Neurosensory Unit Part 1: A&P

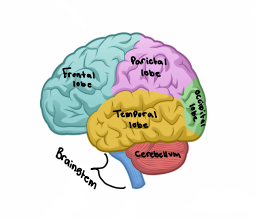
Class Preparation

A. Label the parts of the brain and identify the function of each part.

Frontal Lobe: right controls left side of body and right controls left side. Controls voluntary movement. Where memory is housed. Higher cognitive function. Broca'S area: expressive speech and formation of spoken words

Temporal lobes: auditory reception (hearing & interpreting sound) Wernicke's area: understanding & interpretations of written & spoken language

Brainstem: Control ascending & descending impulses contain reflex control medulla oblongata: primary rhythm center

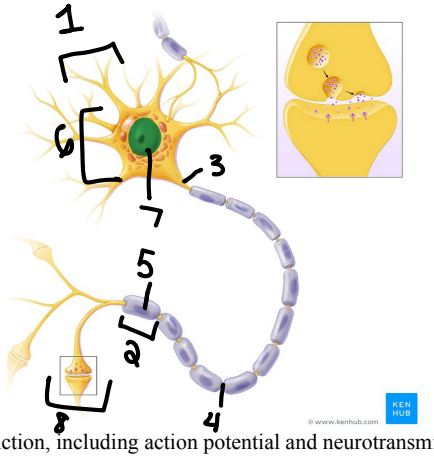


Parietal lobes: primary sensory area (interpretation). Body awareness, and spatial awareness

Occipital Lobes: controls vision and visual interpretations.

Cerebellum: coordination, fine, smooth movement, balance, stability

B. Label the parts of the neuron:



1. Dendrites
2. Myelin sheath
3. Axon terminal
4. Node of Ranvier
5. Schwann's cells
6. Cell body
7. Nucleus
8. Axon terminals

C. Describe nerve impulse conduction, including action potential and neurotransmitters.

Action Potential initiates when Na+/K+ pumps maintain resting potential until a stimulus opens Na+ channels, causing depolarization and repolarization. This triggers calcium channels at the axon terminal, releasing neurotransmitters that bind to the next neuron's receptors, allowing signals to travel through neural networks.