

Motion

Motion is the change in the position of an object with time relative to a fixed reference point.

Type of Motion	Meaning	Example
Rectilinear	Motion in a straight line	Train on a straight track
Circular	Motion along a circular path	Stone tied to a string
Rotational	Object rotates about its own axis	Ceiling fan
Periodic	Repeats at equal intervals	Pendulum
Oscillatory	To and fro about mean position	Swing

Difference between Rotational and Circular Motion

Basis	Rotational Motion	Circular Motion
Definition	Turns about its own axis	Moves along a circular path
Axis	Has a fixed axis	May not rotate about its own axis
Position	Different parts rotate around axis	Whole object changes position around a centre
Example	Earth spinning, fan	Earth revolving around Sun, satellite