

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

Key Concepts

- What are the functions of the central nervous system?
- What are the functions of the two divisions of the peripheral nervous system?

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? _____

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

The Spinal Cord (page 903)

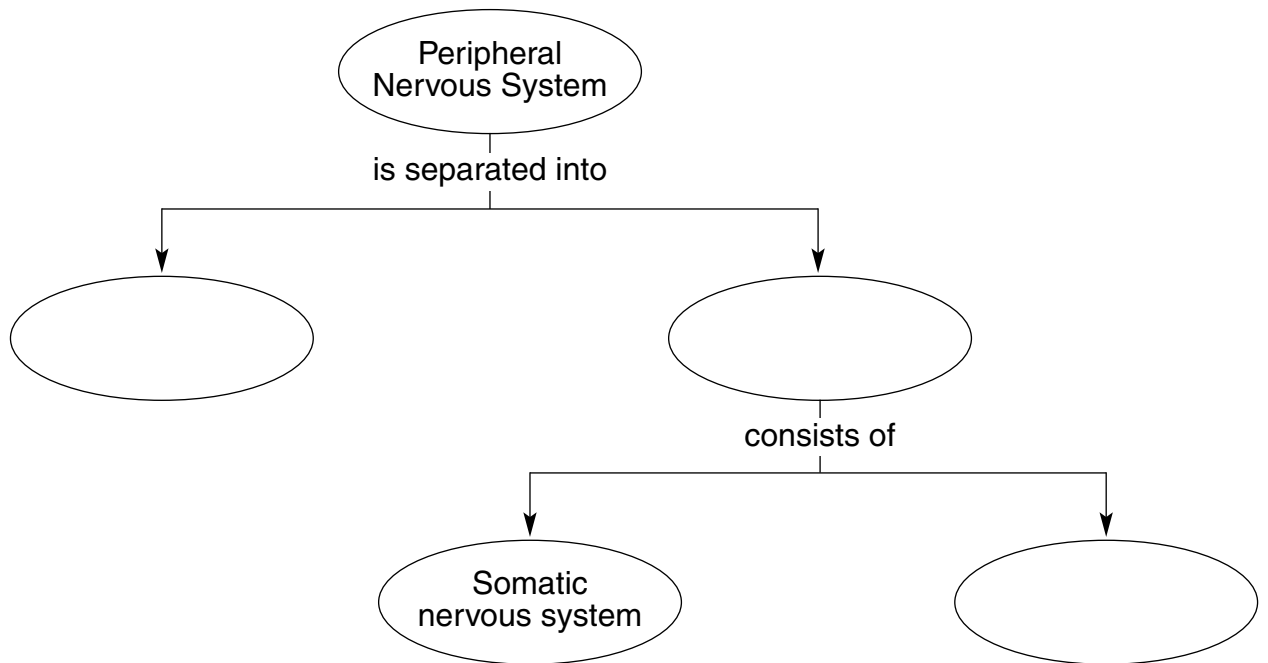
16. What is the advantage of a reflex? _____

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
- b. spinal nerves
- c. ganglia
- 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
- b. Lifting a finger
- c. Wiggling the toes
- 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?

