Position, Distance and Displacement

- Motion in a straight line is one of the simplest forms of motion in a specific direction and is called rectilinear motion.
- An object is in motion if it changes position relative to a reference point.

Position is a measurement of a location, with respect to some reference point (usually an origin).

- Motion can be described by distance, speed, displacement, and velocity, where displacement and velocity also include direction.
- Distance is a physical quantity which describes the length between two points (places) and is the total path length travelled by a body. Distance is a scalar quantity.
- Displacement is the change in position of a body in a certain direction.