

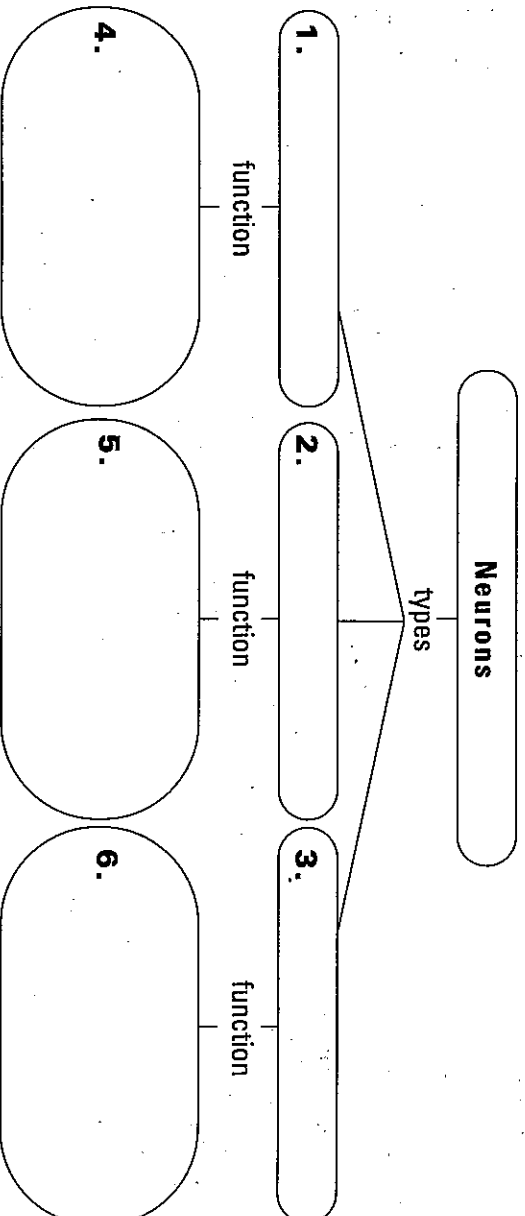
SECTION 29.2 NEURONS Study Guide

KEY CONCEPT

The nervous system is composed of highly specialized cells.

VOCABULARY	
neuron	action potential
dendrite	synapse
axon	terminal
resting potential	neurotransmitter
sodium-potassium pump	

MAIN IDEA: Neurons are highly specialized cells. Use the concept map to organize your notes on neurons.



7. What is the difference between the function of an axon and a dendrite?

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## Section 29.2 STUDY GUIDE CONTINUED

**MAIN IDEA: Neurons receive and transmit signals.**

8. What is the role of the sodium-potassium pump?

9. Draw a picture to match each of the captions in the table. In the third column, write additional details about what is happening in each of your drawings.

Caption	Drawing	Description
The neuron is stimulated and $\text{Na}^+$ ions flow into the axon.		
The action potential travels down the axon as more $\text{Na}^+$ ions enter and $\text{K}^+$ ions leave.		
Neurotransmitters enter the synapse and bind to receptors on another neuron, stimulating $\text{Na}^+$ ions to enter that cell.		

10. What happens after neurotransmitters bind to the other neuron's receptors?

**Vocabulary Check**

- \_\_\_\_\_ 11. the molecule that transmits a signal from one neuron to another
- \_\_\_\_\_ 12. a gap between neurons
- \_\_\_\_\_ 13. end of an axon
- \_\_\_\_\_ 14. moving electrical impulse