

Forces

Name	What is it?	Example	Diagram
Tension	Stretching force	Guitar strings	
Compression	Squashing / pushing force	Object in a vice	
Torsion	Twisting force	Opening a bottle	
Sheer	Cutting force	Scissors	
Centrifugal	Outward force from a spinning object	Merry go round	
Bending	Where a beam is deflected out of shape	Bridge, diving board	

Motion

Name	What is it?	Example	Diagram
Rotary	Motion in a circle, clockwise or anticlockwise	Merry go round, drill	
Linear	Motion in a straight line, in one direction	Car on a straight road	
Oscillating	Motion going forwards and backwards in a circular arc	Swing, rocking horse, pendulum	
Reciprocation	Motion in a straight line, going forwards and backwards	Scroll saw, sewing machine	