

What should I already know?		Key Vocabulary - Definitions	
<ul style="list-style-type: none"> <li>There is a difference between contact and non-contact forces.</li> <li>Objects move differently on different surfaces as a result of contact and non-contact forces.</li> </ul>		<i>accelerate</i>	Beginning to move more quickly.
What will I know by the end of the unit?		<i>air resistance</i>	A force that opposes the movement of an object passing through air.
<p>That unsupported objects fall towards Earth due to the force of gravity.</p>	<ul style="list-style-type: none"> <li>Gravity is a force that pulls objects down towards the <b>centre of the Earth</b>.</li> <li>Gravity stops things <b>floating away into space</b> so when things are thrown, kicked or shot into the air (like a football), <b>gravity</b> pulls them back towards <b>Earth</b>.</li> <li><b>Sir Isaac Newton</b> discovered gravity circa 1665 as he observed an apple <b>falling</b> from a tree.</li> </ul>  	<i>attract</i>	Pull something towards it.
		<i>decelerate</i>	Beginning to move more slowly.
		<i>force</i>	Something that changes the motion of an object.
		<i>friction</i>	The resistance between one surface moving over another.
<p>That motion may be restricted by air resistance, water resistance and friction.</p>	<ul style="list-style-type: none"> <li><b>Water resistance</b> is a force that slows down objects that are moving through <b>water</b>.</li> <li><b>Air resistance</b> is a force that slows down objects that are moving through <b>air</b>.</li> <li><b>Friction</b> is the resistance between two surfaces that are in contact with each other.</li> </ul>    <p><i>water resistance</i>      <i>air resistance</i>      <i>friction</i></p> <ul style="list-style-type: none"> <li>If <b>forces</b> acting on an object are the same strength then they are <b>balanced</b>, if they are different then they are <b>unbalanced</b>.</li> </ul>   <p><i>balanced force</i>      <i>unbalanced force</i></p>	<i>gear</i>	A toothed wheel that works with others to alter the relationship between the speed of a driving mechanism and speed of driven parts.
		<i>gravity</i>	A force that attracts objects towards the centre of the Earth.
		<i>lever</i>	A bar that pivots on a fixed support.
		<i>magnetic force</i>	A force that occurs between electrically charged particles.
		<i>mechanism</i>	A system of parts working together in a machine.
<p>Some mechanisms allow a smaller force to have a greater effect.</p>	<ul style="list-style-type: none"> <li><b>Gears</b> are different sized, <b>toothed wheels</b> that lock together and turn one another.</li> <li><b>Pulleys</b> are <b>wheels</b> joined by a belt. and they can be used to change the <b>speed, direction or force</b> of a movement.</li> <li><b>Levers</b> are <b>mechanisms</b> that make objects easier to lift.</li> </ul>    <p><i>lever</i>      <i>gear</i>      <i>pulley</i></p>	<i>poles</i>	One of two points of a magnet (North or South).
		<i>pulley</i>	A system of wheels and rope which acts to change the direction of a force applied
		<i>repel</i>	To be pushed back or away by a force.
		<i>water resistance</i>	A force that opposes the movement of an object passing through air.