

Key Vocabulary		
Force	<p>A force is an interaction that causes and affected object to be pushed or pulled in a certain direction.</p> <p>Force causes objects to:</p> <ul style="list-style-type: none"> • accelerate, • decelerate • change direction • change shape. 	
Friction	<p>Friction is a force between two surfaces that are sliding, or trying to slide, across each other. Friction always works in the direction opposite to the direction in which the object is moving, or trying to move. Friction always slows a moving object down.</p>	
Gravity	<p>A natural force that causes things to fall towards the centre of the earth.</p>	
Air resistance	<p>Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air, air particles hit the aeroplane making it more difficult for it to move through the air. It slows the moving object.</p>	
Water resistance	<p>Water resistance is a type of friction between water and another material. For example if you go swimming, there is friction between your skin and the water particles.</p>	

Key Vocabulary		
Mechanism	<p>A system of parts working together in a machine.</p>	
Lever	<p>A bar or handle that moves around a fixed point, so that one end of it can be pushed or pulled in order to control the operation of a machine.</p>	
Pulley	<p>A pulley is a device consisting of a wheel over which a rope or chain is pulled in order to lift heavy objects. The weights are moved via a cable and pulley system.</p>	
Gear	<p>A device, often consisting of connecting sets of wheels with teeth around the edge, that controls how much power from an engine goes to the moving parts of a machine.</p>	

Key scientists	
<p>Isaac Newton (1643 – 1727)</p>	<p>Famous for his theory of gravity and his three laws of motion. Force is measured in Newtons, after Newton.</p>
<p>Galileo Galilei (1564 – 1642)</p>	<p>Developed the law of falling bodies which states that objects fall at the same speed, regardless of weight or shape.</p>