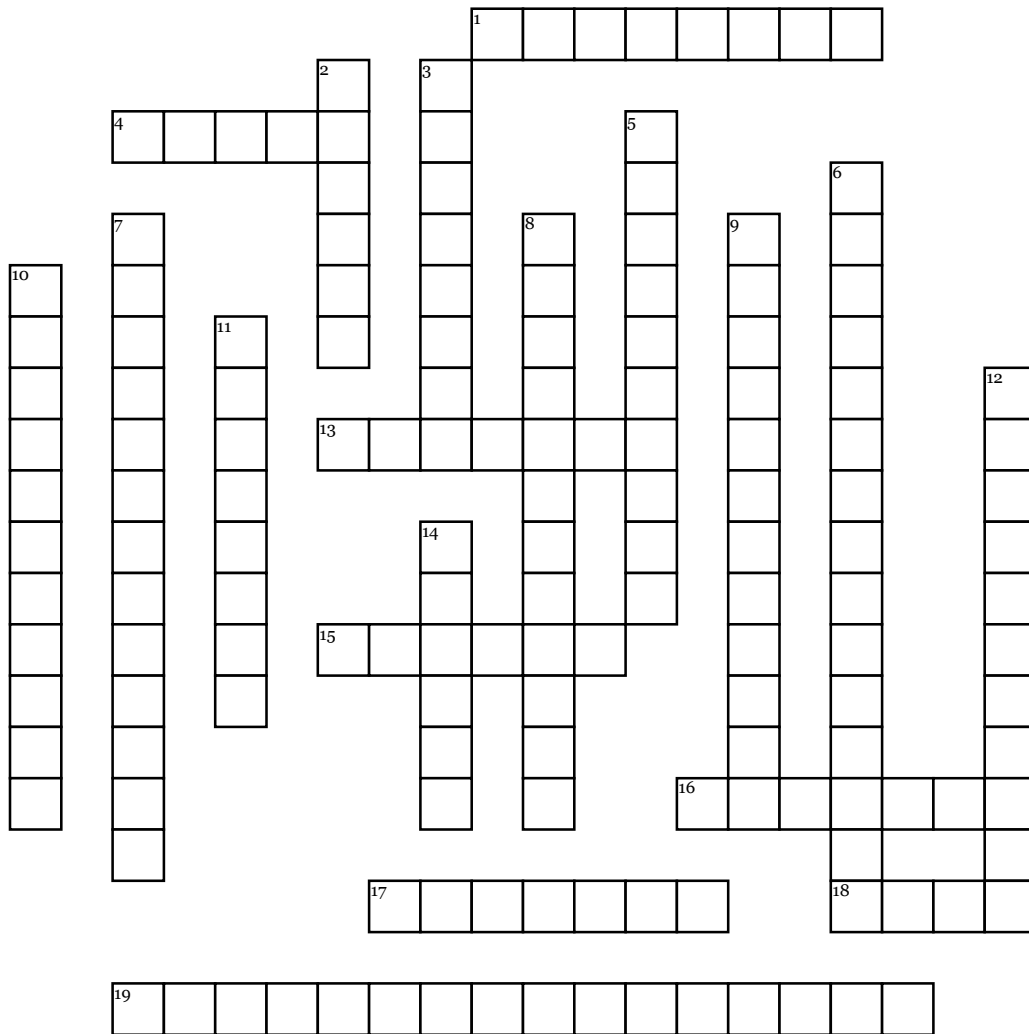


# Newton's Crossword Puzzle



## Across

1. forces occur in pairs such that if one object exerts a force on another object  
 4. something that causes a change in the motion of an object  
 13. the pulling force transmitted axially by means of a string, cable, chain, ect.  
 15. an attribute of the dynamics of a physical system from which the equations of motion of the system can be derived  
 16. the resistance of any physical object to any change in its state of motion  
 17. the force of attraction between all masses in the universe

18. the quantity of matter in a body regardless of its volume or of any forces acting on it  
 19. the displacement divided by time  
**Down**  
 2. the force exerted on a body by gravity  
 3. a catchall word that refers to any force that resists relative tangential motion  
 5. left to right  
 6. used to show the relative magnitude and direction of all forces acting upon an object in a given situation  
 7. a force that is caused by air

8. a force that is applied to an object by a person or another object  
 9. the rate of change of velocity of an object with respect to time  
 10. the support force exerted upon an object that is in contact with another stable object  
 11. up to down  
 12. rules of motion  
 14. a change in position of an object over time

## Word Bank

Friction	Inertia	Tension	Reaction	Normal Force
Newtons Laws	Mass	Weight	Motion	Applied Force
Air Resistance	Acceleration	Free Body Diagram	Gravity	Action
Constant velocity	Horizontal	Vertical	Force	