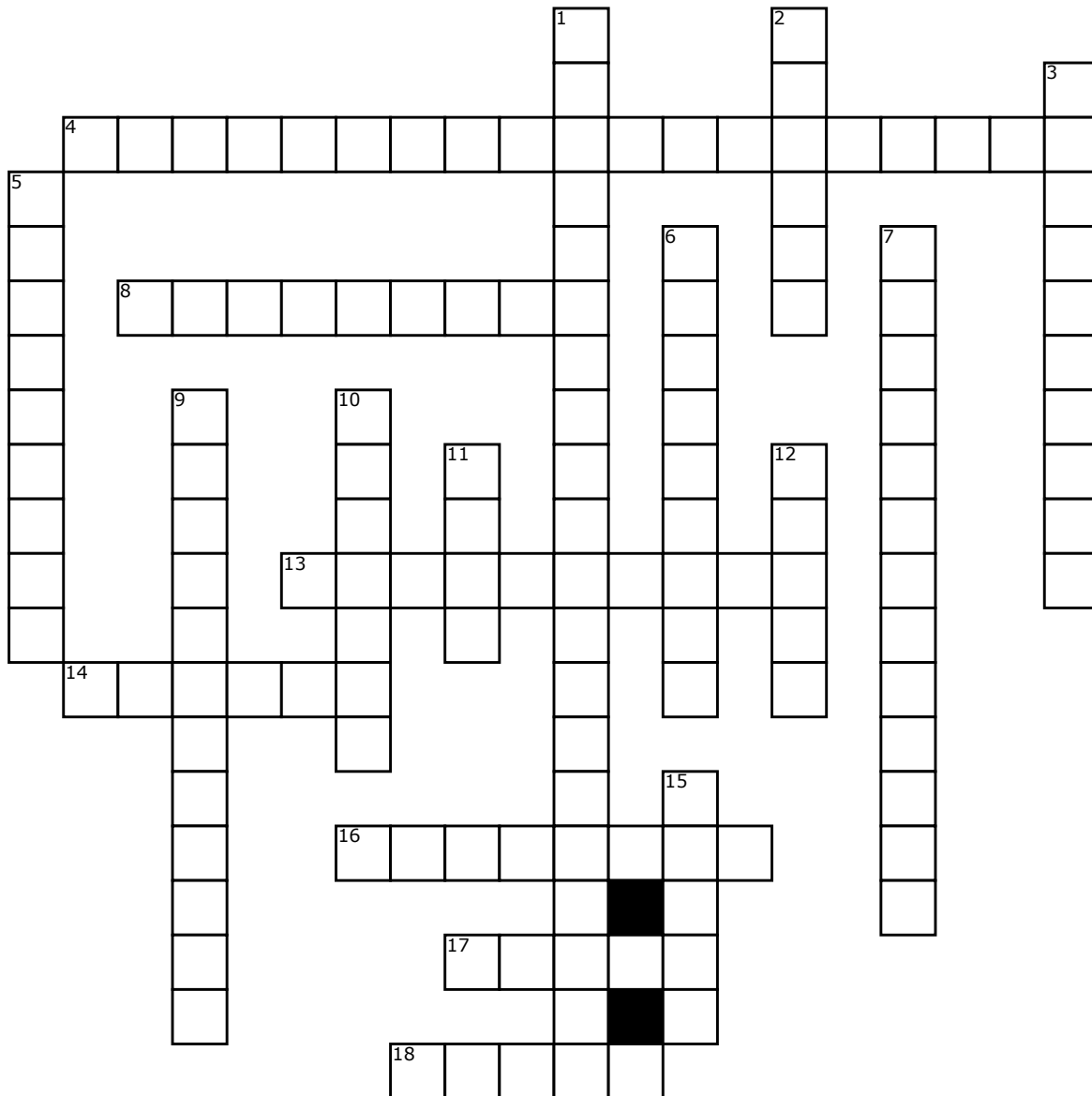


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# Muscles & Muscle Tissue



## **Across**

**4.** (1) concentric and (2) eccentric contractions are \_\_\_\_\_

**8.** A \_\_\_\_\_ unit is made up of a motor neuron and the skeletal muscle fibers innervated by that motor neuron's axonal terminals.

**13.** \_\_\_\_\_ agonist muscles often occur in pairs, called antagonistic pairs.

**14.** what is the dark-staining anisotropic cross striations in the myofibrils of muscle fibers, comprising regions of overlapping thick (myosin) and thin (actin) filaments.

**16.** a bundle of structures, such as nerve or muscle fibers.

**17.** the attachment site for the thick filaments.

**18.** The region of a striated muscle fibre that contains only thick (myosin) filaments

## **Down**

**1.** a type of strength training in which the joint angle and muscle length do not change during contraction (compared to concentric or eccentric contractions, called dynamic/isotonic movements).

**2.** the thick filaments, are bipolar and extend throughout the A-band. They are cross-linked at the centre by the M-band.

**3.** a wispy layer of areolar connective tissue that ensheaths each individual myocyte (muscle fiber, or muscle cell).

**5.** The origin is the fixed attachment, while the \_\_\_\_\_ moves with contraction.

**6.** a sheath of fibrous elastic tissue surrounding a muscle.

**7.** the decline in ability of a muscle to generate force.

**9.** The three different types of muscular \_\_\_\_\_

**10.** what is a chemical that binds to a receptor and activates the receptor to produce a biological response.

**11.** also an agonist

**12.** what is essential for such important cellular functions as the mobility and contraction of cells during cell division.

**15.** In producing a body movement, bones act as \_\_\_\_\_ and joints function as fulcrums of these \_\_\_\_\_.