)			
Coverings:	1. Dura mater 2. Arachnoid mater: <ul style="list-style-type: none"> • Delicate • Transparent 3. Pia mater: <ul style="list-style-type: none"> • Thin • Delicate Vascular • Covers the brain • Dips into its clefts 		
Divisions:			
1. Cerebrum:	Largest		

	Two hemispheres:	Right Left		
		Separated by a longitudinal fissure		
	External surface:	Sulci between which are: Gyri		
2. Cerebellum:	Next in size to cerebrum			
	Two hemispheres:	Right Left		
		Connected together by: Vermis		
	Shows fissures:	<ul style="list-style-type: none"> • Deep • Narrow • Parallel 		
3. Brain-stem:	a) Mid brain b) Pons c) Medulla oblongata			

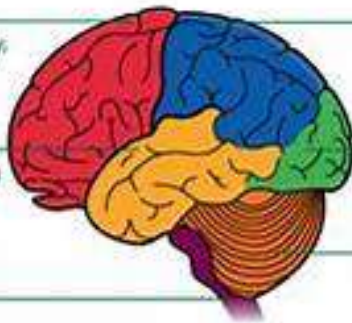


On section:				
Grey matter	nerve cells	Inside brain stem (few (nerve fibres at surface) and Mostly at surface of neuroglia) Cerebrum and Cerebellum		
White matter	<ul style="list-style-type: none"> • nerve fibres & • neuroglia 	At surface of brain-stem Inside cerebrum and Cerebellum		

Frontal lobe
(thinking, memory,
behaviour and
movement)

Temporal lobe
(hearing, learning
and feelings)

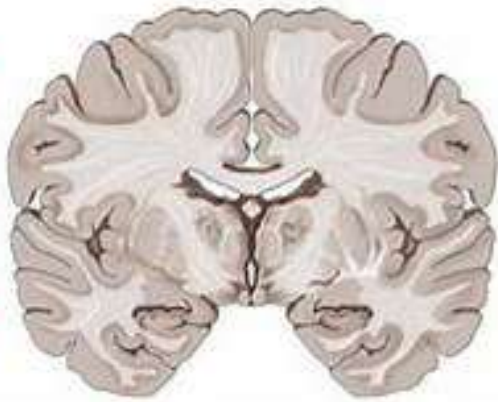
Brain stem
(breathing,
heart rate and
temperature)



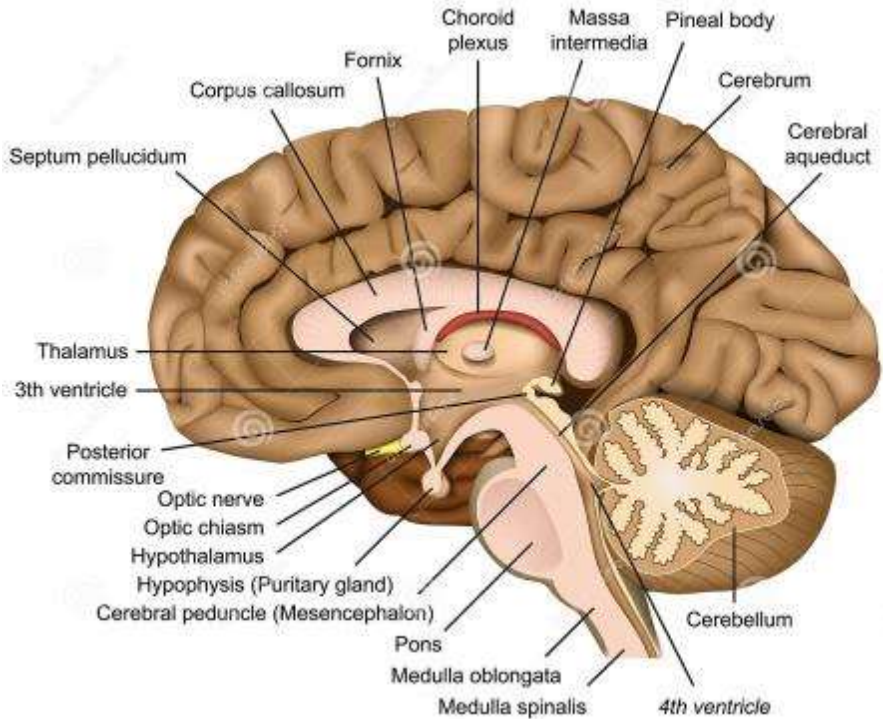
Parietal lobe
(language
and touch)

Occipital
lobe (sight)

Cerebellum
(balance and
coordination)



Lobes of Cerebrum:	<ul style="list-style-type: none"> • Frontal (largest) • Parietal • Temporal • Occipital (smallest) 		
Surfaces:	<ul style="list-style-type: none"> • Superior lateral: Convex • Medial: Flat • Inferior: Uneven 		
Poles:	<ul style="list-style-type: none"> • Frontal • Temporal • Occipital 		
Borders:	<ul style="list-style-type: none"> • Superior-medial (upper) • Infero-lateral (lower) • Superciliary • Infero-medial 		
Cavities:	Lined by ependymal Filled with C.S.F. (clear yellowish fluid)		



a) Ventricles:	Lateral:	<i>Inside cerebral hemisphere</i>	
	Third:	<i>Enclosed between lower part of cerebral hemispheres Communicates by a foramen with the lateral ventricle</i>	
	Fourth:		
b) Aqueduct:	<i>A connecting tunnel between third and fourth ventricles Traverses mid brain</i>		
c) Central canal:	<i>Between medulla oblongata and spinal cord Continuous superiorly with · fourth ventricle</i>		
Sulci:	Grooves:	Variable in:	<ul style="list-style-type: none"> • Length • Shape • Direction • Shallow (or narrow) • Short (or long)
Gyri:	Areas or strips; each of:	A cortex:	Grey matter
		A core:	White matter
Blood vessels:	Large blood vessels of brain:	<i>Lie between the arachnoid and pia mater</i>	
Hind brain:	Includes:	<ul style="list-style-type: none"> • Cerebellum • Pons • Medulla oblongata 	

