










Science Focus Forces and Magnets Year 3/4 Summer Term 1

What? (Key knowledge)





Forces

What is a force?	A force is either a push or a pull.
Forces can make things ...	<ul style="list-style-type: none"> • Speed up • Slow down • Change shape • Change direction
A force that speeds something up.	The child is pushing the car to speed it up. 
A force that slows something down.	The woman is pulling the dog to slow it down. 
A force that changes the shape of something.	The can is being squeezed so that it changes shape and becomes smaller. 
A force that changes the direction of something..	When a ball is hit with a racquet, it will change direction. 

Magnetic forces

Why is magnetism different?	<ul style="list-style-type: none"> • All of the forces above need contact between two objects for them to happen. • Magnetic forces can act at a distance.
Magnets have a north pole and a south pole.	<p>South Pole  North Pole</p>
Magnets attract or repel each other.	<p>Attract: </p> <p>Repel: </p> <p>North and south attract. North and north will repel. South and south will repel. Opposites attract.</p>

Types of magnets




Bar	
Ring	
Button	
Horseshoe	

What? (Key vocabulary)




Spelling	Definition/sentence
squeezed	press firmly (usually with fingers)
contact	physically touching something
magnetic	can be attracted to a magnet
attract	to come together
repel	to force away/apart

Diagrams and symbols

Magnets only attract certain types of metals, other materials such as glass, plastic and wood aren't attracted.

Metals such as iron, nickel and cobalt are attracted to magnets.

Most metals, however, are not attracted to magnets. These include copper, silver, gold, magnesium, platinum and aluminium and more.

