



# Forces

## Year 5— Summer 2



<p><b>Force</b></p>	<p>Something that causes the movement of objects around us e.g. push, pull, twist.</p>
<p><b>Gravity</b></p>	<p>The force that pulls things to the centre of the Earth. The force of gravity keeps all the planets in orbit around the Sun.</p>
<p><b>Air resistance</b></p>	<p>The frictional force of air acting against an object.</p>
<p><b>Friction</b></p>	<p>When one object rubs against another.</p>
<p><b>Mechanisms</b></p>	<p>A simple machine.</p>
<p><b>Lever</b></p>	<p>A length that is free to rotate on a pivot point (e.g. a see-saw).</p>
<p><b>Pulleys</b></p>	<p>A loop of rope over one or more wheels that helps with lifting things.</p>
<p><b>Gears</b></p>	<p>Wheels with teeth that slot together which can increase a turning force.</p>
<p><b>Isaac Newton</b></p>	<p>Born in 1643, a scientist who was famous for the discovery and understanding of gravity.</p>

<p><b>What do we already know about forces?</b></p>	<p>I know that a force is a push or pull that can speed up, slow down, stop or start a movement. I know that magnets can cause this movement at a distance.</p>	
<p><b>What is friction?</b></p>	<p>When an object moves on a surface, the texture of the surface and the object will affect how it moves. This is <b>friction</b>. It is easier to push or pull something along a smooth surface than a bumpy surface</p>	
<p><b>What is air resistance?</b></p>	<p>When an object moves through the air, <b>air resistance</b> can act between the moving surfaces, acting to slow the movement down.</p>	
<p><b>What is water resistance?</b></p>	<p>When an object moves through the water, <b>water resistance</b> can act between the moving surfaces, acting to slow the movement down.</p>	
<p><b>What is gravity?</b></p>	<p><b>Gravity</b> is a force that holds things to the Earth's surface and prevents things from floating off into the Earth's atmosphere. It ensures that unsupported objects fall back down to Earth.</p>	
<p><b>What are gears, levers and pulleys?</b></p>	<p>These are <b>devices</b> that allow a small amount of force to be increased to a larger force. These <b>mechanisms</b> are also known as <b>simple machines</b>.</p>	

