Study Guide for Spinal Cord, spinal Nerves and Cranial Nerves

1. Which part of a sensory neuron is located in the dorsal root of a spinal nerve?

2. Which part of a sensory neuron is located in the dorsal root ganglion?

3. Which kind of neuron is found within the ventral root? \_\_\_\_\_\_\_\_\_\_\_Which specific part of

that neuron is located in the ventral root? \_\_\_\_\_\_\_\_\_\_\_\_

4. Neurons in the posterior white matter of the spinal cord are this type of neuron\_\_\_\_\_\_\_\_\_,

carry this kind of information\_\_\_\_\_\_\_\_\_\_\_\_\_ and are myelinated/unmyelinated?\_\_\_\_\_\_\_\_\_\_\_

5. What 4 things can you tell about the lateral corticospinal tract by its name?

a. c.

b. d.

6. Tell the difference between these 2 spinal cord tracts by completing the table below.

Name of Tract Origin Location in cord Where it ends Sensory /Motor?

anterior spinocerebellar

lateral corticospinal

7. What components make up the gray matter of the spinal cord? Where is the gray matter located within the cord? Within the brain? What components are found in the white matter? Where is the white matter located? What causes the white vs the gray color?

8. Name the 3 meninges surrounding the spinal cord. Which layer is outermost? What lies above and between each layer? What is found within these spaces?

9. Be able to VISUALLY label the various regions of the spinal cord in cross-section.

10. What is the definition of the epi, peri, and endoneurium?

11. Name the 4 branches a typical spinal nerve

12. Name the 4 different spinal plexuses. From which does the phrenic nerve originate? What does that nerve innervate? What part of the body does the Brachial Plexus control? What causes “wrist drop” From which plexus does the femoral nerve originate? The sciatic nerve? The musculocutaneous?

13. What is a dermatome? Sensations generated in the hand pass through which spinal nerves?

14. Name the 5 parts of a typical reflex arc and tell what each part does.

15. How does a somatic reflex differ from a visceral reflex?

16. what is the difference between a monosynaptic, a disynaptic and a polysynaptic reflex?

17. what is the Babinski reflex (sign)/

18. What causes shingles and what are the symptoms?

19. what causes Polio and how does it affect the nervous system?

20. which cranial nerves contain only sensory neurons? Which only motor neurons? I guess the rest are “mixed” cranial nerves.

21. From which part of the brain (be specific) does each nerve begin or end?

22. Movement of the eyeball is controlled by 3 different cranial nerves. Name each nerve and know what specific muscles it innervates.

23. Which cranial nerve is most widely distributed and related to the Autonomic Nervous system?

24. Which cranial nerve causes secretion of tears and saliva?

25. Which cranial nerve trigger chewing?

26. What important muscle action does the Hypoglossal Nerve cause?