IV. BRAIN STRUCTURE & FUNCTION

1. Four main regions of the brain:
* Cerebrum
* Diencephalon
* Brain Stem
* Cerebellum
1. Brain Regions in Detail
2. Cerebrum
	1. Largest visible area
	2. Ridges (gyri) & grooves (sulci)
	3. Split into right & left hemispheres
	4. Divided into several “lobes”
	5. Responsible for:
* Speech
* Memory
* Logical thought
* Emotions
* Voluntary movement
* Senses
	1. Outer area called “gray matter”
* Unmyelinated nerves
* Where all functions in “e” happen.
	1. Inner area called “white matter”
* Carries messages throughout cerebrum
* Corpus callosum – fibers that connect cerebral

 hemispheres.



1. Diencephalon
	1. Inside cerebrum
	2. Major structures:
* Thalamus – tells if sensations are good or bad
* Hypothalamus – regulation of body

 temperature, water balance,

 metabolism

* Epithalamus – makes cerebrospinal fluid *(stay tuned)*



1. Cerebellum
	1. Fine motor control and balance
2. Brain Stem
	1. Three regions:
* Midbrain – vision & hearing reflexes
* Pons – breathing control
* Medulla – heart rate, blood pressure,

 swallowing, vomiting



1. Cranial Nerves
2. Twelve motor nerves that emerge directly from brain.
3. Control sense organs and muscles of head, neck, viscera.



Assn: *Pleasure Me, Pleasure Me!* Article & questions