Chapter 34

Protection, Support, and Locomotion, *continued*

Reinforcement and Study Guide

Section 34.2 Bones: The Body's Support

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:** It absorbs shocks and reduces 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 _____ .

Chapter 34

Protection, Support, and Locomotion, *continued*

Reinforcement and Study Guide

Section 34.2 Bones: The Body's Support, continued

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 <u>true</u> or <u>false</u>.

_____ **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.