

Nervous System Organization

1. T or F: Nervous signals are brief and specific
2. What 3 overlapping functions exist within the nervous system
 - a. _____ - information gathered about surroundings
 - b. _____ - processing and interpretation
 - c. _____ - effector organs produce response
3. The nervous system is broken into what 2 principal parts?
4. Which functional division of the PNS includes sensory fibers that convey messages to

CNS?
5. Which functional division transmits impulses from the CNS to the effector organs?
6. What division of motor controls voluntary actions?
7. What division of the motor regulates glands, smooth and cardiac muscle?
8. What subdivision of the autonomic regulates the nervous system in times of panic?
9. What subdivision of the autonomic refers to a time of "rest and digest?"

Nervous System Histology

1. Which cells are the main cells and structural units of the nervous system?
2. What are small surrounding and supporting cells?
3. What is the most abundant glial cell within the CNS and support/brace neurons?

4. Which are small cells that are spiky and defend neurons of the CNS?
5. Which CNS glial cell job is to line cavities and form barriers?
6. Which CNS cells form myelin sheaths?
7. Which cells surround neurons in the PNS and work similarly with astrocytes?
8. What cells form myelin sheaths in the PNS?
9. T or F: Most neurons are amitotic.
10. What is the biosynthetic center of a neuron?
11. What region of the neuron is the dendrite found?
12. What region of the neuron is the axon found?
13. Dendrites produce _____
14. Axons produce _____
15. T or F: Graded potentials vary in strength.
16. What is the distal end of an axon known as?
17. What part of the axon is attached to the soma?
18. T or F: Axons can inhibit or excite other cells with impulses.
19. What is the function of a myelin sheath?
20. Where can you find a node of Ranvier?

21. What is the special name of the plasma membrane of an axon?

22. What are the 3 types of structural neurons?

a. _____ - most common in CNS and has 3 or more processes

b. _____ - rare and only has 1 dendrite and 1 axon

c. _____ - 1 t-like process (2 axons)

23. What are the 3 functional types of neurons?

a. _____ - transmits from receptors to the CNS

b. _____ - transmits from the CNS to effector organ

c. _____ - most abundant and shuttle signals through CNS pathways

24. Name the tissue coverings of a nerve from farthest out to the farthest in.

25. Nerves are classified by direction in which they transmit signals. What are they?

a. _____ - to the CNS from receptors

b. _____ - to the effector organs from CNS

c. _____ - most abundance, can send signals both ways