

Inskip St Peter's C.E. Primary School Knowledge Organiser

Subject: Science		Years: 3 & 4		Area: Forces	
What should I already know?	What skills will I learn?		Vocabulary		
<ul style="list-style-type: none"> <li>- Experience working scientifically</li> <li>- How to ask relevant scientific questions</li> <li>- Experience of investigations to explore answers to scientific questions</li> </ul> <p><b>Forces and Magnets:</b></p> <ul style="list-style-type: none"> <li>- Children have some understanding of materials and their textures, including how this may affect Friction and resistance</li> <li>- Children will have real world experiences of forces that they can use to relate to their knowledge and investigations</li> <li>- Children have experience with magnets and are aware of their use</li> </ul>	<ul style="list-style-type: none"> <li>- I will develop my skills to work scientifically</li> <li>- I will participate in investigations to improve science understanding</li> <li>- I will compare how objects move on different surfaces</li> <li>- Observe how different forces act upon objects</li> <li>- Understand the names of different forces</li> <li>- Observe how some magnets attract, repel and work on certain materials</li> <li>- Understand that magnets have two poles</li> <li>- Predict whether a magnet will repel or attract</li> </ul>	<b>Forces</b>	An interaction that will change the motion of an object		
		<b>Magnet</b>	A piece of metal that is magnetised to attract magnetic objects		
		<b>Poles</b>	The area at each end of the magnet where the magnetism is strongest		
		<b>Attract/repel</b>	The force of being brought closer or pushed further away by a magnet		
		<b>Gravity</b>	The force that pulls objects towards the centre of the earth		
		<b>Air/water resistance</b>	The force of air or water acting as a push force against an object as it travels through the air/water		
		<b>Friction</b>	The force created as an object moves over another object		
<b>Resources</b>					
<p><b>ICT links</b> – Use of swiggle for research/ BBC Teach for class clips</p> <p><b>Materials/ Cars</b> – Variety of surfaces and materials used for investigation</p> <p><b>Literature</b> – A variety of books available for children to use in further research</p>					
<b>By the end of KS2</b>					
<ul style="list-style-type: none"> <li>• To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</li> </ul>					