

Nervous System Study Guide

1. Central Nervous System (CNS)

a. Brain

i. Cerebrum

1. Largest part of the brain, wrinkly
2. Smell, Touch, Taste, Hearing and Vision
3. Movement, Speech, Memory
4. Looks folded and wrinkled
5. Divided into a right and left halves (hemispheres)
6. Each half has four lobes

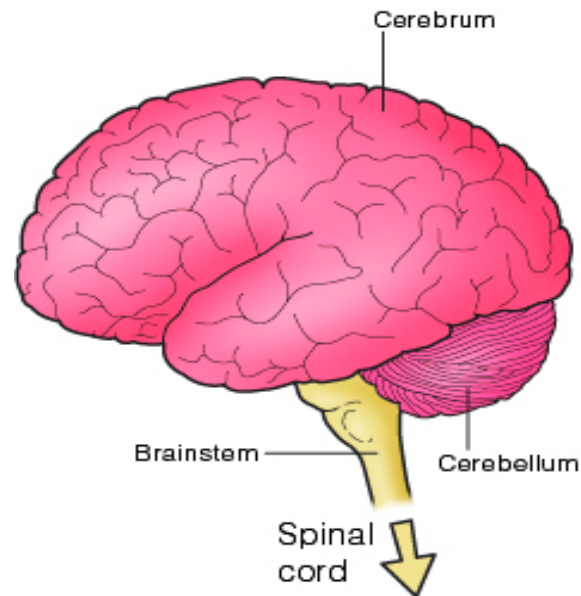
ii. Cerebellum

1. 2nd largest part, back of head
2. Coordinates muscles and maintains balance (example: balance when riding a bike)

iii. Brain Stem

1. Smallest part, underside of brain
2. Involuntary actions
 - a. Breathing, Heartbeat, Digestion

b. Spinal Cord



Lobes

a. Frontal Lobe

1. front of cerebrum: movement, reasoning and decision making, thinking, emotions, personality
2. Contains the Motor Cortex- helps with movement (example: pedal a bike)
3. Contains the Prefrontal Cortex

b. Parietal Lobe

1. top of cerebrum: touch, spatial awareness, senses
2. Contains the Sensory Cortex

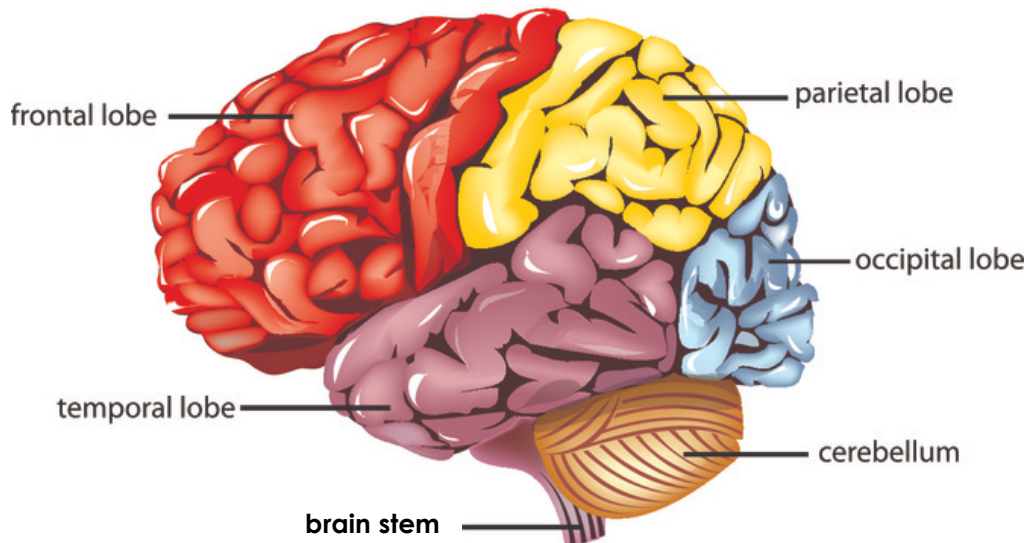
c. Temporal Lobe

1. side of cerebrum: hearing, language, memory retrieval

d. Occipital Lobe

1. back of cerebrum: vision (example: see where you are going when you are riding a bike)

Parts of the Human Brain



Reflexes: fast, involuntary responses that protect you from getting hurt (jumping from a loud noise, jerking hand away from hot pan)

The teen brain (know at least 1)

1. The teen brain needs more sleep than the adult brain. It needs 8.4 hours per night. An adult only needs 7. to 8 hours a night.
2. Dopamine not at optimal levels yet.
3. Teens process memories and emotions with amygdala. Adults process with the prefrontal cortex.

Important vocab:

- **neuron**: specialized cell in nervous system
- **central nervous system**: brain and spinal cord
- **peripheral nervous system**: all nerves in body outside of CNS
- **concussion**: bruise injury to brain