## Year 3: Forces and Magnets Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge
friction	A force that acts between two surfaces or objects that are moving.	Important facts to know by the end of the Forces and Magnets topic:	about our rocks and magnets
surface	The top layer of something		☐ The Earth is a very big magnet. Its North and South poles are highly magnetic.
magnet	An object that produces a magnetic force to pull certain objects towards it.		
magnetic	Objects that are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt are magnetic		☐ A magnet always has north and south poles. Cutting a magnet in half makes two magnets, each with two poles
magnetic field	The area around a magnet which allows certain objects to be pulled towards it.		Magnets only attract certain types of metals, other materials such as glass, plastic and wood aren't attracted.
poles	North and South poles are found at different ends of a magnet		
repel	Repulsion is a force that pushes objects away. For example when a north pole of a magnet is placed near another north pole of a magnet, they push	<ul> <li>Objects move differently on different surfaces.</li> <li>Magnetic fields vary in size depending on the type of magnet.</li> <li>Not all metallic objects are attracted to magnets</li> <li>Different surfaces create different amounts of friction depending on the roughness of the surface and the force applied.</li> <li>A force will change the motion of an object.</li> <li>Magnets have two poles (North and South)</li> </ul>	<ul> <li>Forces control most of the things on our planet from walking your dog to flying an aeroplane</li> </ul>
	away from each other		If two forces are equal to each other then an object will not move but it could change shape
attract	Attraction is a force that pulls objects together. For example when a north		
	pole of a magnet is placed near a south pole of a magnet the two poles attract (pull together)		Gravity is the force that pulls everything down to earth
forces	Pushes or pulls		<ul> <li>Pressure is another type of force that pushes down on something.</li> </ul>