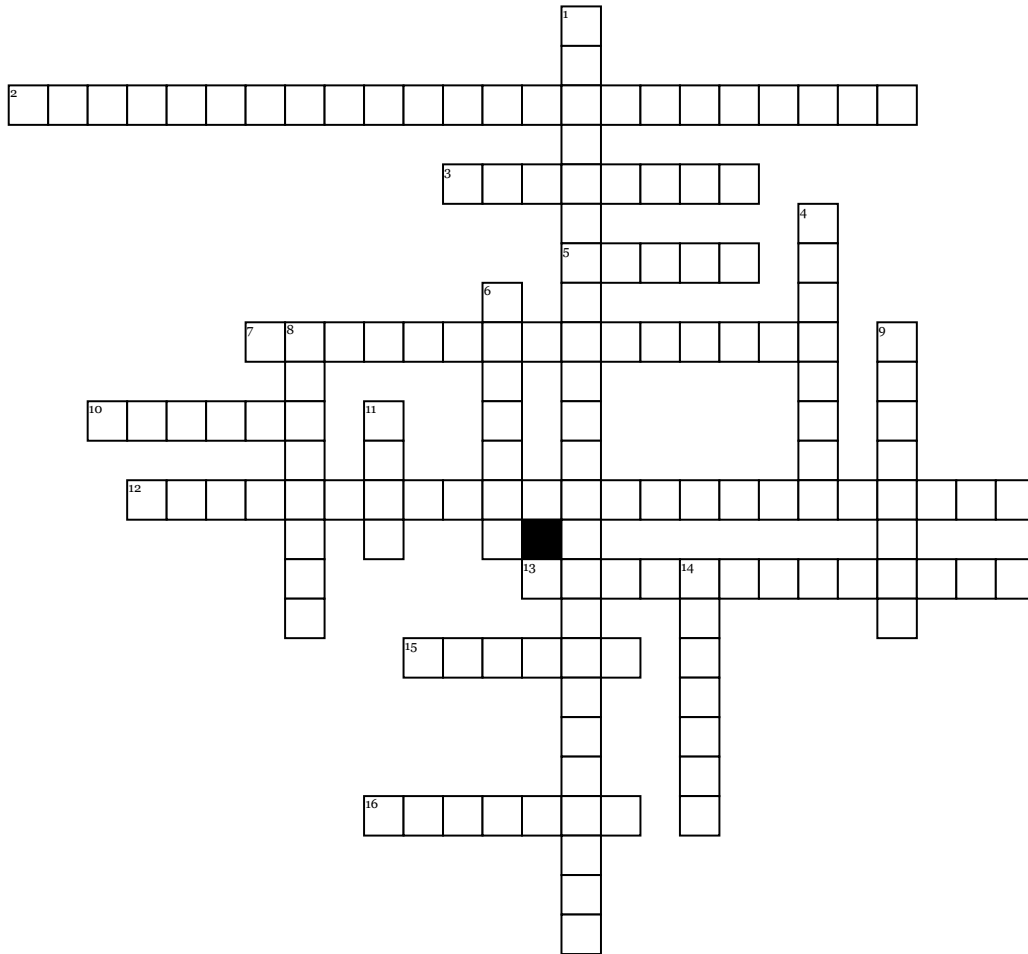


Name: \_\_\_\_\_

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

# Newton's Laws of Motion



## Across

- 2.** "An object at rest will remain at rest, and an object moving at a constant velocity will continue moving at a constant velocity, unless it is acted upon by an unbalanced force." Another name is Law of Inertia  
**3.** Speed in a given direction  
**5.** The distance an object travels per unit of time  
**7.** Forces that produce a nonzero net force, which changes an object's motion  
**10.** The force of gravity on an object at the surface of a planet

**12.** "If one object exerts a force on another object, then the second object exerts a force of equal strength in the opposite direction on the first object."

**13.** Equal forces acting on an object in opposite directions

**15.** The action of moving or being moved

**16.** Force that attracts our bodies near earth

## Down

**1.** Acceleration depends on the object's mass and on the net force acting on the object."

**4.** The product of an object's mass and velocity

**6.** The tendency of an object to resist any change in its motion

**8.** The overall force on an object when all the individual forces acting on it are added together

**9.** The force that one surface exerts on another when the two surfaces rub against each other

**11.** Amount of matter in an object

**14.** The SI unit of force

## Word Bank

Momentum

Speed

Newtons First Law of Motion

Newtons Second Law of Motion

Balanced Force

Newtons

Friction

Motion

Net Force

Unbalanced Force

Velocity

Gravity

Inertia

Mass

Newtons Third Law of Motion

Weight