

Class Copy
Nervous System White Board Partner Review

Use the following pages, with your notes, packet work and partner for help: p. 435, 437, 445

1. On the brain, label the frontal, parietal, occipital and temporal lobes.
2. a) What is the difference between a gyrus and a sulcus?
b) What is the difference between white and gray matter?
3. On the side of the whiteboard, name the neuroglia that would provide myelination in the white matter of the CNS. For the neuroglia, also include the following:
 - a) What are the gaps between cells called?
 - b) Would this cell have a neurolemma? Why or why not?
 - c) *How* does myelination increase the speed of a nerve impulse?
4. On the brain, label the location where the following senses are controlled: touch, taste, vision, hearing, smell.
5. On the side of the whiteboard, write the name of the division of the nervous system that controls the special senses. Also include:
 - a) Would this division use afferent or efferent signals?
 - b) What type of neuron (multi, bi or unipolar) is commonly found in the retina?
 - c) If your sensory nerves are myelinated, what type of neuroglia would provide the myelination?
 - d) Would this cell have a neurolemma? Why or why not?
6. Label the location of the primary motor cortex on the brain.
 - a) Would this division use afferent or efferent signals?
7. On the side of the whiteboard, name the two divisions of the motor nervous system. Include the function of each major division.
8. Define a 'ventricle' in brain anatomy/physiology. On the side of your whiteboard, answer the following question: Based on the function you discovered, what type of neuroglia would be found lining the ventricle in your brain?
9. The pons and medulla oblongata are together referred to as the brain stem. Label the pons and medulla on your brain.
10. On the side of your whiteboard, answer the following: The medulla controls vital life functions such as heart rate and breathing. What division of the nervous system manages these functions?
 - a) This division is further divided into two categories. Name them, and give the functions for each.
11. Define synapse. On your whiteboard, draw a synapse between two neurons and include the following labels: *presynaptic cell, postsynaptic cell, synaptic cleft, neurotransmitter, gated ion channels, synaptic vesicle, axon terminal, dendrite*