

Year 3 Forces and Magnets

I should already know: -

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Key Knowledge

To be able to compare how things move on different surfaces.

To be able to observe how magnets attract or repel each other and how they attract some materials and not others.

To be able to notice that some forces need contact between two objects but that magnetic forces can act at a distance.

To be able to group materials on whether they are attracted to a magnet or not and identify some magnetic materials.

Key vocabulary:

Attract: To pull towards

Compass: A device for finding directions by means of a magnetic needle pointing to the magnetic north.

Contact force: Forces that act when two or more objects touch each other, eg friction.

Force: A push or a pull

Friction: The force that acts when two objects touch each other. It is a contact force.

Magnetic field: The area around a magnet in which there is magnetic force.




Magnetic: The pushing or pulling force that acts between two magnets or between a magnet and magnetic materials.

Non-contact force: Forces that do not need contact. They can act at a distance, eg magnetic force.

Pole: The end of a magnet where the magnetic field is the strongest.

Repel: To push backwards

Forces can make things.....

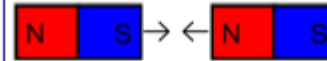
Change shape	
Change speed	
Change direction	

Friction

It is easier to pull or push things along smooth surfaces than rough ones



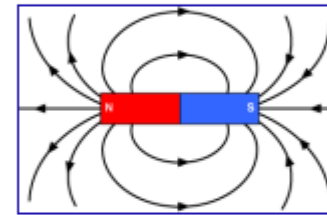
Magnets



Opposite poles attract



Same poles repel




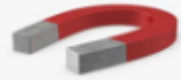


Magnetic Field







Compass

Types of magnets:

Bar 	Ring 
Button 	Horseshoe 

Magnetic Materials

Iron 	Nickel 	Steel 	Stainless steel 
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