MAIN IDEA: The CNS processes information.

3. What is the role of the cerebrum?

_____

4. What are the three main structures of the brain?

_____

MAIN IDEA: The PNS links the CNS to the muscles and other organs.

5. Use the chart to take notes on the peripheral nervous system.

Division of the PNS	Voluntary or Involuntary?	Examples of Tissues It Stimulates
somatic nervous system		
autonomic nervous system		
sympathetic nervous system		
parasympathetic nervous system		

Vocabulary Check

Explain how the clue can help you to remember the word's definition.

6. word: reflex arc; **clue:** An *arc* is movement that is in the shape of an arch.

_____

7. word: autonomic nervous system; **clue:** *Autonomic* looks similar to the word *automatic.*

_____

_____

8. word: cerebral cortex; **clue:** A *cortex* is an outermost layer.

_____

_____

9. word: sympathetic nervous system; **clue:** Consider how something that is *sympathetic* might affect homeostasis.

_____

Name Period Date

SECTION 29.4 | CENTRAL AND PERIPHERAL NERVOUS SYSTEMS

Study Guide

KEY CONCEPT

The central nervous system interprets information, and the peripheral nervous system gathers and transmits information.

VOCABULARY		
cerebrum	brain stem	autonomic nervous system
cerebral cortex	reflex arc	sympathetic nervous system
cerebellum	somatic nervous system	parasympathetic nervous system

MAIN IDEA: The nervous system's two parts work together.

1. What organs make up the central nervous system?

_____

2. What types of neurons make up the peripheral nervous system?

_____

On the first page of this section, you read about how the nerves, brain, and spinal cord work together to produce a response. Use the cause-and-effect diagram below to trace how the nervous system produces a response to a stimulus.

PNS detects _____.

→ A sensory neuron passes signal to _____.

→ _____ passes signal to the _____.

→ The _____ interprets the signal and passes it to the PNS.

→ A motor neuron _____.