



**What I should already know...**

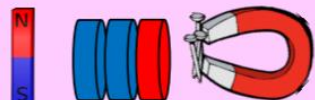
- How to make things stop and start using push and pulls.
- Have experimented and can talk about floating and sinking.

**What is a magnet?**

A magnet is a special object which produces an area of magnetic force around itself called a **magnetic field**.

If a **metal** object enters this magnetic field, they will be attracted towards the magnet and end up sticking to it. (Non-metallic objects such as wood, plastic or fabric would not be attracted to it.)

**Here is a range of different magnets:**



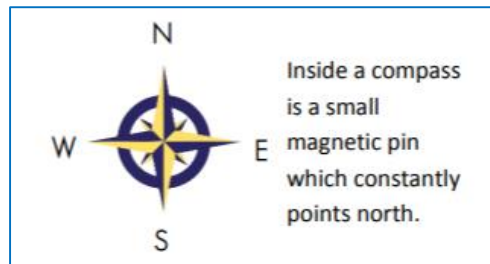
Bar Button Horseshoe



Cylindrical Ring Arc / Crescent

**Key Facts**

- Magnets exert attractive and repulsive forces on each other.
- That some forces need contact between two objects, but magnetic forces can act at a distance.
- Magnets exert non-contact forces, which work through some materials.
- Magnets exert attractive forces on some materials.
- Identify magnetic and non-magnetic materials and group accordingly.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which way poles are facing.



**Key Vocabulary**

**Force** - strength or energy as an attribute of physical action or movement.

**Push** – To exert a force on something to move it away from you.

**Pull** -To exert a force on something to move it towards you.

**Surface** - the outside part or uppermost layer of something.

**Magnet** – An object which produces a magnetic force that pulls certain objects towards it.

**Magnetic** – Objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.

**Magnetic field** – The area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.

**Attract** - Attraction is a force that pulls objects together.

**Repel** - Repulsion is a force that pushes objects away.

**Friction** - A force that acts between two surfaces or objects that are moving, or trying to cross each other.

**Compass** - A device that show north and south on earth.

**Pole** – North and South poles are found at different ends of a magnet.

**North** - A position on a compass opposite of south.

**South** -A position on a compass opposite of north.

