In your textbook, read about the central nervous system.

Refer to the illustration of the brain and spinal cord. Write the correct letter to identify the structure being described. Letters may be used more than once.

1. sends and receives messages from all parts of the body
2. protected by the vertebrae
3. protected by the skull
4. carries messages from skin to spinal cord
5. spinal cord
6. body nerves
7. cerebrum is its largest part
8. described as a nerve column
9. 31 pairs of nerves extend from it
10. more than 100 billion neurons are found here

Complete the graphic organizer about the central nervous system. These terms may be used more than once: autonomic nervous system, central nervous system, peripheral nervous system, sympathetic nervous system.
Study Guide

CHAPTER 33
Section 3: The Senses

In your textbook, read about the senses.

Match the description in Column A with the term in Column B.

Column A

_____ 1. respond to temperature, pressure, and pain
_____ 2. specialized chemical receptors on the tongue
_____ 3. transmit information about body position
_____ 4. light-sensitive cells
_____ 5. filled with fluid and lined with hair cells

Column B

A. taste buds
B. sensory receptors
C. rods
D. cochlea
E. semicircular canals

In your textbook, read about sight.

Complete the table by filling in the missing information. Use these choices:

<table>
<thead>
<tr>
<th>cones</th>
<th>cornea</th>
<th>lens</th>
<th>retina</th>
<th>rods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projects image onto the retina</td>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contains receptor cells called rods and cones</td>
<td>7.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the structure through which light first enters the eye</td>
<td>8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excited by low levels of light</td>
<td>9.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide information about color to the brain</td>
<td>10.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In your textbook read about hearing and balance.

Use each of the terms below only once to complete the passage.

auditory canal  balance  cochlea  hearing
middle ear  nerve impulses  tympanum

Two major functions of the ear are (11) ________________________________ and
(12) ________________________________. Sound waves enter the (13) ________________________________ and
cause the (14) ________________________________ to vibrate. The vibrations travel through the bones of the
(15) ________________________________ and cause fluid in the (16) ________________________________ to
vibrate. Hair cells then generate (17) ________________________________ that are transmitted to the brain.