11 Physics 6 Moving About - Part 1

1.	**acceleration**	the time rate of change of velocity; can be a speeding up, slowing down and/or changing of direction
2.	**air resistance**	friction caused by movement of bodies through the air
3.	**average speed**	defined as distance over time
4.	**average velocity**	defined as displacement over time
5.	**bearings**	angles measured clockwise from north; used in vector analysis
6.	**centripetal acceleration**	the acceleration directed towards the centre of a circle about which an object is moving
7.	**centripetal force**	the force directed towards the centre of a circle necessary for an object to follow a circular path
8.	**collision**	when two or more objects exert forces on each other, generally over a short time interval
9.	**component**	one of the numerous vectors that can be added vectorially to yield a resultant vector
10.	**displacement**	change in position in a given direction
11.	**dynamics**	the study of the causes of motion
12.	**elastic collision**	a collision in which kinetic energy is conserved
13.	**energy**	the capacity for doing work
14.	**equilibrium**	the state in which a body does not undergo any changes in its motion; the resultant force is zero
15.	**force**	that which changes the motion or shape of a body
16.	**friction**	a force that always opposes motion; arises as a result of contact between different materials
17.	**gravitational field**	that region of space in which a mass experiences a force of attraction from other masses
18.	**gravity**	the force of gravitation on an object
19.	**impulse**	the product of force and time; equals the change in momentum
20.	**inelastic collision**	a collision in which kinetic energy is not conserved; it is conserved into other forms such as heat and sound
21.	**inertia**	the property of matter that causes it to resist changes in motion
22.	**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
23.	**joule**	the unity of energy (or work); the product of a force of one newton acting through a distance of one metre
24.	**kilogram**	the SI unit of mass