

# A&PI Muscular System Study Guide

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1. How does muscle convert energy?
2. What are the four functions of muscles?
3. What are the four properties of muscles?
4. What are the three types of muscles?
5. Which muscle tissues are striated?
6. Which muscle tissue is under voluntary control?
7. What are the states of a muscle?
8. In which direction does a muscle exert its force?
9. What is an insertion?
10. What is an origin?
11. What does it mean when a muscle is an agonist?
12. What does it mean when a muscle is an antagonist?
13. What does it mean when a muscle is a synergist?
14. What tissues are found in a muscle?
15. What is an endomysium, perimysium, and epimysium?
16. What is the fascia?
17. What are individual muscle cells called?
18. What are groups of muscle cells called?
19. What connects muscle to bones?
20. What specialized organelles are found in myocytes?
21. What are myofibrils?
22. What does dystrophin do?
23. What is myosin?
24. What is actin?
25. What is the sliding filament theory?
26. What are the steps that lead to a muscle contraction?
27. What is the neuromuscular junction?
28. How does a nerve communicate with a muscle?
29. What is an action potential?
30. What is isotonic contraction?
31. What is isometric contraction?
32. What is muscle tone?
33. What mechanisms does a muscle cell utilize to restore ATP?
34. How does a muscle cell store oxygen? (Name of molecule)
35. What is the oxygen debt?

36. How does a person repay their oxygen debt?
37. How does a muscle generate heat?
38. What are the differences between smooth muscle and skeletal muscle?
39. What does the smooth muscle use in place of troponin?
40. Learn the locations of all muscles in the lab!