

Types of Motion

Speed



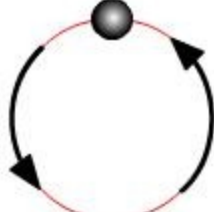
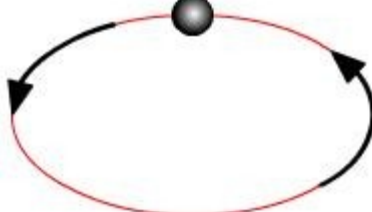

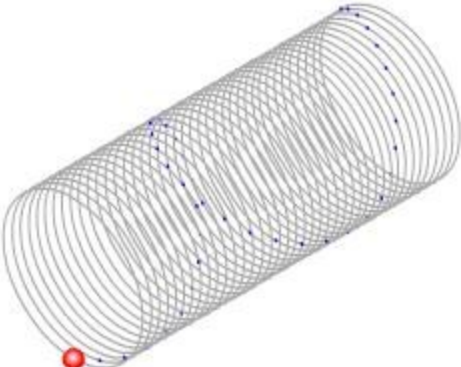
The rate of movement of a body is called its speed. Speed is described in metres per second, (m/s) when using the metric International System of Units (SI).

Velocity

Velocity includes two elements, the speed of a body and its direction, e.g. a body is moving at 2 metres per second North.

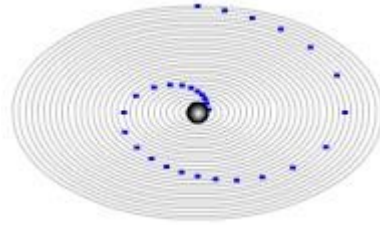
Acceleration

Acceleration is the rate of change of velocity. The change may be a change in speed or a change in direction, or a change in speed and direction.

Linear motion Motion in a straight line is called linear motion.	
Reciprocating motion Motion backwards and forwards in a straight line is called reciprocating motion.	
Rotary motion Motion along a circular path is called rotary motion.	
Elliptical motion Motion along an elliptical path is called elliptical motion.	
Oscillating motion A swinging motion is called oscillating motion	
Helical motion Helical motion is a combination of rotary motion and linear motion, e.g. imagine the path of a point (its locus) on one face of a nut rotating and moving along a screw. The point has rotary motion but it also moves along the screw.	

Spiral motion

Spiral motion is a type of rotary motion where the radius of rotation of a body increases incrementally, creating a spiral.



Conical motion

Conical motion is a combination of spiral motion and linear motion, e.g. imagine the path of a point (its locus) moving from the apex of a cone (the tip of the cone) to the base as it moves around the cone.

