

1. <b>kinematics</b>	the study of motion without examining the causes; the description of motion	21. <b>velocity</b>	the time rate of change of displacement
2. <b>kinetic energy</b>	energy of motion	22. <b>weight</b>	the force of gravity on an object
3. <b>law of conservation of energy</b>	energy can neither be created nor destroyed but only changed in form	23. <b>work</b>	the product of force and displacement parallel to the force
4. <b>law of conservation of momentum</b>	in the absence of external forces, the sum of the momenta before the collision is equal to the sum of the momenta after the collision		
5. <b>mass</b>	a fundamental physical quantity; a measure of the amount of matter or inertia		
6. <b>metre</b>	a fundamental unit of length; it is equal to the distance travelled by light in a vacuum in the fraction $1/299,792,458$ of a second		
7. <b>momentum</b>	the product of mass and velocity of a moving body		
8. <b>motion</b>	change in position relative to an observer		
9. <b>Newton</b>	the SI unit of force; it is that force which will accelerate a mass of 1 kg at 1m.s		
10. <b>Newton's First Law</b>	a body will remain at rest or travel with constant velocity unless acted upon by an unbalanced force		
11. <b>Newton's Second Law</b>	the acceleration of an object is directly proportional to the resultant force acting on it and inversely proportional to its mass		
12. <b>Newton's Third Law</b>	if one body exerts a force on a second body, the second body exerts the same force back on the first body; to every action there is an equal and opposite reaction		
13. <b>potential energy</b>	energy due to position or configuration; stored energy		
14. <b>resolution of vectors</b>	the breaking down of a vector into its components		
15. <b>resultant</b>	that single vector which has the same effect as a number of other vectors; the vector sum of a number of vectors		
16. <b>resultant force</b>	that single force which would have the same effect as two or more forces applied to the same point		
17. <b>scalar</b>	a quantity that can be represented completely, purely by a number		
18. <b>speed</b>	time rate of change of distance		
19. <b>tension</b>	forces in ropes, strings, wires, cables, etc.		
20. <b>vector</b>	a quantity that needs both a size and a direction to describe it fully and which obeys special laws of addition		