

Knowledge Mat: *Science Forces Summer 1*

Vocabulary	
Attract	to pull towards
Contact	when objects touch
Different	not the same
Distance	the length between two objects
Force	a push or pull that acts upon an object that can cause it to move, change shape or change direction
Friction	the force that acts upon one surface when it moves against another
Magnet	a piece of iron that attracts and repels
Magnetic Force	when a magnet pulls objects towards it or pushes objects away.
Magnetic Pole	each end of the magnet where the force is the strongest
Pull	to move something towards
Push	to move something away
Repel	to push away
Same	identical, not different

Fantastic Force Facts!

- All forces are really just a push or a pull.
- Magnetism is a type of force. A magnet might pull an object towards it or push it away.
- Not all metals are magnetic!
- Sir Issac Newton was one of the first scientists to study forces.

Magnets and their poles



Same poles repel

If you try to put two magnets together with the same poles pointing towards one another, the magnets will push away from each other. We say they repel each other.

Different poles attract

If you put two magnets together with different poles pointing towards one another, the magnets will pull towards each other. We say they attract each other.

Magnets

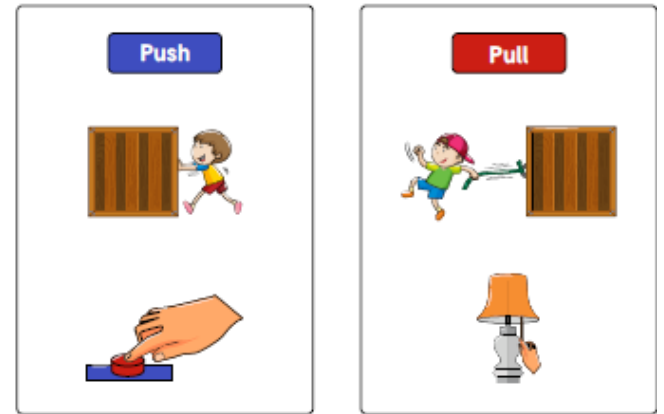
South magnetic pole.



North magnetic pole.

Magnets are usually made from iron. They can attract and repel other objects with their magnetic forces. Magnetic forces act at a distance meaning that a magnet does not need to be in contact with another object for the magnetic forces to act. Magnets can be lots of different shapes, sizes and colours, but they will always have a north and south magnetic pole.

Examples of Pushes and Pulls



Forces

A force is a push or pull that acts upon an object. We can't see forces, but they are an important part of our everyday lives.

We push and pull objects to do many different things. When we push or pull objects we can move the object, change the shape of the object or make the object change direction.

Examples of Magnetic Objects

