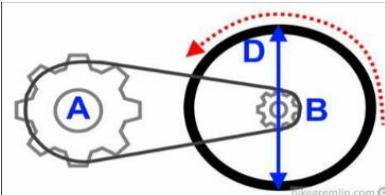
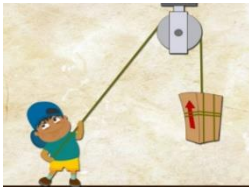
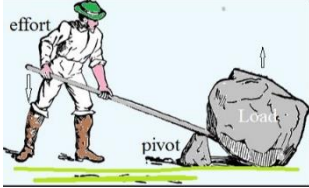


Mighty Oaks Knowledge Organiser - Forces

Subject Specific Vocabulary			Sticky Knowledge about Forces
friction	Friction is a force between two surfaces that are sliding, or trying to slide, across each other.	 <p>gears</p>  <p>pulley</p>  <p>lever</p>	<input type="checkbox"/> Frictional force is any force that is caused due to the friction between 2 surfaces. An example of this might be when you put on the brakes on your bike.
gravity	Gravity is a force which tries to pull two objects towards each other.		<input type="checkbox"/> Gravity is the pulling force acting between the Earth and a falling object, for example when you drop something. Gravity pulls objects towards the centre of the Earth.
air resistance	Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air.		<input type="checkbox"/> Forces can be contact or non-contact. Contact forces are where objects exert force on one another: Friction is a contact force. Non-contact forces are 'invisible' like gravity.
water resistance	If you go swimming, there is friction between your skin and the water particles.		<input type="checkbox"/> Any kind of force is really just a push or a pull.
levers	A lever can be described as a long rigid body with a fulcrum along its length.		<input type="checkbox"/> Air resistance is the force on an object moving through air, such as a plane moving through the sky. Air resistance affects how fast or slowly objects move through the air
pulleys	Pulley is a simple machine and comprises of a wheel on a fixed axle, with a groove along the edges to guide a rope or cable.	Important facts to know by the end of the forces topic: <ul style="list-style-type: none"> Isaac Newton was a British scientist famous for his work on forces. Force is measured in Newtons – named after him. Gears are used to change the speed and/or direction of a force. A lever uses a fulcrum and means that heavy objects can be moved using less effort. An example of a simple lever would be a wheelbarrow. Pulleys are used with ropes or chains so that thing can be lifted with less effort. 	<input type="checkbox"/> Water resistance is the force on objects moving in water.
gears	Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well.		<input type="checkbox"/> Magnetic force is an invisible force created by electrons. Magnetic force controls magnetism and electricity.
Force meter	A force meter is a device used for measuring the amount of force. Force is measured in Newtons.		
Galileo	Galileo (1564-1642) developed the telescope to enable close observation of the night sky.		
Newton	During his lifetime, Newton (1642-1717) developed the theory of gravity and made breakthroughs in the area of optics, such as the reflecting telescope.		