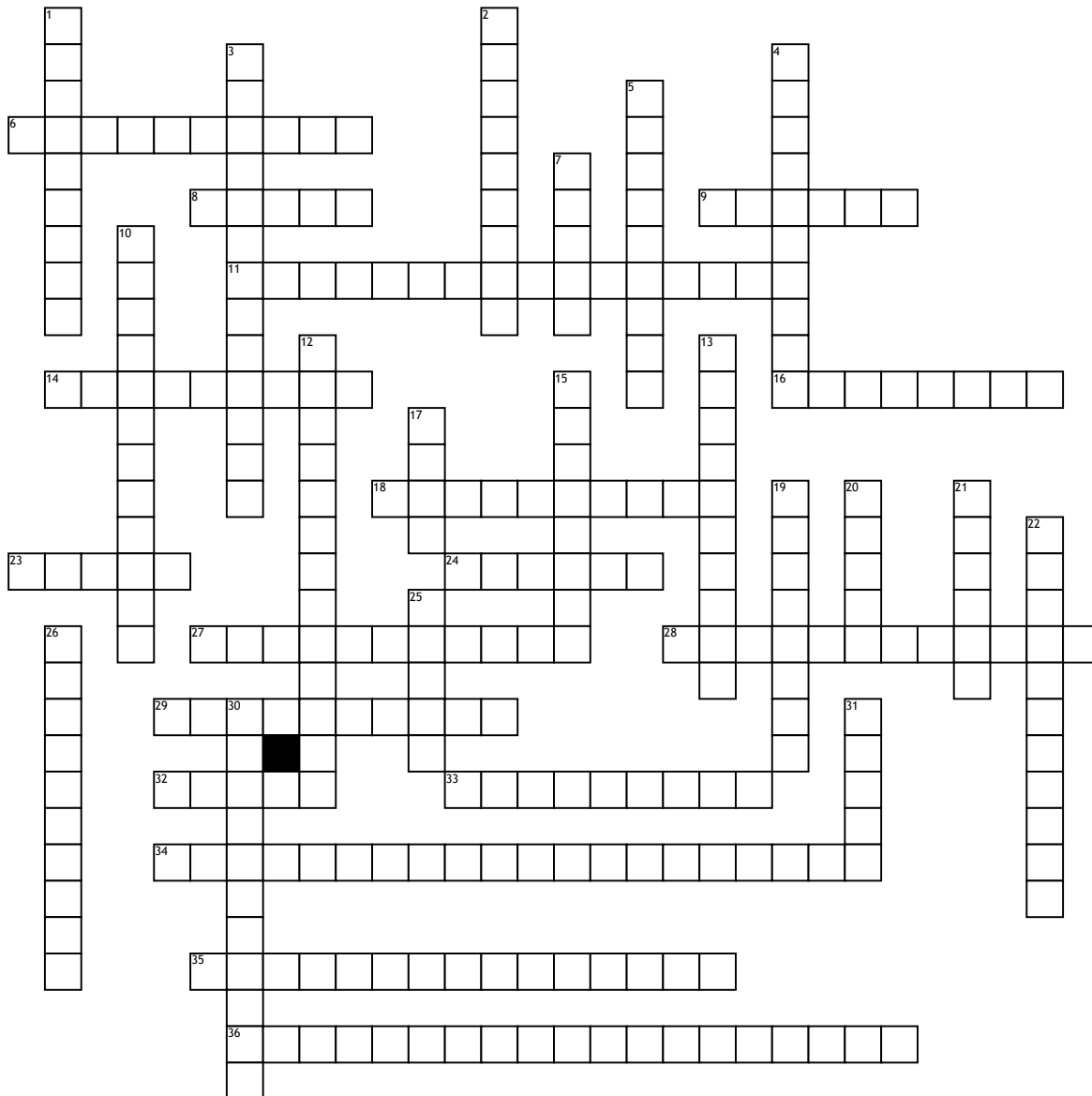


Name: _____ Date: _____ Period: _____

Muscles and Muscle Tissue



Across

6. the sheath of connective tissue surrounding a bundle of muscle fibers
 8. the dark thin bands across a striated muscle fiber that mark the junction of actin filaments in adjacent sarcomeres
 9. protein found in muscle tissue as a thick filament
 11. extensions of the cell membrane that penetrate into the centre of skeletal and cardiac muscle cells
 14. a sheath of fibrous elastic tissue surrounding a muscle
 16. muscle that causes a particular movement to occur, creating a normal range of movement in a joint by contracting
 18. the cytoplasm of a myocyte
 23. a pale band across a striated muscle fiber that consists of actin
 24. region of a striated muscle sarcomere that contains myosin thick filaments
 27. The shortening and thickening of functioning muscle or muscle fiber
 28. a single contraction resulting from a threshold stimulus
 29. a muscle that opposes the action of another
 32. appears as a lighter band in the middle of the dark A band at the centre of a sarcomere
 33. an iron- and oxygen-binding protein found in the muscle tissue
 34. muscular contraction in which the length of the muscle does not change

35. action is normally controlled by an individual's will
 36. maintain constant tension in the muscle as the muscle changes length

Down

1. the point of attachment in a muscle where more movement occurs
 2. the repeating unit between two Z lines
 3. the condition in which muscles of the body remain semi-contracted for an extended period
 4. the cell membrane of a striated muscle fiber cell
 5. made up of a motor neuron and the skeletal muscle fibers innervated by that motor neuron's axonal terminals
 7. operation of most skeletal muscles involves leverage
 10. the filaments of myofibrils, constructed from proteins
 12. the decline in ability of a muscle to generate force
 13. layer of areolar connective tissue that is within a muscle fiber
 15. a regulatory protein complex controlling the interaction of actin and myosin
 17. closer to the fulcrum
 19. a bundle of structures
 20. the center of the A band and, thus, it is in the center of the sarcomere

21. the attachment site that doesn't move during contraction
 22. A muscle cell
 25. a cellular protein found especially in microfilaments
 26. the continuous and passive partial contraction of the muscles
 30. a protein of muscle that forms a complex with troponin regulating the interaction of actin and myosin in muscular contraction
 31. responsible for the passive elasticity of muscle