

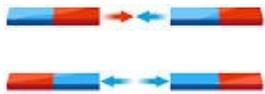
# Knowledge Organiser - Science: Iron Man

## What? (key Knowledge)

### Types of Rocks

What is force?	A force is either: <ul style="list-style-type: none"> <li>A push</li> <li>A pull</li> </ul>
Forces can make things...	<ul style="list-style-type: none"> <li>Speed up.</li> <li>Slow down</li> <li>Change shape</li> <li>Change direction.</li> </ul>
A force that speeds something up.	The child is pushing the car to speed it up. 
A force that slows something down.	The girl 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 the ball is hit with the racket, it will change direction. 

### Magnetic Forces

Why is magnetism different?	All of the forces above needed contact between two objects for them to happen. <b>Magnetic forces can act at a distance.</b>
Magnets have a North Pole and a South Pole.	<b>South Pole</b>  <b>North Pole</b>
Magnets attract or repel each other.	Attract:  North and South attract. But North and North or South and South will repel.

### Magnetic Forces

Bar	
Ring	
Button	
Horseshoe	

## Forces and Magnets

### What? (key Vocabulary)

Spelling	Definition/Sentence
Squeezed	Firmly press (usually with the fingers)
Contact	Physically touching something
Magnetic	Can be attracted to a magnet
Attract	To come together
Repel	To become part of a liquid.

### Diagrams and Symbols

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



Metal 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, aluminium and more



### Possible Experiences

- Explore the uses of magnets in everyday objects
- Group everyday objects into magnetic and non-magnetic by testing with magnets
- Design a mechanism that requires a magnet to enable it to work.

Can magnets only attract magnets?

**No - Magnets can attract other things too. See the diagram on the opposite side.**

