

<div>UKS2 Science Knowledge Organiser</div> <div>Physics Forces</div> <div></div>	<div>To be secure in this unit you must:</div> <div>Knowledge:</div> <div>Identify and know the effect of friction.</div> <div>Explain how levers, pulleys and gears allow a smaller force to have a greater effect.</div> <div>Describe magnets as having two poles.</div> <div>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</div> <div>Identify and know the effect of air resistance.</div> <div>Identify and know the effect of water resistance.</div> <div>Know what gravity is and its impact on our lives.</div>	<div>Skills:</div> <div>Plan enquiries, including recognising and controlling variables where necessary.</div> <div>Take measurements, using a range of scientific equipment, with increasing accuracy and precision.</div> <div>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.</div> <div>Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</div> <div>Present findings in written form, displays and other presentations.</div> <div>Use test results to make predictions to set up further comparative and fair tests.</div> <div>Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.</div>	
Vocabulary		Vocabulary	Newton
friction	Friction is a force between two surfaces that are sliding, or trying to slide, across each other.	magnet	A magnet is a rock or a piece of metal that can pull certain types of metal toward itself.
gravity	Gravity is a force which tries to pull two objects towards each other.	North Pole	The south pole and north pole of a magnet are the two ends of a magnet that have opposite magnetic fields. The north pole of a magnet is attracted to the south pole of another magnet.
air resistance	Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air.	South Pole	The south pole and north pole of a magnet are the two ends of a magnet that have opposite magnetic fields. The south pole of a magnet is attracted to the north pole of another magnet.
water resistance	If you go swimming, there is friction between your skin and the water particles.	attract	Certain metals are attracted to magnets, meaning that they are pulled in by the magnet's magnetic field. Magnets also attract one another, opposite pole to opposite pole.
Galileo	Galileo developed the telescope to enable close observation of the night sky.	repel	When a magnetic pole repels another magnetic pole, it gives out a force that pushes the other pole away.
levers	A lever can be described as a long rigid body with a fulcrum along its length.	parachute	A parachute is a device used to slow down an object that is falling towards the ground. There are two forces acting on the falling person: 1. Gravity (Upwards) 2. Air resistance (Downwards). Without a parachute the gravity is more than air resistance. But as the parachute opens, the Air resistance increases.
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.		
Newton	During his lifetime, Newton developed the theory of gravity and made breakthroughs in the area of optics, such as the reflecting telescope.		
gears	Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well.		
			
			Galileo
			