

Name _____

Period _____

Date _____

AP: CHAPTER 48: NERVOUS SYSTEM

1. Describe the typical nerve pathway.

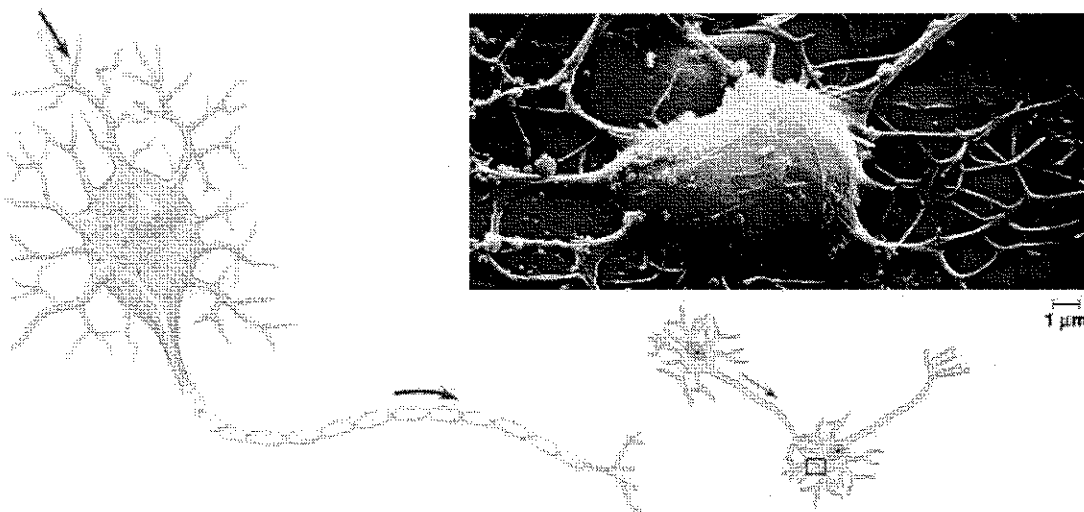
2. Trace the reflex pathway by naming the structures.

3. How are "messages" carried...

a. in neurons _____

b. between neurons _____

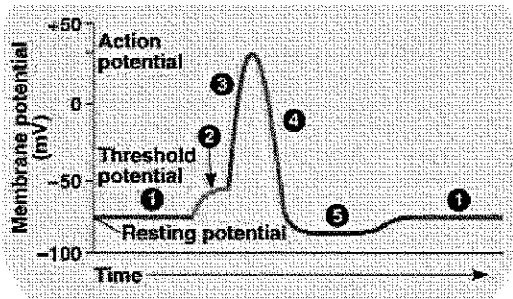
4. Review the structures of the motor neuron.



Name _____

5. How does the neuron maintain a -70 mV potential?

6. Detail the stages of the "action potential." Use the graph and indicate what is happening at the membrane in each stage.



7. How does an impulse propagate down the axon?

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

9. Describe what happens at the synapse. _____

Name _____

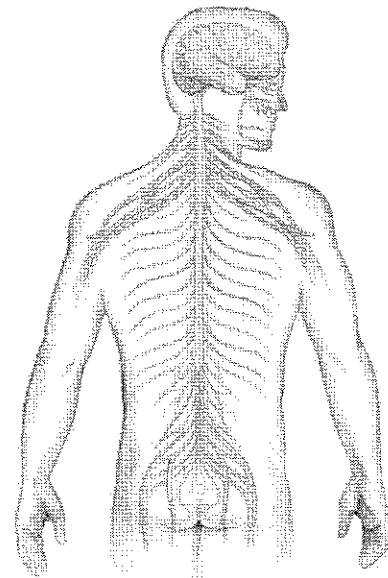
10. What occurs with the many synaptic inputs on a cell body? (graded potentials and threshold)

11. Trace the variations in nervous systems in the animal kingdom.

12. Label the diagram of the human nervous system and indicate the functions of each.

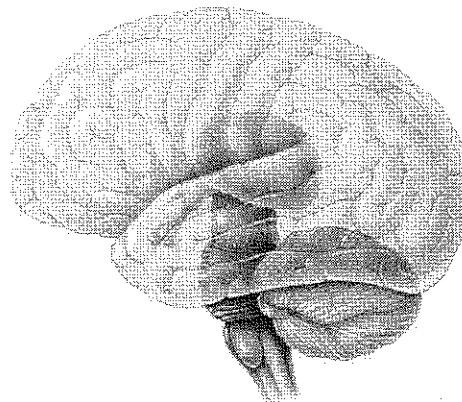
Include:

- CNS
- PNS
- sensory
- motor
- automatic
- motor
- sympathetic
- parasympathetic



13. How do the sympathetic and parasympathetic work together?

14. List the major components of the human brain and indicate their functions.



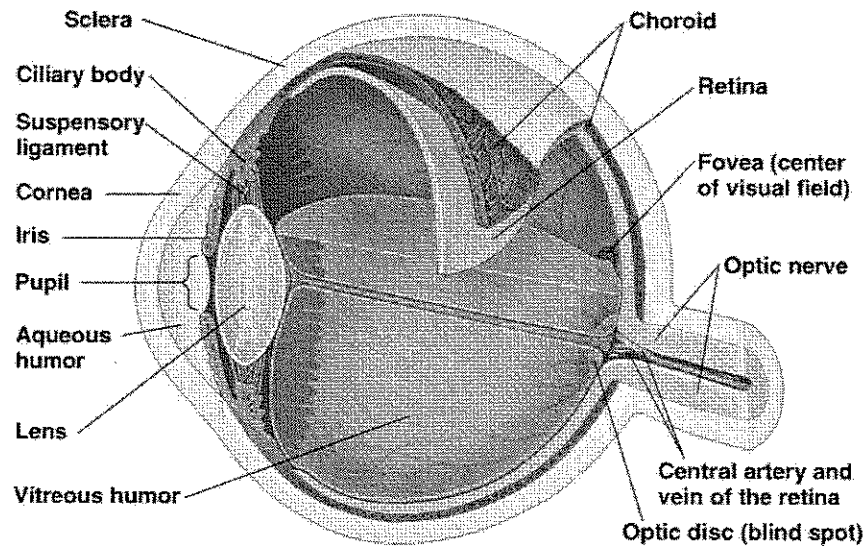
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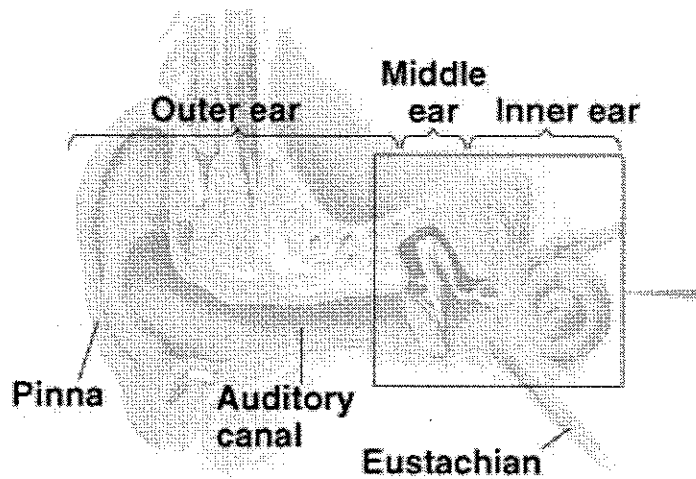
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AP: CHAPTER 49: SENSORY AND MOTOR MECHANISMS

1. Using a diagram of the vertebrate eye, identify and give the function of each structure.



2. Using a diagram of the human ear, identify and give the function of each structure.



3. Explain how the mammalian ear functions as a hearing organ.

Name _____

4. Explain how the mammalian ear functions to maintain body balance and equilibrium.

5. Describe three functions of a skeleton.

6. Distinguish between an exoskeleton and an endoskeleton.

7. Explain how the skeleton combines with an antagonistic muscle arrangement to provide a mechanism for movement.

8. Explain how the nervous system produces graded contractions of whole muscles.

9. Distinguish among skeletal muscle, cardiac muscle, and smooth muscle.

a. _____

b. _____

c. _____

Name _____

10. Labeling the diagram below, explain how a muscle contraction is controlled.

