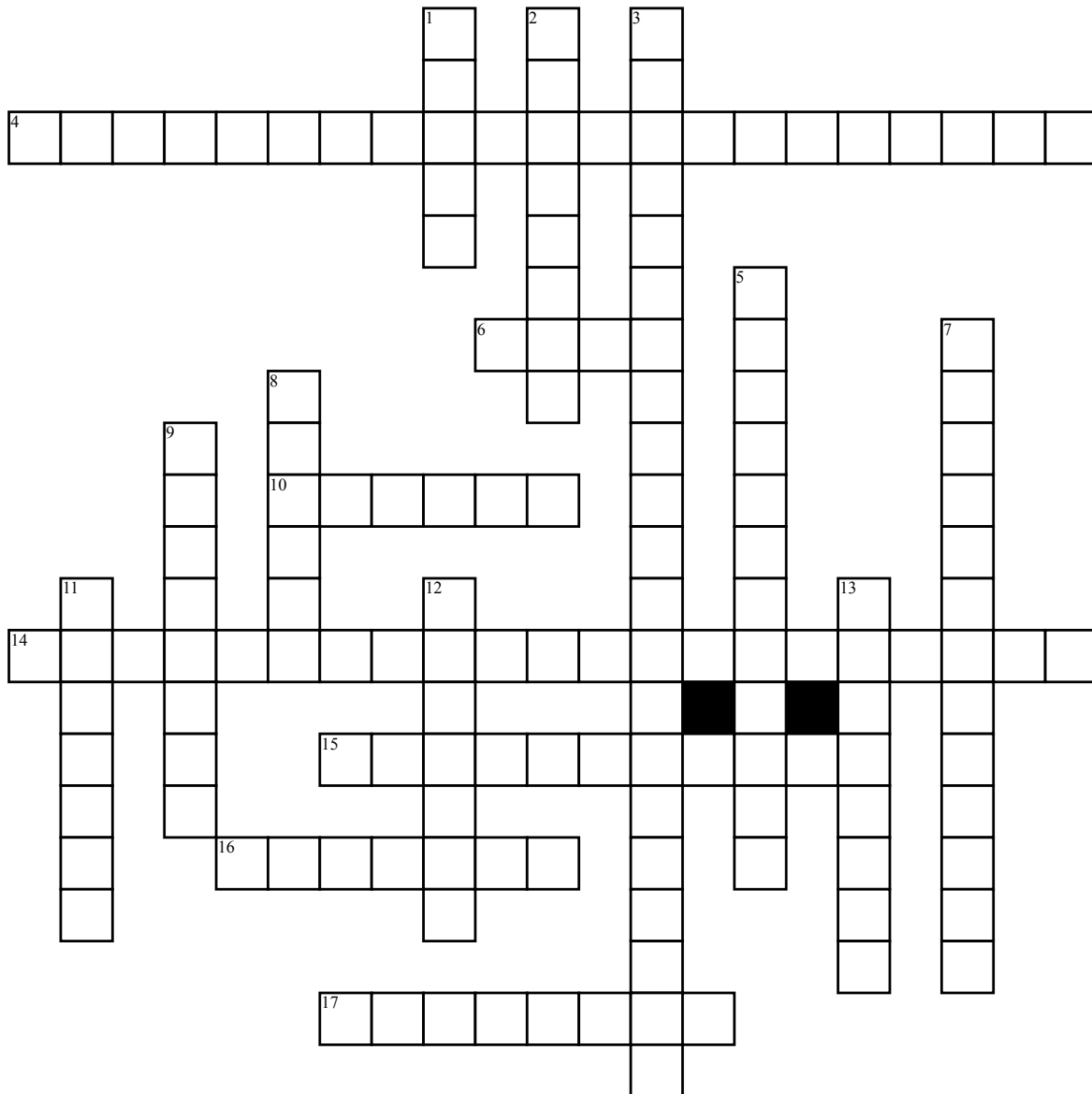


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Newton's law of motion



## Across

**4.** Whenever one object exerts a force on a second object the second object exerts an equal and opposite force on the first

**6.** Scalar quantity of matter in an object

**10.** Force caused by gravity due to its mass

**14.** The acceleration of an object is directly proportional to the net force acting on the object, is in the direction of the net force and is inversely proportional to the mass of the object

**15.** Upward supportive force

**16.** pull of an object on any other object

**17.** Resistive force that opposes the motion or attempted motion of an object either past another object with which it is in contact or through a fluid

## Down

**1.** any push or pull exerted on an object, measured in Newton's

**2.** SI units of mass = 1000 grams; one kilogram is the mass of 1 L of water

**3.** Every object continues in a state of rest or of uniform speed in a straight line unless acted on by a nonzero net force

**5.** Is a force that is exerted on an object by a person or another object or force

**7.** Type of friction caused by air; always opposes motion

**8.** SI unit of force. One newton is the force that will give an object of mass 1 kg an acceleration of 1 m/s<sup>2</sup>

**9.** Opposing force that goes against motion; caused by contact between two surfaces

**11.** Stretching force; ex- spring

**12.** Property of things to resist changes in motion

**13.** Product of the mass of an object and its velocity