Name: _____ Question Set 47

CHAPTER 45: Neurons and Nervous Systems

1. What are the three different types of neurons and what are their functions?

   a. _____

   _____

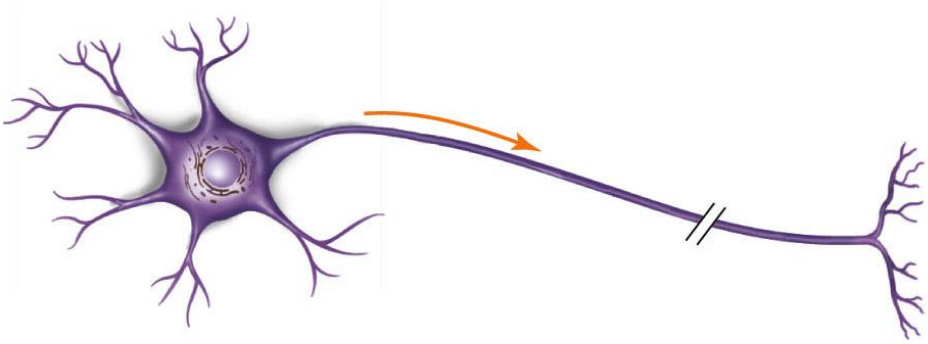
   b. _____

   _____

   c. _____

   _____

2. Label and list the function of each part of the neuron.



3. How does the neuron maintain an approximate -60 mV potential?

_____

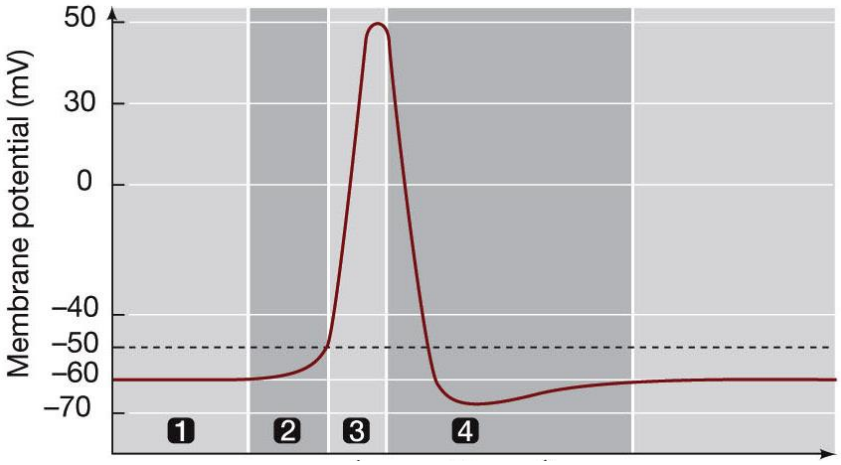
_____

4. What is the significance of the electrochemical gradient?

_____

_____

5. Using **Figure 45.10** and the text identify each step of the course of an action potential and describe what is happening?



6. How does an impulse propagate down the axon?

7. What is the significance of the Schwann cells and myelin?

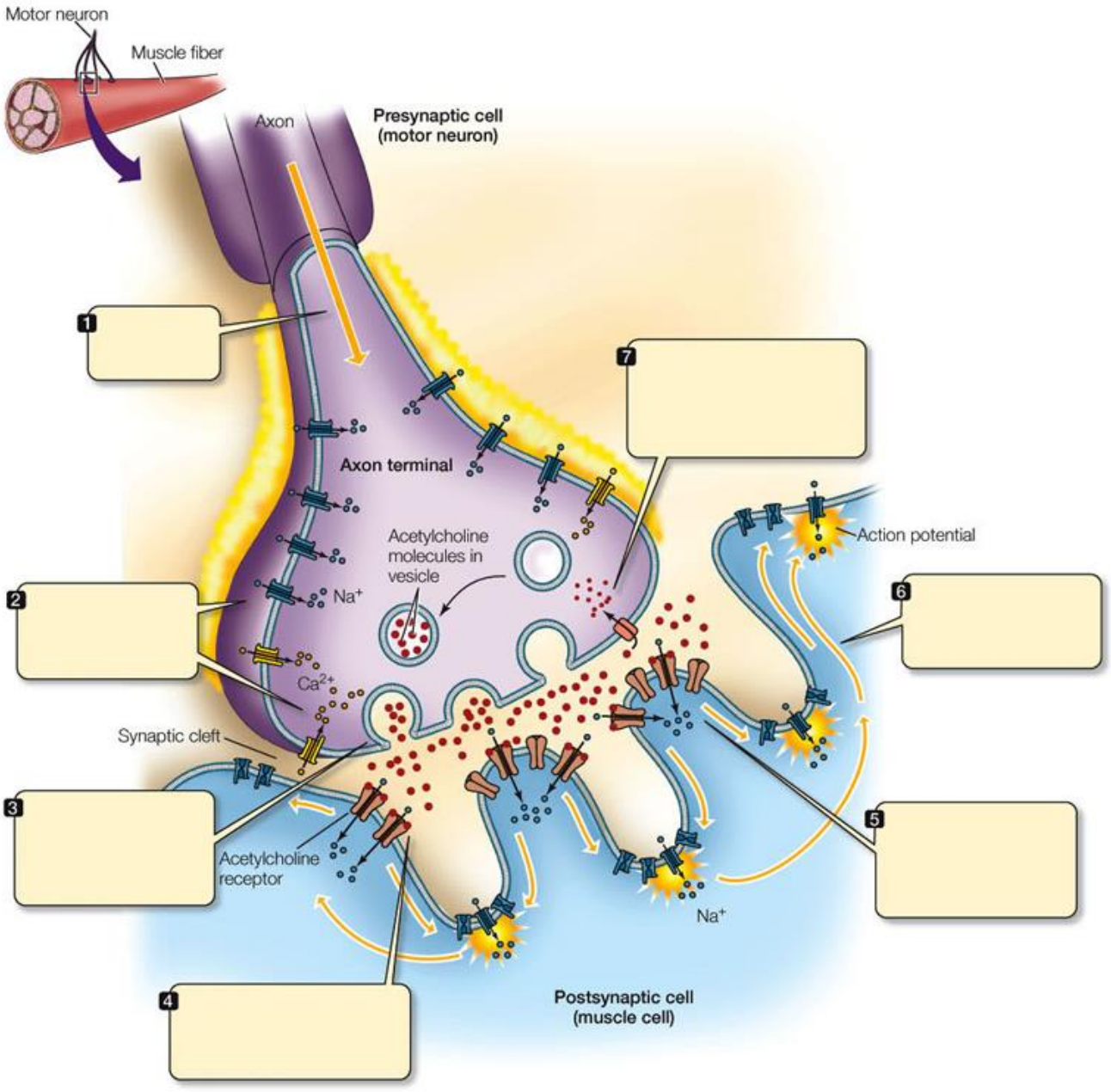
8. Describe what happens when an impulse reaches the terminal end.

9. What happens at the synapse?

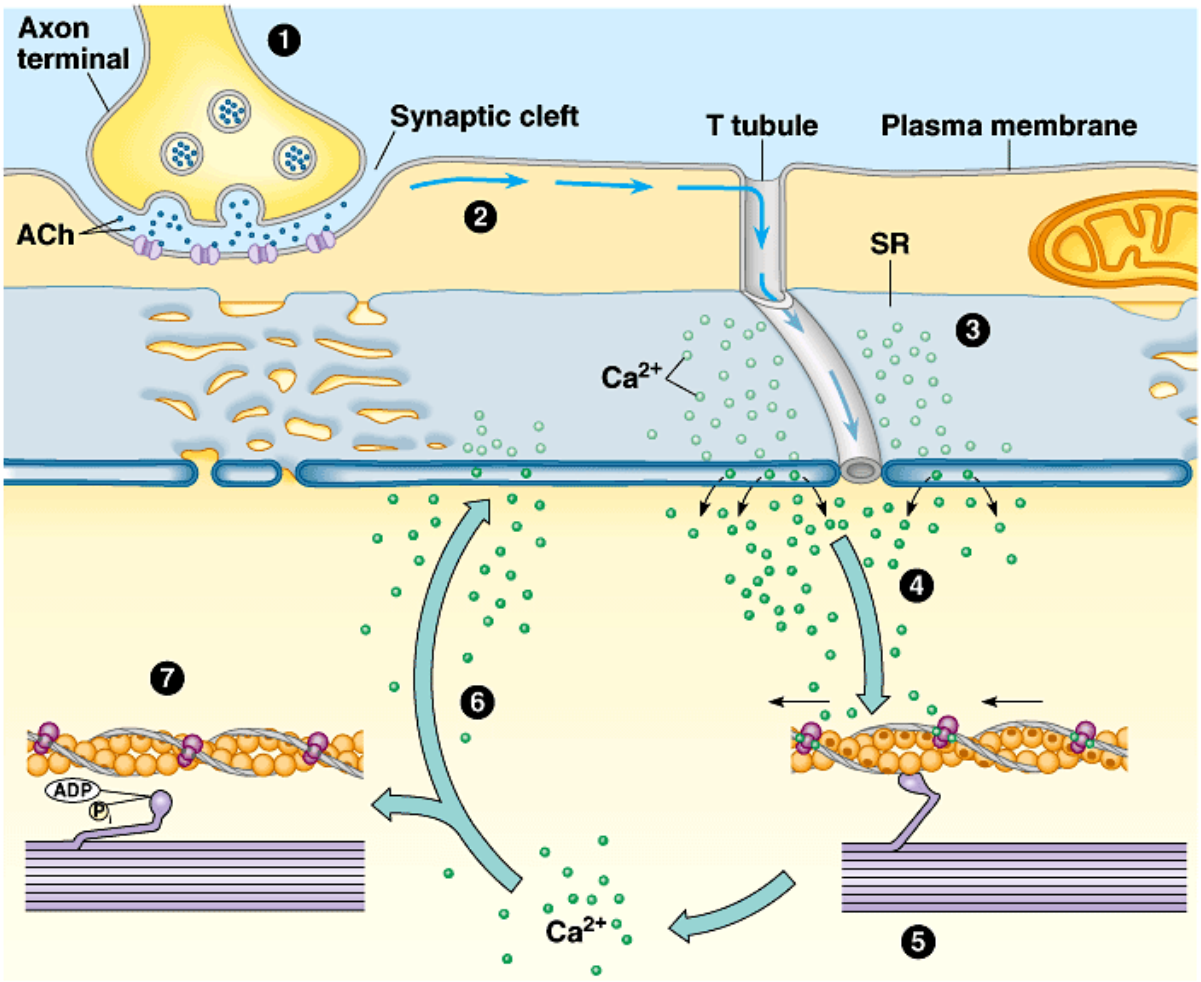
_____

_____

10. Using **Figure 45.13** and the on-line text, describe what is happening in each numbered step of chemical synaptic transmission.



11. Using the figure below, your textbook (bits of chapter 48), and your notes, explain how a muscle contraction is controlled.



12. What is significance of cephalization?