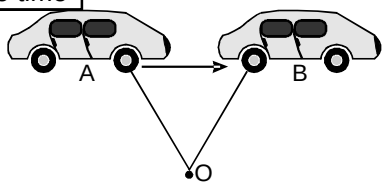
Class-IX(Cancept Map)

Motion

When object changes it position with respect to time

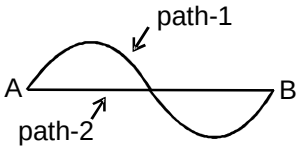
Rest

When object changes it position with respect to time



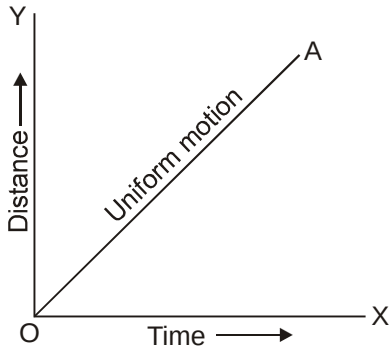
Physical Quantities
- Scalar : depend only on magnitude
- Vector : Depend on magnitude and directions

Distance → Scalar quantity ; S.I. unit metre

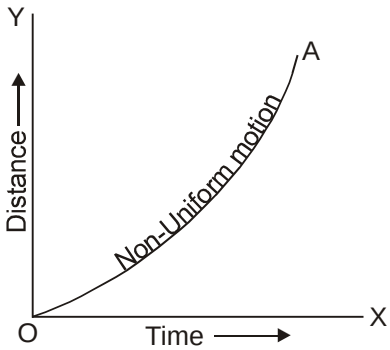


Displacement → Vector quantity ; S.I. unit metre

Speed → Scalar quantity ; S.I. unit metre per second
- Average speed
- uniform speed
- Non-uniform speed
- Instantaneous speed



Velocity → Vector quantity ; S.I. unit metre per second
- Average Velocity
- uniform Velocity
- Non-uniform Velocity
- Instantaneous Velocity



Acceleration → Vector quantity ; S.I. unit metre per second square
- Positive Acceleration
- Negative Acceleration

$$a = \frac{v-u}{t}$$

Equations of motion
- $v = u + at$
- $s = ut + 1/2at^2$
- $v^2 - u^2 = 2as$