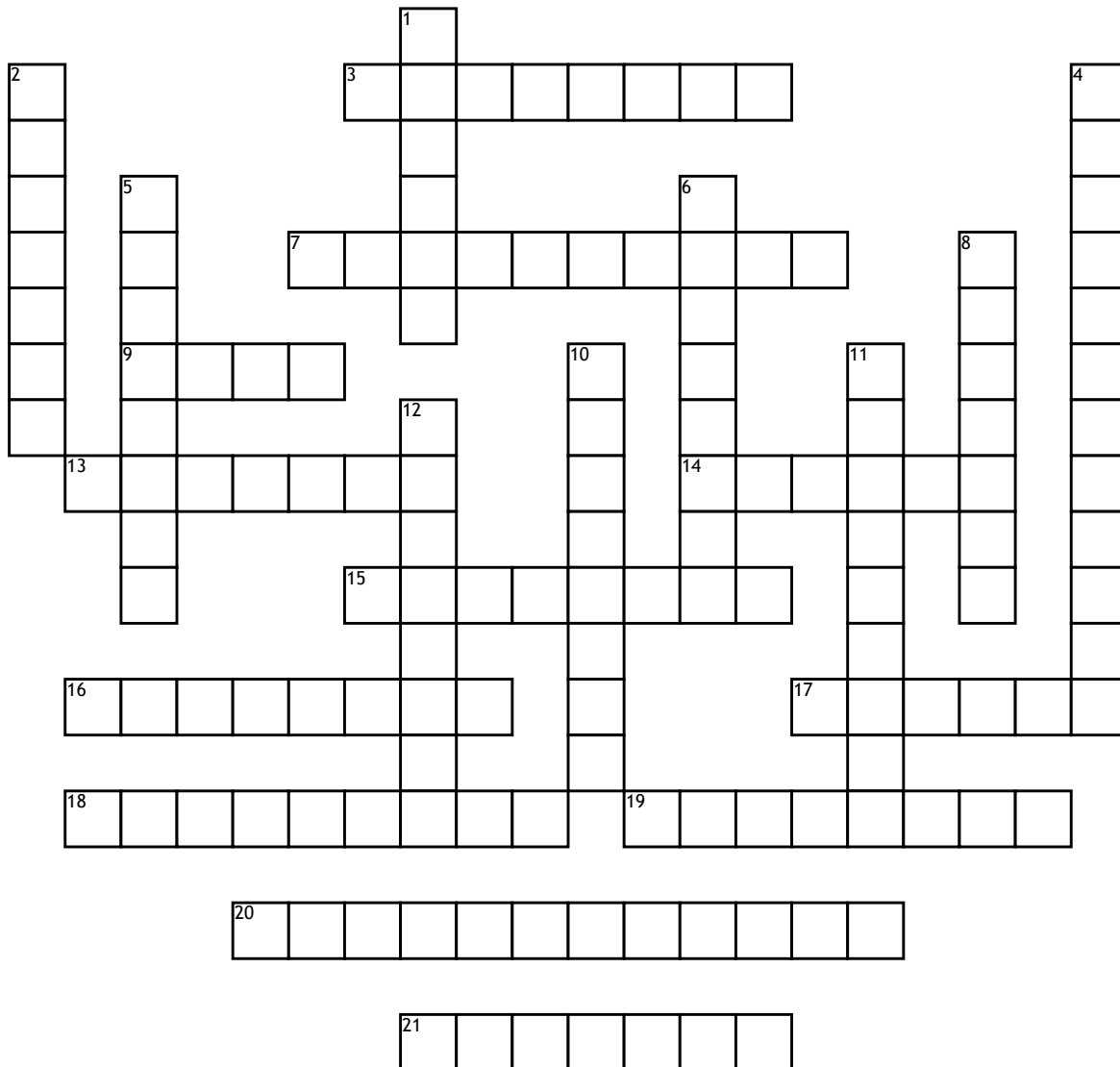


# Mechanics



## Across

3. Speed in a given direction.  
 7. A form of motion experienced by an object that is thrown and moves along a curved path under the action of gravity only  
 9. Newton described this as the amount of matter. It is the inertia of an object.  
 13. Reluctance to change.  
 14. The force that a surface) pushes back up with. It is always perpendicular to the surface the object is on.  
 15. Equal in magnitude but opposite in direction.

16. This opposes (goes against) motion.  
 17. The gravitational force on a body that can vary throughout the Universe  
 18. The overall force when more than one force is combined.  
 19. Equal and opposite to an action on a different object.  
 20. Rate of change of velocity.  
 21. The force of attraction between all matter.

## Down

1. One of these will give a mass of 1kg an acceleration of 1 m/s/s  
 2. Split a vector into vertical and horizontal parts.

4. Distance in a particular direction.  
 5. The constant velocity when the forces acting on a moving object balance.  
 6. How far you go. Sometimes the height or length.  
 8. This equals the change in momentum. It is calculated by Force x time.  
 10. How hard it is to stop something.  
 11. The horizontal and vertical parts we get when we resolve a vector.  
 12. The curve followed by a projectile.