

Musculoskeletal System

1. List and describe the major functions of the skeletal system.
2. What kinds of cells are found in bone tissue? B. What are osteons, central/Haversian canals and lacunae? What is hydroxyapatite? Where is the collagen in bone tissue?
3. A. Which bones are part of the axial skeleton a. Appendicular skeleton? C. Describe and give examples of the three types of synovial joints: ball/socket, hinge, pivot. Use your lab or worksheet to study all the various bones of the human body.
4. A. Describe how tendons are involved in muscle attachment to bone. B. What is meant by antagonistic pairs?
5. What is the function of ligaments? What type of tissue are tendons and ligaments made of?
6. A. How are ATP and Calcium involved in muscle physiology? B. What happens when muscle cells run out of oxygen?
7. What is rickets? How is sunlight related to the development of this disease? What can people do to decrease their risk for rickets?
8. A. Describe the process of osteoporosis. B. What nutrients and macromolecules are involved in this pathology? Who is most at risk for developing osteoporosis? What can people do to decrease their risk?