

Bio 22 PAL Worksheet  
Spinal Cord and Nerves

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1. What are the two important functions of spinal nerves?
2. What are the 5 regions of the spinal cord?
3. How many nerves are in each region? Include the numbering that correlates with each vertebrae.
4. Define the following terms: Nerves, Tract, Ganglia, Nuclei
5. What does the cervical enlargement innervate?
6. The lumbar enlargement supplies nerves to what?
7. Which spinal nerves make up the cervical, brachial, lumbar, and sacral plexus?
8. What does the Cervical plexus innervate?
9. What does the phrenic nerve innervate? Branches from what keeps it "alive"?
10. What are the major nerves of the Brachial plexus? What does the brachial plexus innervate?

11. The Lumbar plexus is subdivided into what divisions? What is the main nerve for each division?

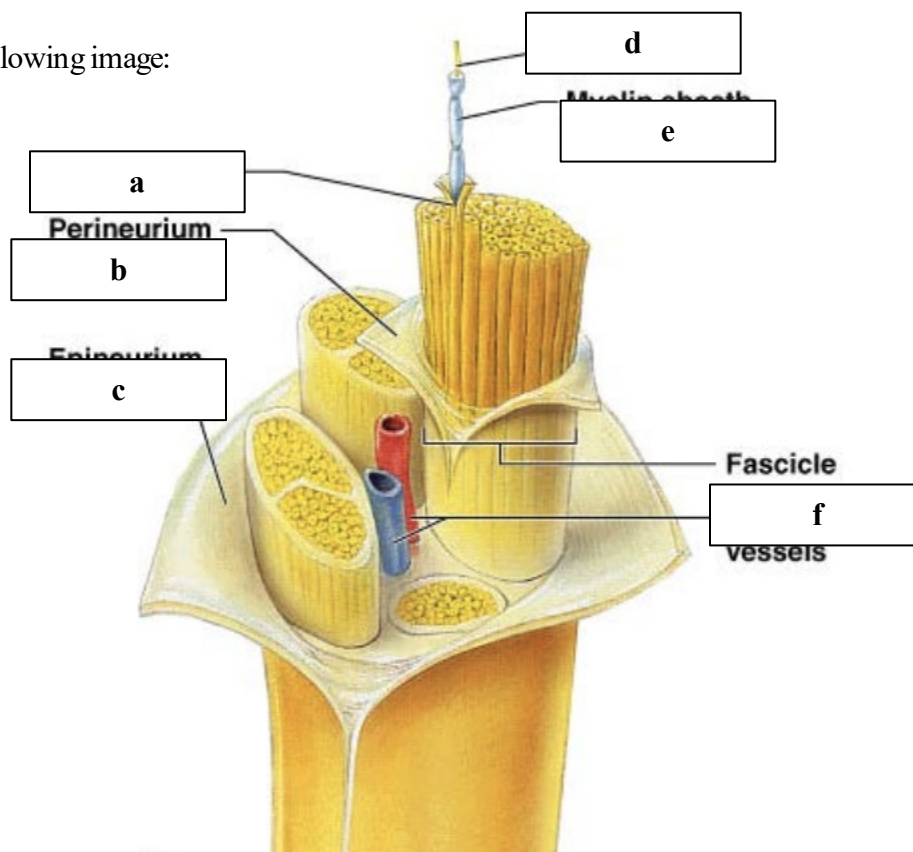
12. What does the Sacral plexus innervate?

13. What are all the Sacral nerves?

14. What are dermatomes and why are they important?

15. What do the posterior and anterior ramus innervate?

16. Label the following image:



17. Describe the shape of the gray matter of the spinal cord. Define the three “horns” found in the gray matter.

18. What are the 3 major regions of the white matter?

19. Localization/thought questions:

- a. Patient can't move right fingers: which plexus was damaged?
- b. Patient can't flex elbow: which plexus was damaged?
- c. Patient can't feel the pinprick on neck: which plexus was damaged?
- d. Patient has trouble breathing voluntarily: which plexus was damaged?
- e. Patient can't stand on toes: which plexus was damaged?
- f. Patient can't flex thigh: which plexus was damaged?

20. Label the following image:

