

Directed Reading B

Section: The Nervous System TWO SYSTEMS WITHIN A SYSTEM

Circle the letter of the best answer for each question.

1. What does the nervous system do?
 - a. pump blood
 - b. gather and interpret information
 - c. digest food
 - d. eliminate waste

Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

central	information	nerves
peripheral	central command post	

2. The nervous system is the body's _____.
3. The nervous system gathers and interprets _____.
4. Your brain and spinal cord are the _____ nervous system.
5. The _____ nervous system does NOT include the brain and spinal cord.
6. The peripheral nervous system uses specialized structures called _____ to carry information.

Directed Reading B *continued*

THE PERIPHERAL NERVOUS SYSTEM

Circle the letter of the best answer for each question.

7. What are special cells in your body that transfer messages called?
- a. impulses
 - b. homeostasis
 - c. neurons
 - d. cell bodies
8. What are fast-moving electrical messages that travel along nerve cells called?
- a. impulses
 - b. dendrites
 - c. axons
 - d. cell bodies

Neuron Structure

Read the description. Then, draw a line from the dot next to each description to the matching word.

- | | | |
|---------------------------------------------|---|--------------|
| 9. allows the neuron to receive information | ● | a. cell body |
| 10. carry impulses from the cell body | ● | b. dendrite |
| 11. has a nucleus and cell organelles | ● | c. axon |

Information Collection

Circle the letter of the best answer for each question.

12. Which neurons gather information about what is happening in your body?
- a. motor neurons
 - b. sensory neurons
 - c. receptors
 - d. light

Directed Reading B *continued*

Circle the letter of the best answer for each question.

13. What are the specialized nerve endings at the end of the sensory neurons?
- a. motor neurons
 - b. sensory neurons
 - c. receptors
 - d. light

Delivering Orders

14. What neurons send impulses from the brain and spinal cord?
- a. motor neurons
 - b. sensory neurons
 - c. receptors
 - d. light

NERVES

15. What connects the central nervous system to the rest of the body?
- a. axons
 - b. nerves
 - c. blood vessels
 - d. connective tissue
16. Where are all of the nerves in your body?
- a. in your head
 - b. in your spine
 - c. in your muscles
 - d. everywhere in your body
17. Which of the following are a part of nerves?
- a. skeletal muscles
 - b. skin cells
 - c. axons
 - d. bones

Directed Reading B *continued*

SOMATIC AND AUTONOMIC NERVOUS SYSTEMS

Somatic Nervous System

Read the words in the box. Read the sentences. **Fill in each blank with the word or phrase that best completes the sentence.**

voluntary	somatic
autonomic	homeostasis

18. Most of the _____ nervous system is under your conscious control.
19. The somatic nervous system controls _____ movements, such as smiling.
20. Digestion and heart rate are functions controlled by the _____ nervous system.
21. The sympathetic and parasympathetic nervous systems work together for _____.

THE CENTRAL NERVOUS SYSTEM

The Control Center

voluntary	involuntary	brain
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22. The main control center of the central nervous system is the _____.
23. Things the brain controls that happen without thinking are called _____.
24. When you move your arm, the action is _____.

Directed Reading B *continued*

The Cerebrum

Circle the letter of the best answer for the question.

25. What is the largest part of your brain?
- a. right hemisphere
 - b. left hemisphere
 - c. cerebrum
 - d. medulla

Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

hemisphere	cerebrum
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26. You think and store memories in the _____.
27. Your right hand is controlled by the left _____ of the cerebrum.

The Cerebellum

Circle the letter of the best answer for each question.

28. What part of your brain helps you keep your balance?
- a. cerebrum
 - b. hemisphere
 - c. cerebellum
 - d. medulla

Directed Reading B *continued*

The Medulla

Circle the letter of the best answer for each question.

29. What is one involuntary process the medulla controls?
- a. balance
 - b. talking
 - c. memory
 - d. heart rate

THE SPINAL CORD

30. What are the bones that protect your spinal cord called?
- a. neurons
 - b. homeostasis
 - c. vertices
 - d. vertebrae

Spinal Cord Injury

31. Which of the following could be affected by a spinal cord injury?
- a. sense of smell
 - b. sight
 - c. sense of touch
 - d. hearing