The Skeletal System
(pages 474–481)

This section describes the skeletal system and its function. It also tells how to keep your bones strong and healthy.

Functions of the Skeletal System (pages 474–476)

1. List the three major functions of the skeleton.
   a. 
   b. 
   c. 

2. Is the following sentence true or false? The structures of an organism’s organs and organ systems are related to the functions they perform.

   __________

3. The 26 small bones that make up the backbone are the 

   __________.

4. Is the following sentence true or false? Since the backbone is just one long bone, it allows your body to easily bend and twist.

   __________

5. How does the skeleton help the body move?

   __________

6. Circle the letter of the bone that protects the brain.
   a. backbone   b. pelvic girdle   c. ribs   d. skull

7. The long bones of the arms and legs make __________

8. Calcium and phosphorus are __________ that are stored in bones.
Bones—Strong and Living (pages 478-480)

9. Circle the letter of each sentence that is true about bones.
   a. Bones are very strong and lightweight.
   b. Concrete can absorb more force without breaking than can bone.
   c. Bones make up over half of an adult’s body weight.
   d. Bones are hard because they contain minerals.

10. When do bone cells form new bone tissue? ____________________________

The Structure of Bones (pages 347–348)

11. Label the parts of the bone in the diagram below.

Match each part of a bone with its characteristics.

<table>
<thead>
<tr>
<th>Bone Parts</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. marrow</td>
<td>a. Where blood vessels and nerves enter and leave the bone</td>
</tr>
<tr>
<td>13. outer membrane</td>
<td>b. Has small canals with blood vessels running through</td>
</tr>
<tr>
<td>14. compact bone</td>
<td>c. Strong, but lightweight layer because it has many small spaces within it</td>
</tr>
<tr>
<td>15. spongy bone</td>
<td>d. Soft connective tissue in the spaces in bone</td>
</tr>
</tbody>
</table>
18. What is a joint?  

19. What are the two kinds of joints in the body?  
   a.  
   b.  

20. Circle the letter of the bones that are held together by immovable joints.  
   a. knee  
   b. ankle  
   c. ribs  
   d. shoulder blade  

21. Complete the table to show the four types of movable joints.  

<table>
<thead>
<tr>
<th>Movable Joints</th>
<th>Kind of Motion</th>
<th>Where It’s Found in the Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball-and-socket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hinge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pivot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gliding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. The bones in movable joints are held together by strong connective tissues called ________________.

**Taking Care of Your Bones** *(pages 480–481)*

23. What can you do to keep your bones healthy? ________________

______________________________

______________________________

24. A condition in which the body’s bones become weak and break easily is called ________________.