

Section 35–3 Divisions of the Nervous System (pages 901–905)

This section describes the major divisions of the nervous system and explains their functions.

Introduction (page 901)

1. What is the function of the central nervous system? _____

The Central Nervous System (page 901)

2. The central nervous system consists of the _____ and the _____.
3. Is the following sentence true or false? Three layers of connective tissue known as meninges protect the brain and spinal cord. _____
4. The brain and spinal cord are bathed and protected by _____.

The Brain (pages 902–903)

Match the part of the brain with its function.

Part of Brain	Function
_____ 5. Cerebrum	a. Coordinates and balances the actions of the muscles
_____ 6. Cerebellum	b. Regulates the flow of information between the brain and the rest of the body
_____ 7. Brain stem	c. Controls voluntary activities of the body
_____ 8. Thalamus	d. Controls hunger, thirst, fatigue, anger, and body temperature
_____ 9. Hypothalamus	e. Receives and relays messages from the sense organs

10. The two hemispheres of the brain are connected by a band of tissue called the _____.
11. Identify the four lobes of the brain.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
12. Is the following sentence true or false? The left hemisphere of the cerebrum controls the body's left side. _____
13. Is the following sentence true or false? The outer layer of the cerebrum is called the cerebral cortex. _____
14. What is gray matter, and where is it found? _____

Name _____ Class _____ Date _____

15. The two regions of the brain stem are the _____ and the _____.

The Spinal Cord (page 903)

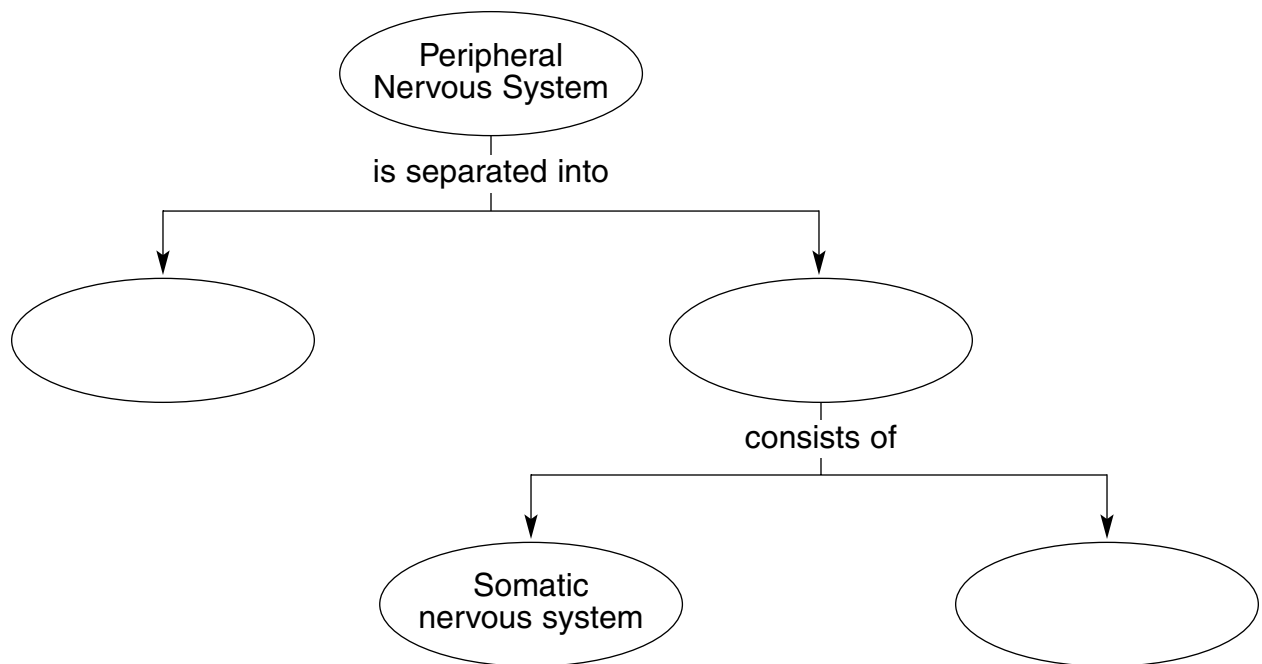
16. What is the advantage of a reflex? _____

The Peripheral Nervous System (pages 903–904)

17. Circle the letter of each choice that is part of the peripheral nervous system.

- | | |
|-------------------|----------------|
| a. cranial nerves | c. ganglia |
| b. spinal nerves | d. spinal cord |

18. Complete the concept map.



19. Circle the letter of each activity that is controlled by the somatic nervous system.

- | | |
|-------------------------|--------------------------------|
| a. Beating of the heart | c. Wiggling the toes |
| b. Lifting a finger | d. Pulling foot away from tack |

20. What does the autonomic nervous system regulate? _____

21. Why is it important to have two systems that control the same organs?

