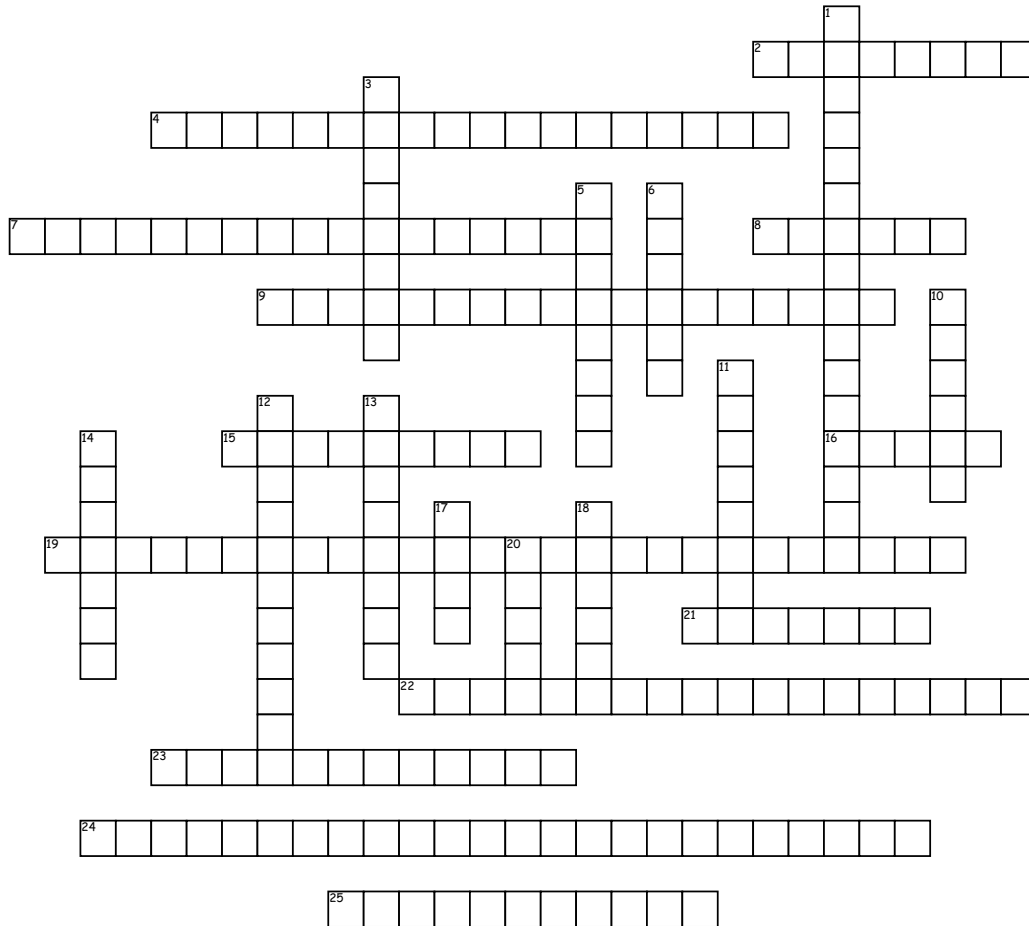


# Physics - 2nd Quarter



## Across

2. the speed of something in a given direction  
 4. a pair of objects that interact to produce a force on each other of equal magnitude but of opposite direction  
 7. length of the vector  
 8. a quantity having direction as well as magnitude, especially as determining the position of one point in space relative to another  
 9. a collision process whereby part of the total kinetic energy of the system is converted into a different form of energy, such as radiant energy  
 15. to hold (a property) constant during an interaction or process  
 16. the rate at which someone or something is able to move or operate  
 19. a field of force surrounding a body of finite mass

## Word Bank

weight  
 friction  
 vector  
 force  
 equilibrium  
 momentum  
 gravitational field strength

scalar  
 freefall  
 system  
 speed  
 inelastic collision  
 normalforce

netforce  
 actionreactionpair  
 mass  
 magnitudeofvector  
 elastic collision  
 conserved

accelerationduetogravity  
 scientificnotation  
 acceleration  
 velocity  
 impulse  
 inertia

21. a driving or motivating force

22. a way of writing very large or very small numbers by multiplying power of 10 and a number between 1 and 10

23. increase in the rate or speed of something

24. the acceleration which is gained by an object because of gravitational force

25. a state in which opposing forces or influences are balanced

## Down

1. a collision in which the total kinetic energy of the colliding bodies or particles is the same after the collision as it was before

3. the ideal falling motion of something subject only to a gravitational field

5. the resistance that one surface or object encounters when moving over another

6. (of a quantity) having only magnitude, not direction

10. a set of connected things or parts forming a complex whole

11. the quantity of motion of a moving body, measured as a product of its mass and velocity

12. force exerted upon an object that is in touch with another stable object

13. overall force acting on an object

14. a property of matter by which it retains its state of rest or its velocity along a straight line so long as it is not acted upon by an external force

17. a coherent, typically large body of matter with no definite shape

18. a body's relative mass or the quantity of matter contained by it

20. strength or energy as an attribute of physical action or movement