

Name: _____

Chapter 10

- 1) Motion results from alternating _____ and relaxation of muscles; the skeletal system provides leverage and a supportive framework for this movement.
- 2) The scientific study of muscles is known as _____.
- 3) Skeletal muscle tissue is primarily attached to bones. It is _____ and _____.
- 4) Cardiac muscle tissue forms the wall of the heart. It is striated and _____.
- 5) Smooth (visceral) muscle tissue is located in viscera. It is _____ (smooth) and involuntary.
- 6) Muscle functions are production of _____, stabilizing _____, _____ substances within the body, and generating _____.
- 7) Electrical excitability is the ability to respond to certain stimuli by producing electrical signals such as _____ (impulse).
- 8) Contractility is the ability to shorten and thicken (contract), generating _____ to do work.
- 9) In an _____ contraction, the muscle develops tension but does not shorten.
- 10) In an _____ contraction, the tension remains constant while the muscle shortens.
- 11) _____ is the ability to be extended (stretched) without damaging the tissue.
- 12) _____ is the ability to return to original shape after contraction or extension.
- 13) Each skeletal muscle is a separate organ composed of cells called _____.
- 14) _____ is a sheet or band of fibrous connective tissue that is deep to the skin and surrounds muscles and other organs of the body.
- 15) Superficial _____ (or subcutaneous layer) separates muscle from skin and functions to provide a pathway for nerves and blood vessels, stores fat, insulates, and protects muscles from trauma.
- 16) *Deep* _____, which lines the body wall and limbs and holds muscles with similar functions together, allows free movement of muscles, carries nerves, blood vessels, and lymph vessels, and fills spaces between muscles.
- 17) Other connective tissue components are _____, covering the entire muscle; _____, covering fasciculi; and _____, covering individual muscle fibers; all are extensions of deep fascia.

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| A. action potentials |
| B. body movements |
| C. body positions |
| D. Contraction |
| E. Elasticity |
| F. endomysium |
| G. Epimysium |
| H. Extensibility |
| I. Fascia (3x) |
| J. Fibers |
| K. force |
| L. heat |
| M. Involuntary |
| N. isometric |
| O. isotonic |
| P. moving |
| Q. Mycology |
| R. Nonstrained |
| S. Perimysium |
| T. Striated |
| U. Voluntary |