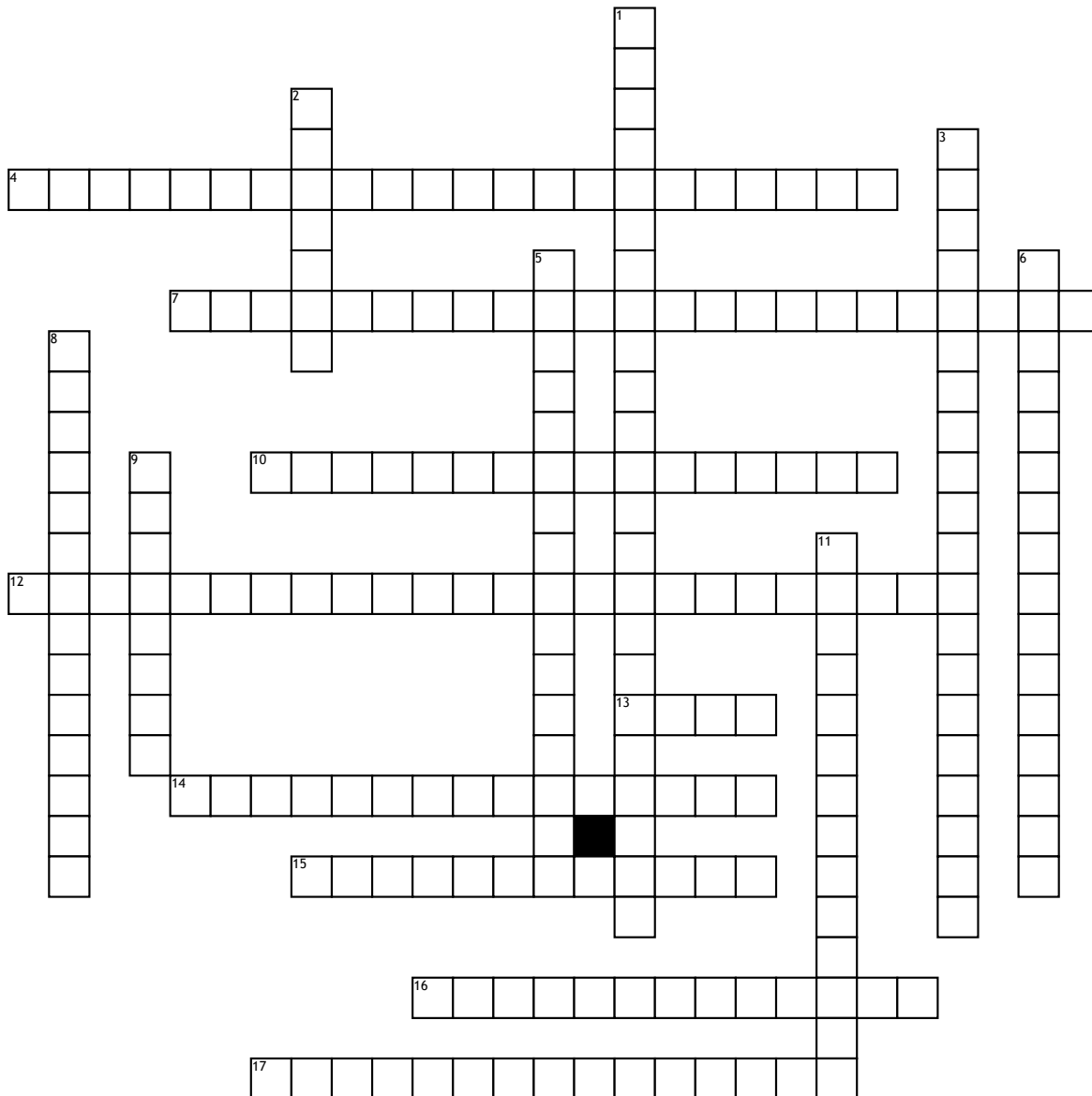


# Forces and Motion



## Across

4. In the absence of outside force, the total momentum of objects that interact does not change  
 7. An object will remain at rest or moving at a constant velocity unless it is acted upon by an unbalanced force  
 10. Causes the velocity of an object to change  
 12. Acceleration depends on the net force acting on the object and the object's mass  
 13. A measure of the amount of matter an object contains

14. When an object rolls across the surfaces

15. An elastic force that stretches or pulls matter  
 16. Occurs when a solid object moves through a fluid  
 17. When two solid surfaces slide over each other

## Down

1. 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

2. The kind of friction that slows a falling object

3. The tendency of an object to resist a change in motion  
 5. An object that is thrown  
 6. An elastic force that squeezes or pushes matter together  
 8. Equal forces acting on one object in opposite direction  
 9. Length of a path between two points  
 11. The friction that acts on objects that are not moving