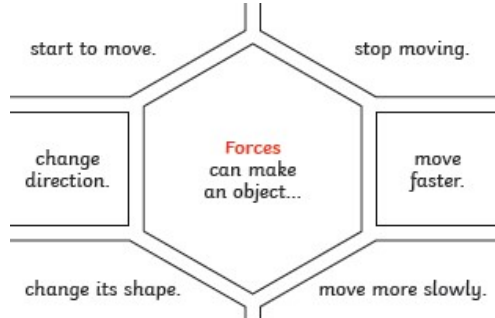



Forces in Action

Class 3 and 4

Key Vocabulary					Key Knowledge
Forces	Pushes or pulls	Gravity	A pulling force exerted by Earth (or anything else which has mass)	Gravitational Pull	The pull that the Earth exerts on an object, pulling it towards the Earth's centre. Keeps us on the ground!
Weight	The measure of the force of gravity on an object.	Mass	A measure of how much matter (stuff) is inside an object.		
Air Resistance	A type of friction caused by air pushing against any moving object.	Water Resistance	A type of friction caused by water pushing against any moving object.	Friction	A force that acts between two surfaces or objects that are moving across each other.
Streamlined	When an object is shaped to minimise the effects of air or water resistance.	Mechanism	Parts which work together in a machine e.g. pulleys, gears and levers.	Buoyancy	An upward force that a liquid applies to an object.

Key Knowledge

How do forces work?		<p>Examples of forces in action:</p>  <p>Friction is sometimes helpful and unhelpful. What do you think? What is streamlining.</p>
----------------------------	--	--

Who is Isaac Newton and what is gravity?	Isaac Newton is famously thought to have developed his theory of gravity when he saw an apple fall from the tree.	How can mechanisms change forces?		
		<p>Pulleys Pulleys can be used to make a small force lift a lighter load. The more wheels in a pulley, the less force needed.</p>	<p>Gears/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.</p>	<p>Levers Can be used to make a small force lift a lighter load. A lever always rests on a pivot.</p>

Prior Learning	Next Steps
Children will have learnt about friction and magnetism	At KS3, the children will learn about: <ul style="list-style-type: none"> - Forces and movement