Introduction to Structure and Function of the Nervous System

To complete this worksheet, select:

Module: Regulation  
Activity: Animations  
Title: Introduction to Structure and Function of the Nervous System

Introduction

1. a. Describe the primary function of the nervous system. ________________________________
   ________________________________
   ________________________________

   b. How does this function underlie human regulation? ________________________________
   ________________________________
   ________________________________

   c. Name the three neuron types. ________________________________

   ________________________________

   ________________________________

Neuron Structure & Function

2. What is the function of motor neurons? ________________________________
   ________________________________

3. What are the two functions of sensory neurons? ________________________________
   ________________________________
   ________________________________

4. What is the function of association neurons? ________________________________
   ________________________________
   ________________________________
System Organization

5. What are the two subsystems of the nervous system? 

6. Name neuron functions for the central nervous system (CNS). 

7. Name neuron functions for the peripheral nervous system (PNS). 

8. Where is PNS tissue located?

9. Explain the functions of two types of neurons that form the somatic nervous system division of the PNS.

   sensory neurons -
   motor neurons -

10. a. Explain the functions of two types of neurons that form the autonomic nervous system division of the PNS.

    sensory neurons -
    motor neurons -

   b. Describe the two divisions of the motor portion of the ANS.

      Sympathetic -
      Parasympathetic -

   c. Do these divisions work voluntarily or involuntarily? What effectors are stimulated by each?
11. Explain the functions of the two types of neurons that form the *enteric nervous system* (ENS) divisions of the PNS.

   Sensory neurons - ______________________________________________________________________

   Motor neurons - _______________________________________________________________________

12. What controls all the nervous pathways in the body? ______________________________________

13. a. What is the function of reflex arcs. ____________________________________________________

   ________________________________

   b. Name the parts of a reflex arc. ________________________________________________________

   ________________________________

14. Contrast between somatic, autonomic, and enteric reflex arcs. ______________________________

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