

CHAPTER 30 - How Animal Move

Chapter Reading Guide

Movement and Locomotion

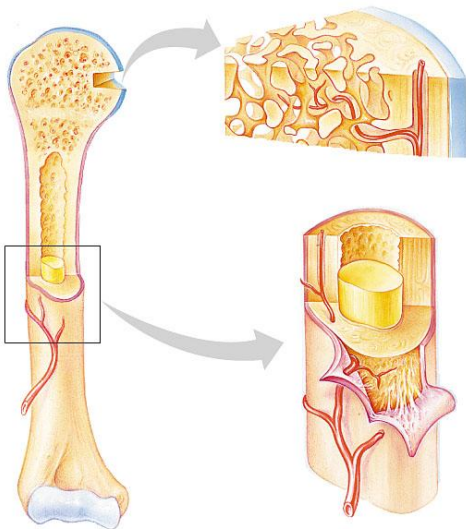
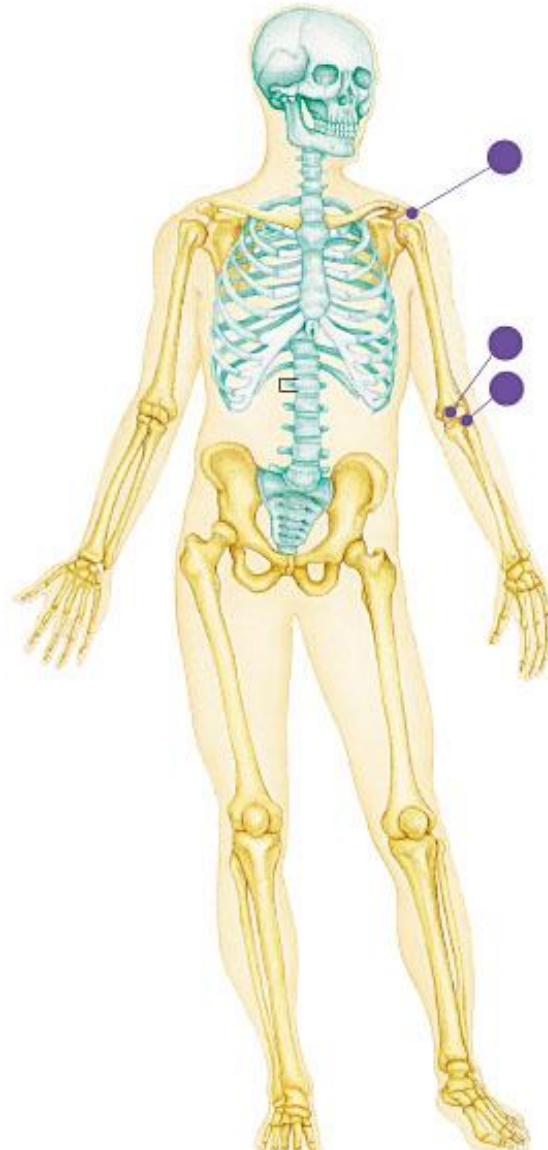
1. Describe the diverse methods of locomotion and the forces each must resist.

Skeletal Support

2. Describe the three main types of skeletons. Note their advantages, their disadvantages, and examples of each.

Types of Skeletons	Advantages	Disadvantages	Examples

3. Label the diagrams of the human skeleton below. Begin by distinguishing between the **axial** and **appendicular skeletons**, the three **types of joints** and **types of bone marrow**. Be sure to label and provide a brief description of each.



Describe the complex structure of a bone noting the major tissues that contribute to bones and their functions.

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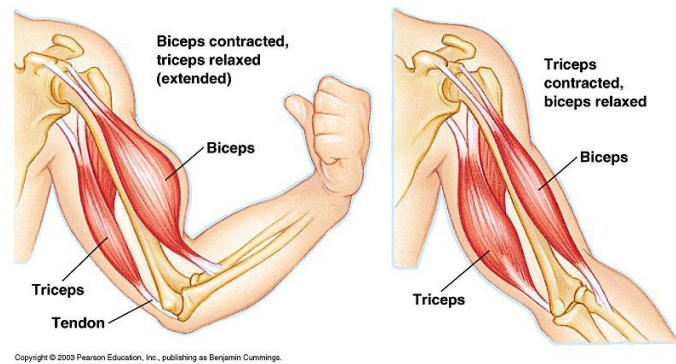
4. Describe the most common skeletal disorders.

5. Explain why bones break and how we can help them heal.

Muscle Contraction and Movement

6. Explain how muscles relengthen once contracted.

7. Describe the structure and arrangement of the filaments found in a muscle cell. Explain the details of how a muscle cell contracts. BE SURE TO MENTION the role of important players such as motor neurons and calcium.



8. Explain what causes muscles to tire. Distinguish between aerobic and anaerobic exercise. Note the advantages of each.

9. Describe an example of an animal using its sensory receptors, central nervous system, skeleton, and muscle to perform an activity.

10. Describe how you bend your knee, starting with action potentials and ending with the contraction of a muscle. How does a strong contraction differ from a weak contraction?