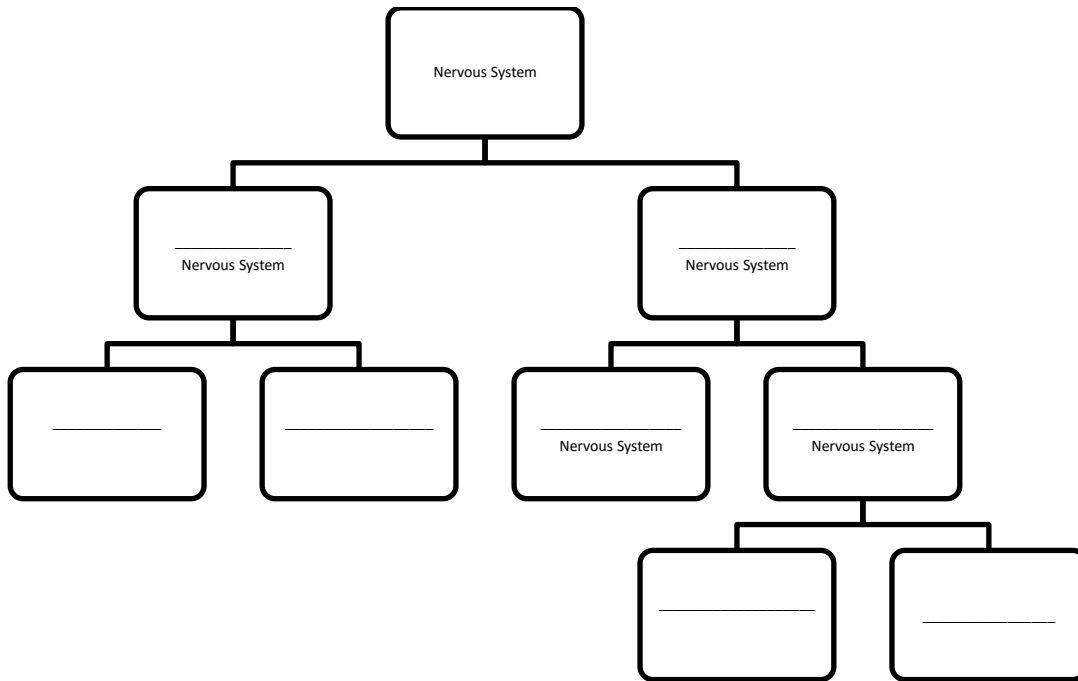


Nervous System Worksheet

1. Fill in the following flowchart:

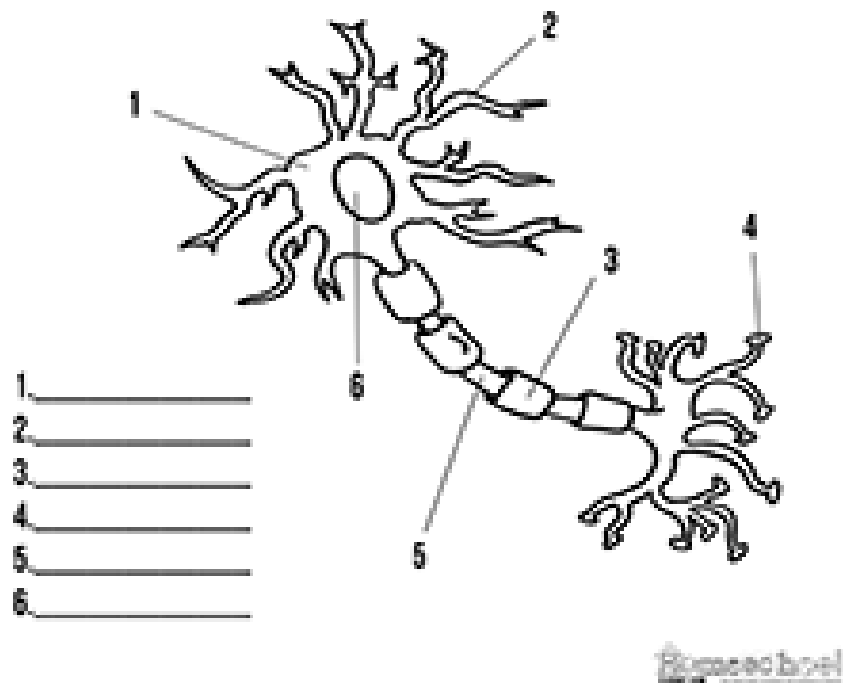


2. The _____ is an extension of the brain. It runs from the base of the brain down the center of the back and is protected by a column of bones.
3. _____ are produced without the help of the brain. It is activated when you touch a hot iron, for example.
4. The _____ Nervous System handles input and _____.
5. What is biofeedback?

6. The _____ system kicks the body into gear while the _____ system slows the body and enables conservation of energy.
7. The communication specialists of the brain are called _____.

8. In the PNS fibers of individual _____ are collected in bundles called _____.
9. The PNS has how many pairs of nerves? _____.
10. PNS nerve pairs are distributed along the body. Describe their distribution.

11. Label the following structure:



12. The Myelin Sheath serves as an _____ that increases _____.
13. The Myelin Sheath is formed by _____ cells.
14. The gaps that interrupt the Myelin Sheath are called _____ of _____.
15. An example of a demyelinating disease is _____.
16. Neurons communicate through an _____ process.
17. Define neurogenesis: _____

18. Children cannot be toilet trained before age 2 to 3 due to the inability to control bladder and bowel functions. Explain this fact in relation to one structure of the neuron.

19. Glial Cells provide the following functions:

- i. _____
- ii. _____
- iii. _____
- iv. _____

20. Describe one suggested role of glial cells using Einstein as an example.

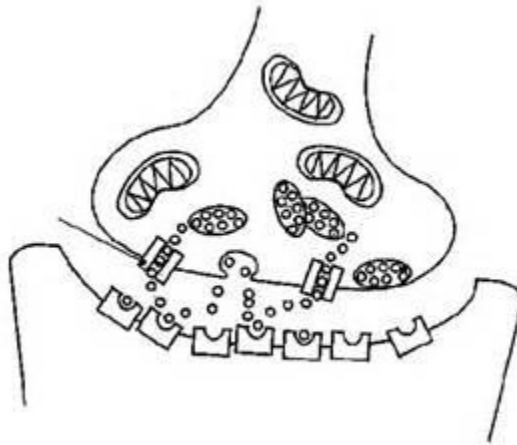
21. The gap between two neurons is called the _____.

22. What is pruning?

23. When neurons are inactive they have a type of potential. This is called _____
or _____.

24. What is brain plasticity?

25. Describe the process by which neurons communicate. Use the following diagram to help you.



26. Neurotransmitters can be found in the _____, _____,
_____, and certain _____.

27. Hormones are a type of _____ messengers and are produced in the
_____ glands.

28. Below are some common neurotransmitters. State some functions of each.

Neurotransmitter	Function
Serotonin	
Dopamine	
Acetylcholine	
Norepinephrine	
Gamma-Aminobutyric Acid (GABBA)'	
Glutamate	

29. Dan was being chased by a wild animal. He ran through the bush and was cut by thorns while he was running. However, Dan didn't feel the cuts or realize he was cut until he got to safety. Explain why Dan may not have felt the cuts.

30. The following hormones have important implications for our bodies. For each one state what organ produces the hormone and give its function. Name the 3 main sex hormones.

Hormone	Produced by:	Function
Melatonin		
Oxytocin		
Adrenal Hormones		
Sex Hormones: 1. _____ 2. _____ 3		