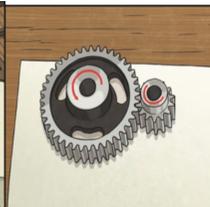


What I should already know	Gravity	Vocabulary	
<p>Forces are pushes and pulls which make things move and stop moving.</p> <ul style="list-style-type: none"> -Most forces need contact between objects, but magnets can act at a distance. -Magnets are made of materials that create a magnetic field (the area in space where the force of magnets can be detected). -Forces are shown by arrows in diagrams. The bigger the arrow, the bigger the force. -When forces are unbalanced, objects can speed up, slow down, or change direction. 	<p>Gravity attracts all things towards each other.</p> <ul style="list-style-type: none"> -It has been around since the beginning of the universe and applies to all matter and energy -The gravitational force between two object is affected by their mass. If you double the mass of one of them, you will double the gravitational force. -Without gravity we would fly right off the planet! The moon's gravity causes our ocean tides on Earth. The Sun's gravity keeps Earth in orbit around the Sun. -We don't actually "feel" gravity. We only feel the effects of trying to overcome it by jumping or when we fall. -Sir Isaac Newton discovered gravity around 300 years ago. The tale is that he saw an apple fall from a tree, and wondered what force made it fall to the ground.  	<p>Air resistance</p>	<p>A force that is caused by air with the force acting in the opposite direction to an object moving through the air</p>
<p>What is a force?</p>	<p>Machines and Mechanisms</p>	<p>Force</p>	<p>A push or pull upon an object resulting from its interaction with another object</p>
<p>There are a number of different forces that affect us in our daily lives: Applied force: The force placed on an object by a living creature. Friction: the force that occurs when an object or surface moves over another object or surface. Air resistance is a type of friction force that pulls against an object travelling through the air. Some objects are more 'streamlined', meaning that the air pulls on them less, and they travel faster. Water resistance is the friction force on objects floating or moving in water. Surface resistance is the friction force of objects moving across a surface.</p> 	<p>Simple machines and mechanisms include pulleys, gears and levers. They can be used to turn a small force into larger forces. This means that we can use these machines to accomplish things more easily.</p> <ul style="list-style-type: none"> -Levers give us extra pushing or pulling force and help us lift greater weights. -Gears are different sized cogs which work together to give a machine extra force. -Pulleys are wheels and ropes that work together to lift heavy objects.   	<p>Friction</p>	<p>The resistance that one surface or object encounters when moving over another</p>
		<p>Gears</p>	<p>A toothed wheel that works with other: to alter the relation between the speed of a driving mechanism (e.g. engine) and the speed of the driven parts (e.g. the wheels)</p>
		<p>Gravity</p>	<p>The force that attracts a body towards the centre of the earth</p>
		<p>Levers</p>	<p>A rigid bar resting on a pivot that is used to move a heavy or firmly fixed load</p>
		<p>Mass</p>	<p>The weight measured by an objects acceleration under a given force or by the force exerted on it by gravity</p>
		<p>Pull force</p>	<p>To draw or haul towards oneself or itself, in a particular direction</p>
		<p>Pulleys</p>	<p>A wheel with a grooved rim around the changes the direction of a force applied to the cord</p>
		<p>Push force</p>	<p>To move something in a specific way by exerting force</p>
		<p>Water resistance</p>	<p>A force that is caused by water with the force acting in the opposite direction to an object moving through the water</p>