acceleration	the time rate of change of velocity; can be a speeding up, slowing down and/or changing of direction
air resistance	friction caused by movement of bodies through the air
average speed	defined as distance over time
average velocity	defined as displacement over time
bearings	angles measured clockwise from north; used in vector analysis

centripetal acceleration	the acceleration directed towards the centre of a circle about which an object is moving
centripetal force	the force directed towards the centre of a circle necessary for an object to follow a circular path
collision	when two or more objects exert forces on each other, generally over a short time interval
component	one of the numerous vectors that can be added vectorially to yield a resultant vector
displacement	change in position in a given direction

dynamics	the study of the causes of motion
elastic collision	a collision in which kinetic energy is conserved
energy	the capacity for doing work
equilibrium	the state in which a body does not undergo any changes in its motion; the resultant force is zero
force	that which changes the motion or shape of a body

friction	a force that always opposes motion; arises as a result of contact between different materials
gravitational field	that region of space in which a mass experiences a force of attraction from other masses
gravity	the force of gravitation on an object
impulse	the product of force and time; equals the change in momentum
inelastic collision	a collision in which kinetic energy is not conserved; it is conserved into other forms such as heat and sound

inertia	the property of matter that causes it to resist changes in motion
instantaneous velocity	the velocity at an instant of time; found by taking the average velocity over an extremely small time interval; it is equal to the slope of the tangent at the point on a displacement-time graph
joule	the unity of energy (or work); the product of a force of one newton acting through a distance of one metre
kilogram	the SI unit of mass