Nervous System- Make sure you know terminology that we have talked about in the notes!

1. Describe and sketch the structure of a neuron using cell body, dendrite, axon, synaptic terminals, myelin, axon hillock, nodes of ranvier.

2. Describe the differences between the 3 functional types of neurons (sensory, motor, and association). Which is most common? Which makes central nervous system?

3. Describe the steps of an action potential. What happens during depolarization/ repolarization/ hyperpolarization in terms of ion movement? What type of transport is involved? Be able to describe and label the graph and membrane potentials. (4-5 questions)

4. What are the 4 types of glial cells in the CNS (honors) CP- Just identify what each does? What are their functions? What about the 2 in the PNS?

5. Why are nerve cells myelinated? What cells do this in the CNS /PNS? What are nodes of ranvier? What is salutatory conduction?

6. What is the role of CSF in the brain? Who makes it? Where is it located?

**7. Define the function of each region of the brain. Be able to label a brain diagram with each region we talked about.**

8. What is the difference between grey and white matter (honors)? Where is each found in the brain? Spinal Cord?

9. What are the three parts of the brainstem? What is the role of each?

10. Describe the 3 layers of the CNS meninges. Where is the CSF located?

11. Describe the steps of neurotransmitter release and what the neurotransmitter does (honors)

12.

13. Describe what the cause, who it affects, and symptoms of each disease we talked about.

14. Describe the structure of the spinal cord. Where does it stop? What is the cauda equine/ conus medularris?

15. Describe the importance of the blood brain barrier. What cells form it?

16. What is the difference between a tract and nerve?

17. Describe the regeneration of a peripheral nerve fiber that has been damaged. Which type of nerve fibers can regenerate?

18. Describe the differences between somatic and autonomic branches of the ANS. What responses does the sympathetic and parasympathetic branches cause?

19. What is the difference between the CNS, ANS, Somatic, and Peripheral nervous system?

20. Describe the 5 steps of a basic reflex loop.