	Part of the Brain	Description/Function	Symbol/Mnemonic Device
Brainstem	Medulla	Unconscious vital processes (circulation, heart rate, breathing)	"medusa" turns to stone Doulah = midwife (brings life) "med"-itation Just "du" it (me-"du"-lla) Breathing is "dull" Me-du-llah sounds like heartbeat
	Pons	Communicates sensory messages & movement from cerebellum to cerebrum "Bridge" Eye and face movements Possible role in dreams	Pom-pons Bridge over a pond
	Reticular Formation (Reticular Activating System)	Arousal & attention Filters stimuli coming to brain	"Rise And Shine" (R.A.S.) Particular Reticular (filters stimuli) Re-"tic" ular formation (tic – sound of neural firing)
	Cerebellum	Muscle coordination & balance	Cere-"bal"-um Cere-balance Sarah-Ballerina Two "ll"s look like balance beam CereBelluM – Coordination, Balance, Movement Belle of the ball (dancing = balance & coordination) Antebellum (balance between slave & free) Ball (need coordination to catch)
	Thalamus	Directs sensory information to particular areas of brain	Thal-mail (like a post office) T-top of brainstem, S-switchboard
	Amygdala	Instinctual emotional reactions (aggression or fear) Attention to novel stimuli	Amygdala monster "Angry Amy" or Aggressive Amy Emo-gdala

	Hypothalamus	Regulates hunger, thirst, body temperature, endocrine system	Hungry "hypos" Hypo-thermometer, hypothermia Hyper-hypothalamus Hypo - typo (regulation/maintenance) Hypothala "must" Hypothala<u>m</u>us <u>Hom</u>oeostasis M=maintenance
	Pituitary Gland	Master gland – directs endocrine system	Arm "pit" Pit boss (directs casino activities)
	Hippocampus	Formation of new memories	Hippo at camp (can't forget that!) Camping – make memories "One time at hippo camp" Hippos never forget (similar to elephants)
Cerebrum	Cerebrum	Divided into two hemispheres Higher order functions	<u>C</u>ereal <u>b</u>owl Cranium game
	Left Hemisphere	Logic, language (verbal tasks), math, detail-oriented Controls right side of body	Logical-left (lefty-logic) Left-logic-language
	Right Hemisphere	Visual-spatial tasks, creativity Controls left side of body	R-tistic Right Rembrandt Right Sight
	Corpus Callosum	Thick bundle of nerve fibers that connects left & right hemispheres Communicates between two hemi's	Callo-"sum" of 2 hemispheres Corpus "Call someone" (connects) Corpse – connects living & dead??? <u>C</u>onnection <u>C</u>ord Cor"<u>p</u>lus" callo<u>sum</u> (two hemispheres together)
Cerebral Cortex	Cerebral Cortex	Wrinkled surface of brain Divided into four lobes	<u>C</u>rinkled <u>C</u>ap Cor-Texas (large surface area) Core-tex (core of higher functions)
	Frontal Lobes	Emotion regulation, speaking, judgment & reason, planning, personality	Personality is a "front" "Future" lobe Prefrontal lobotomies Frontal filter (for emotions)

	Parietal Lobes	Pain, pressure, touch sensations	Presents-parietal (receiving info) Parietal-pain-pressure-position
	Temporal Lobes	Auditory cortex (hearing)	Tempo (music/rhythm) Temple (temples on side of head)
	Occipital Lobes	Visual cortex (sight)	Eye-cipital lobe "ocular" occipital Optometrist/ophthalmologist Occipital sounds like "optical"
	Motor Cortex	Located at rear of frontal lobes Controls voluntary movements	
	Sensory Cortex	Located at front of parietal lobes Receives info for body touch & movement sensations	
Association Areas	Broca's Area	Physical production of speech (directs muscle movements) Located in left frontal lobe	Broca Obama Boca = "mouth" in Spanish
	Wernicke's Area*	Language comprehension & expression Located in left temporal lobe	"Hooked on Wernicke's" (like the "Hooked on Phonics" program)

Basal Ganglia – collection of nuclei (at base of the hemispheres) for controlling voluntary movements and establishing postures

Glial Cells – nourish, protect, and support neurons

* **Angular Gyrus** – transforms visual representations into auditory code (Wernicke's area uses this auditory code to derive meaning)
→ Damage to angular gyrus means someone can speak & understand, but cannot read aloud

***Locus Coeruleus** – role in physical reaction to panic/stress