




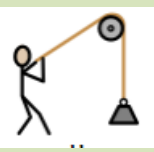

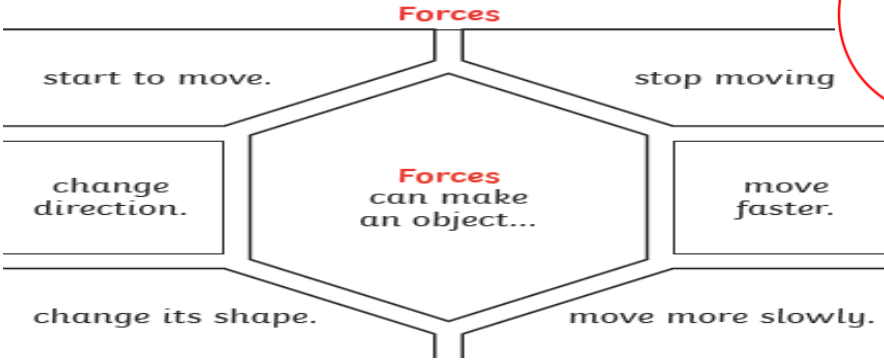


Year 5, Spring Term 2- Forces



New Vocabulary

gravity		A pulling force exerted by the Earth (or anything else that has mass).
air resistance		A type of friction caused by air pushing against any moving objects.
water resistance		A type of friction caused by water pushing against any moving object.
friction		The force that acts upon one surface when it moves against another.
gear		Wheels with teeth that slot together. When one wheel is turned the other one turns as well.
pulley		A simple machine that makes it easier to lift or move a heavy object. It includes at least one wheel and a length of rope.
lever		A simple machine used to increase force. They only have two parts – the handle and the fulcrum (pivot).



Examples of forces in action:


		
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Water resistance and air resistance are forms of friction. Friction is sometimes helpful and sometimes unhelpful. For example, air resistance is helpful as it stops the skydiver hitting the ground at high speed. Friction on a bike chain can make the bike harder to pedal so it is unhelpful.

Influential Individual – Isaac Newton



Isaac Newton is famously thought to have developed the theory of gravity when he saw an apple fall to the ground from an apple tree.

		
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<p>Pulleys can be used to make a small force lift a lighter load. The more wheels in a pulley, the less force is needed to lift a weight.</p>	<p>Gears or cogs can be used to change the speed, force or direction of a motion. When two gears are connected, they always turn in the opposite direction to each other.</p>	<p>Levers can be used to make a small force lift a lighter load. A lever always rests on a pivot.</p>
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