In your textbook, read about the structure and function of the skin.

Complete the table by checking the correct column for each description.

<table>
<thead>
<tr>
<th>Description</th>
<th>Epidermis</th>
<th>Dermis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The outermost layer of skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Contains connective tissue, glands, and muscles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The thicker, inner layer of skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Partly composed of dead, keratin-containing cells</td>
<td></td>
<td></td>
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<tr>
<td>5. Contains pigmented cells that protect against the sun’s rays</td>
<td></td>
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<tr>
<td>6. Hair follicles grow out of this layer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Site of continual mitotic cell divisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Richly supplied with blood vessels and nerves</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Answer the following questions.

9. Describe the change that takes place in your skin when you are exposed to ultraviolet light.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. How does skin help regulate body temperature?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

11. List three other functions of skin.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
In your textbook, read about the structure of the skeletal system and joints.

Identify the following as being part of the axial or appendicular skeleton.

1. the tarsals, metatarsals, and phalanges in your foot
2. the seven vertebrae in your neck
3. your rib cage
4. the bones in your shoulder
5. your lower jaw
6. the humerus in your arm

For each answer below, write an appropriate question.

7. Answer: They are bands of connective tissue that attach muscles to bones.
   Question: ____________________________________________________________

8. Answer: Fluid-filled sacs that reduce friction between bones in a joint.
   Question: __________________________________________________________

9. Answer: They connect bones to other bones.
   Question: __________________________________________________________

10. Answer: One allows the bones to move back and forth; the other allows the bones to rotate.
   Question: _________________________________________________________

In your textbook, read about the formation of bone and bone growth.

Complete each sentence.

11. In a human embryo’s skeleton, ________________ is gradually replaced by ________________ except in a few places like the tip of the ________________ .

12. Some cells in cartilage are stimulated to become ________________ . They secrete a substance in which ________________ ________________ and other minerals are deposited.

13. Your bones increase in length near their ________________ .

14. Even after you reach your full adult height, the bone-forming cells in your body will still be involved in ________________ and ________________ .
In your textbook, read about compact and spongy bone and skeletal system functions.

Answer the following questions.

15. If you cut through to the center of a large leg bone, what bone components (in order, from the outside in) would you encounter?

16. How do blood vessels and nerves reach individual bone cells in compact bone?

17. What role does bone marrow play in the functioning of your circulatory system?

18. In what way is the skeleton a storehouse?

In your textbook, read about growth, mineral storage, and injury and disease in bone.

Determine if the statement is true or false.

19. Once you have finished growing, your bones no longer change.

20. Calcium is both deposited in and removed from bones.

21. Calcium removed from bone is rapidly excreted in the urine as an unnecessary body waste.

22. As a person ages, his or her bone density usually decreases.

23. Because bones in an adult’s skeleton are harder than children’s bones, adults are less likely to break a bone in a fall.

24. Osteoporosis is most common in older women because they rarely include milk in their diet.
In your textbook, read about three types of muscles and skeletal muscle contraction.

Complete the table by checking the correct column for each description.

<table>
<thead>
<tr>
<th>Description</th>
<th>Type of Muscle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. under voluntary control</td>
<td>Smooth</td>
</tr>
<tr>
<td>2. striated</td>
<td></td>
</tr>
<tr>
<td>3. slow, prolonged contractions</td>
<td></td>
</tr>
<tr>
<td>4. attached to bones</td>
<td></td>
</tr>
<tr>
<td>5. found only in the heart</td>
<td></td>
</tr>
<tr>
<td>6. not under voluntary control</td>
<td></td>
</tr>
<tr>
<td>7. lines cavities and surrounds organs</td>
<td></td>
</tr>
</tbody>
</table>

In your textbook, read about muscle strength and exercise.

If the statement is true, write true. If it is not, rewrite the italicized part to make it true.

8. Muscle strength depends on the number of fibers in a muscle.

9. When oxygen is limited, aerobic respiration becomes a muscle's primary source for ATP.

10. During lactic acid fermentation, oxygen builds up in muscle cells.

11. A drop in the amount of lactic acid in the bloodstream indicates that muscular activity has decreased.