

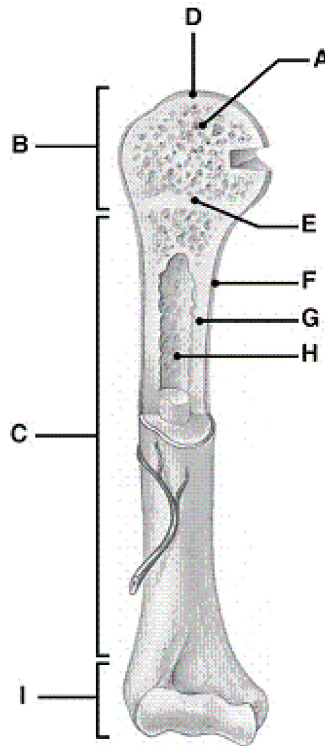
Warm-Up: Structure of Bone (pp 137-141)

Figure 5.1

Using the letters in Figure 5.1, identify the following in items 1 through 6 below:

1. The proximal epiphysis is represented by letter _____.
2. The area that causes the lengthwise growth of a long bone is indicated by letter _____.
3. The area that serves as a storage area for fat in adults is indicated by letter _____.
4. The diaphysis is indicated by letter _____.
5. The periosteum, a connective tissue covering on the diaphysis, is represented by letter _____.
6. The area that contains glassy hyaline cartilage that provides a smooth slippery surface which decreases friction is indicated by letter _____.
7. Yellow marrow is a storage area for _____.
8. The type of fiber connecting the periosteum to the underlying bone are called _____.
9. An increase in bone diameter is called _____ growth.

10. What type of tissue covers the epiphysis of bones and reduces friction in the joints:
- Ⓐ yellow marrow
 - Ⓑ endosteum
 - Ⓒ spongy bone
 - Ⓓ periosteum
 - Ⓔ articular cartilage
11. In adults, the function of the yellow marrow is to:
- Ⓐ store adipose tissue
 - Ⓑ form blood cells
 - Ⓒ store calcium and phosphorus
 - Ⓓ cause lengthwise growth in long bones
 - Ⓔ decrease friction at joint surfaces
12. The presence of an epiphyseal plate indicates that:
- Ⓐ bone is dead
 - Ⓑ bone length is no longer increasing
 - Ⓒ bone diameter is increasing
 - Ⓓ bone diameter is decreasing
 - Ⓔ bone length is increasing
13. What tiny canal connects central canals to lacunae in compact bone:
- Ⓐ perforating canal
 - Ⓑ lamella
 - Ⓒ canaliculus
 - Ⓓ Haversian canal
 - Ⓔ osteon
14. The bone cells that respond to parathyroid hormone (PTH) to destroy bone matrix and release calcium into the blood are called:
- Ⓐ osteocytes
 - Ⓑ chondrocytes
 - Ⓒ erythrocytes
 - Ⓓ osteoclasts
 - Ⓔ osteoblasts
15. The canal that runs through the core of each osteon contains:
- Ⓐ cartilage and lamellae
 - Ⓑ osteoclasts and osteoblasts
 - Ⓒ yellow marrow and Sharpey's fibers
 - Ⓓ blood vessels and nerve fibers
 - Ⓔ red marrow
16. The small cavities in bone tissue where osteocytes are found are called:
- Ⓐ lacunae
 - Ⓑ Volkmann's canals
 - Ⓒ Haversian canals
 - Ⓓ trabeculae
 - Ⓔ lamellae
17. What kind of tissue is the forerunner of long bones in the embryo:
- Ⓐ elastic connective tissue
 - Ⓑ dense fibrous connective tissue
 - Ⓒ fibrocartilage
 - Ⓓ hyaline cartilage
 - Ⓔ loose fibrous connective tissue