Nervous System Practice

1. What is the name of cells found in the nervous system called? _______________________

2. Label the following structures on the neuron below: axon, dendrite, and nucleus. Color each of these parts a different color.

VOCABULARY

<table>
<thead>
<tr>
<th>nervous system</th>
<th>central nervous system (CNS)</th>
<th>stimulus</th>
</tr>
</thead>
<tbody>
<tr>
<td>endocrine system</td>
<td>peripheral nervous system (PNS)</td>
<td></td>
</tr>
</tbody>
</table>

MAIN IDEA: The body’s communication systems help maintain homeostasis.

CIRCLE THE LETTER OF THE WORD OR PHRASE THAT BEST COMPLETES THE SENTENCE.

3. Your body’s ability to maintain ________ depends on the ability of different systems in your body to communicate with one another.
   a. stimulus  b. nervous  c. **homeostasis**  d. endocrine

4. The _______ system is a collection of physically disconnected organs that helps control growth, development
   a. stimulus  b. nervous  c. homeostasis  d. **endocrine**

5. A __________ caues a chemical, cellular, or behavioral change in an organism.
   a. **stimulus**  b. nervous  c. homeostasis  d. endocrine

6. The __________ system is a physically connected network of cells, tissues, and organs that controls thoughts, movements, and simpler life processes.
   a. stimulus  b. **nervous**  c. homeostasis  d. endocrine
MAIN IDEA: The nervous and endocrine systems have different methods and rates of communication.

Fill in the blank with name of the system that best completes the sentence.

7. The _central nervous_ _______ system includes the brain and spinal cord.

8. The __nervous_________ system works quickly and controls processes that occur over short periods of time.

9. The ___endocrine__________ system works slowly and controls processes that occur over long periods of time.

10. The ___peripheral nervous_______ system transmits messages to and from the central nervous system.

Vocabulary Check

Use the vocabulary terms from this section to complete the sentence.

11. You jump when you hear a nearby truck honk its horn. In this example, the honking horn is the __stimulus__.

12. The ___endocrine system___ sends chemical signals through the bloodstream.

13. When your brain wants to make your legs move so that you can run, the _peripheral nervous system_ carries the message from your spinal cord to your leg muscles.

14. Your __nervous system___ is the communication system that sends its signals through a highly connected network of specialized cells and tissues.

KEY CONCEPT
The nervous system is composed of highly specialized cells.

VOCABULARY

<table>
<thead>
<tr>
<th>neuron</th>
<th>action potential</th>
<th>dendrite</th>
</tr>
</thead>
<tbody>
<tr>
<td>synapse</td>
<td>axon</td>
<td>terminal</td>
</tr>
<tr>
<td>resting potential</td>
<td>neurotransmitter</td>
<td>sodium-potassium pump</td>
</tr>
</tbody>
</table>

MAIN IDEA: Neurons are highly specialized cells.

Circle the letter of the word or phrase that best completes the sentence.

15. A specialized cell that stores information and carries messages within the nervous system and between other body systems is a(n)__________.
   a. cell body       b. axon       c. neuron       d. dendrite

16. A branchlike extension of the cytoplasm and the cell membrane that receives messages from neighboring cells is a(n) ____________.
   a. cell body       b. axon       c. neuron       d. dendrite

17. A long extension that carries electrical messages from one cell in the nervous system to another cell is called a(n)__________.
   a. cell body       b. axon       c. neuron       d. dendrite
18. Fill in the blanks in the Concept Map with the names of the different types of neurons.

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