

- An object is said to be at rest if it does not change its position with respect to its surroundings.
- An object is said to be in motion if it changes its position with respect to its surroundings.

Types of Motion

- (1) **Periodic Motion:** that repeats on a regular cycle. eg:- revolution of earth around sun.
- (2) **Rectilinear Motion:** a point mass body is moving along a straight line. gi. a car moving on a straight road.
- (3) **Oscillatory Motion:** it is motion of the oscillating body around its rest position, where the motion is repeated in equal period of time. eg: motion of a pendulum.
- (4) **Circular motion:** a particle moves around a fixed point in circular path.

Measurement of length: the measurement or extent of something from one end to the other end. there are two methods of measuring the length

- direct method
- indirect method

Measurement of Time: any phenomenon that repeats itself regularly after a fix interval can serve as a clock.

- different units of time are used to measure the duration of different events.

Measurement of Mass: mass of body is the quantity of matter in the body, which does not depend upon temperature, pressure or location of the body in space.

Fundamental Units

- Metre
- Kilogram
- Second
- Kelvin

Derived Units

- Force
- Power
- Area
- Energy
- Work

Estimation & Accuracy

Accuracy of a measurement is a measure of how close the measured value is to The true value of the equality.