

Muscular System  
Chapter Ten Study Guide

1. What are muscle functions?
2. What are the three types of muscle structure? What are the characteristics of each type?
3. How is connective tissue integrated into the structure of a skeletal muscle organ? (Fig 10.1)
4. How do the CT fibers covering the skeletal muscle change as they approach the ends of the skeletal muscle? What is CT called between the muscle and bone?
5. Explain how the CT at the end of the muscle “integrates” into the covering of the bone? Deeper?
6. What is the significance of muscle compartments? (Fig 10.3)
7. How may a bruise result in the loss of a limb? What is this condition called?
8. What is the name of the connective tissue extracellular fiber common to the endomysium-perimysium-epimysium” as well as to the tendons, the periosteum, the perforating fibers and the endomysium? Significance?
9. What connects a skeletal muscle to a bone?
10. What structure connects a bone to a bone?
11. What is an aponeurosis? Function?
12. What is a retinaculum? Function?
13. Explain why inflammation beneath the retinaculum may result in chronic pain? Name of condition?
14. Explain how these terms are used to describe the movement of skeletal muscles: extensors, flexors, adductors, abductors, prime movers, synergist, antagonist, and fixators. (use the muscles of the arm to answer this question) (Fig 10.4)
15. What division of the nervous system innervate skeletal muscles? Voluntary or involuntary?
16. How many neurons are used to connect the brain to a skeletal muscle?
17. What terms describe the neurons that connect the brain to the skeletal muscles?
18. What are the two pathway for the upper motor neurons? Location from where to where? Significance?
19. What are the two pathway for lower motor neurons? Location from where to where? Significance?
20. What are all muscle capable of doing? (Hint: convert what to what?)