kinematics	the study of motion without examining the causes; the description of motion
kinetic energy	energy of motion
law of conservation of energy	energy can neither be created nor destroyed but only changed in form
law of conservation of momentum	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
mass	a fundamental physical quantity; a measure of the amount of matter or inertia

metre	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
momentum	the product of mass and velocity of a moving body
motion	change in position relative to an observer
Newton	the SI unit of force; it is that force which will accelerate a mass of 1 kg at 1m.s
Newton's First Law	a body will remain at rest or travel with constant velocity unless acted upon by an unbalanced force

Newton's Second Law	the acceleration of an object is directly proportional to the resultant force acting on it and inversely proportional to its mass
Newton's Third Law	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
potential energy	energy due to position or configuration; stored energy
resolution of vectors	the breaking down of a vector into its components
resultant	that single vector which has the same effect as a number of other vectors; the vector sum of a number of vectors

resultant force	that single force which would have the same effect as two or more forces applied to the same point
scalar	a quantity that can be represented completely, purely by a number
speed	time rate of change of distance
tension	forces in ropes, strings, wires, cables, etc.
vector	a quantity that needs both a size and a direction to describe it fully and which obeys special laws of addition

velocity	the time rate of change of displacement
weight	the force of gravity on an object
work	the product of force and displacement parallel to the force