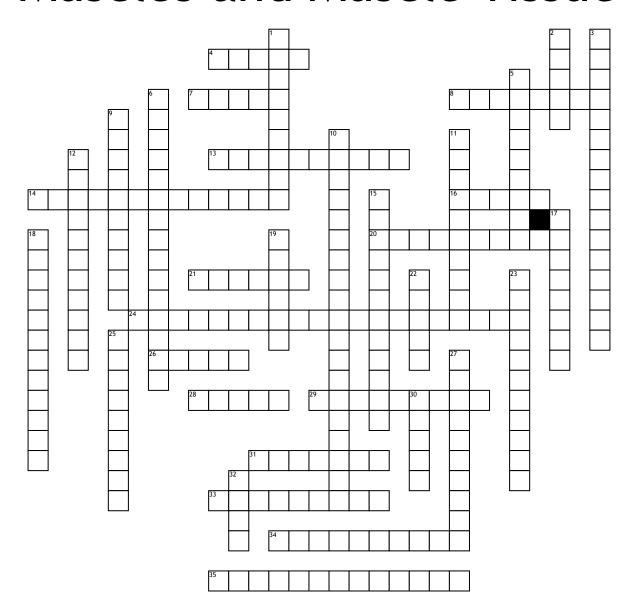
Name:	Date:	Period:

## Muscles and Muscle Tissue



## Across

- **4.** a pale band across a striated muscle fiber that consists of actin
- 7. appears as a lighter band in the middle of the dark A band at the centre of a sarcomere
- **8.** a protein of muscle that together with tropomyosin forms a regulatory protein complex controlling the interaction of actin and myosin
- **13.** sheath of connective tissue surrounding a bundle of muscle fibers
- **14.** efers to the condition in which muscles of the body remain semi-contracted for an extended period
- 16. a protein found in microfilaments
- ${\bf 20.}$  the cell membrane of a striated muscle fiber cell
- **21.** protein found in muscle tissue as a thick filament
- **24.** A muscular contraction in which the length of the muscle does not change
- **26.** The operation of most skeletal muscles involves leverage

- 28. responsible for the passive elasticity of muscle
- ${\bf 29.}$  the repeating unit between two  ${\bf Z}$  lines
- **31.** a muscle that moves in one direction
- **33.** a motor neuron and the skeletal muscle fibers innervated by that motor neuron's axonal terminals
- 34. connective tissue within the muscle
- ${f 35.}$  the decline in ability of a muscle to generate force

## <u>Down</u>

- 1. the point of attachment in a muscle where more movement occurs
- 2. any of the dark thin bands across a striated muscle fiber
- 3. extensions of the cell membrane that penetrate into the centre of skeletal and cardiac muscle cells
- 5. fibrous tissue surrounding the cell
- 6. controlled by an individual's will
- **9.** the continuous and passive partial contraction of the muscles

- **10.** maintain constant tension in the muscle as the muscle changes length
- 11. a muscle that contracts while another relaxes
- 12. multinucleate cells that make up skeletal muscles
- **15.** a single contraction resulting from a threshold stimulus
- 17. a bundle of structures
- **18.** the filaments of myofibrils, constructed from proteins, principally myosin or actin
- ${\bf 19.}$  the attachment site that doesn't move during contraction
- 22. the striated region of a sarcomere
- 23. a movement of a muscle that causes it to become tight
- **25.** an iron- and oxygen-binding protein found in the muscle tissue
- 27. the cytoplasm of a myocyte
- 30. is in the center of the A band
- 32. is closer to the fulcrum of a lever