

Topic: Nervous Systems Introductory Worksheet

Summary: Students will answer introductory questions on the central & peripheral nervous systems.

Goals & Objectives: Students will be able to list the parts of the central nervous system. Students will be able to describe the basics on how the central nervous system functions. Students will be able to list and determine the function subdivisions of the peripheral nervous system.

Standards: CA Biology *9b*. *Students know* how the nervous system mediates communication between different parts of the body and the body's interactions with the environment.

Time Length: 30 minutes

Prerequisite Knowledge: Students have been introduced to the structure of the brain.

Materials:

- Photocopied handouts
- Biology textbook

Accommodations: Students with an IEP can take the handout home if they need extra time, work with a partner, and/or answer questions 1-4, 8-9, 12-15, 19-20, 24-30.

Evaluation:

Each question is worth 1/2 point, for a total of 15 points.

Nervous System Worksheet

1. What are the functions of the central nervous system? _____

2. CNS is an abbreviation for. _____
3. PNS is an abbreviation for. _____
4. What are the two parts of the CNS? _____
5. What is the name of the fluid that lets the brain take in nutrients and remove wastes with blood? _____
6. What is the largest part of the brain? _____
7. What increases the surface area of this part of the brain? _____
8. If someone had a stroke and couldn't use the muscles on the right side of the face, which hemisphere of the brain had the stroke? _____
9. What are the four main lobes of the cerebral cortex? _____

10. What connects the two hemispheres of the brain? _____
11. What are two main parts of the diencephalon? _____
12. What part of the brain regulates balance, coordinates and smoothes movements? _____
13. What part of the brain receives sensory info and relays it to the cerebral cortex? _____
14. What controls recognition and analysis of body temperature? _____
15. What could happen if the hypothalamus stopped working? Explain your answer. _____

16. Why is the hypothalamus important to the endocrine system? _____

17. What are the three parts of the lower brain stem? _____

18. Give four important functions that are controlled by the lower brain stem? _____

19. What connects the brain to the peripheral nervous system? _____

20. Certain kinds of information are processed in the spinal cord. Give one example. _____

21. Why would it be good for certain information to be processed directly in the spinal cord?

22. Why does paralysis occur when a person gets a spinal cord injury? _____

23. What are the two divisions of the PNS? _____

24. What does the somatic nervous system control? _____

25. What neurotransmitter controls the somatic nervous system and how does it work?

26. The autonomic nervous system (ANS) is composed of two subdivisions called:

27. Which ANS subdivision is involved when you are startled and panicking? _____

28. Which ANS subdivision is involved when you are eating potato chips on a couch?

29. The neurotransmitter acetylcholine performs what two functions? _____

30. Which PNS system controls skeletal muscles? _____