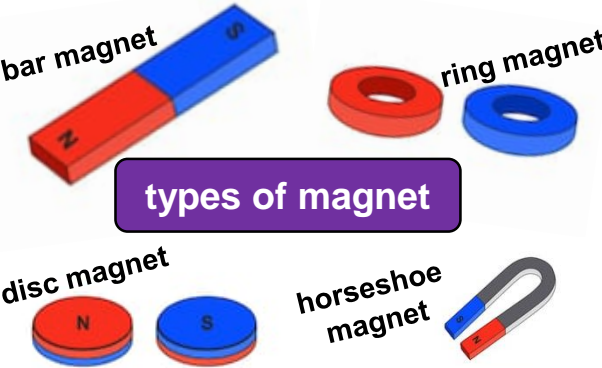


Magnet = an object or device that attracts iron or another magnetic material



types of magnet

Scientific skills:

- Asking questions**
Asking questions that can be answered using a scientific enquiry.
- Making predictions**
Using prior knowledge to suggest what will happen in an enquiry.
- Setting up tests**
Deciding on the method and equipment to use to carry out an enquiry.
- Observing and measuring**
Using senses and measuring equipment to make observations about the enquiry.
- Recording data**
Using tables, drawings and other means to note observations and measurements.
- Interpreting and communicating results**
Using information from the data to say what you found out.
- Evaluating**
Reflecting on the success of the enquiry approach and identifying further questions for enquiry.

Knowledge Organiser Y3 Forces and Magnets

A permanent magnet produces a magnetic field around it that enables it to stick to some types of metal, like iron.

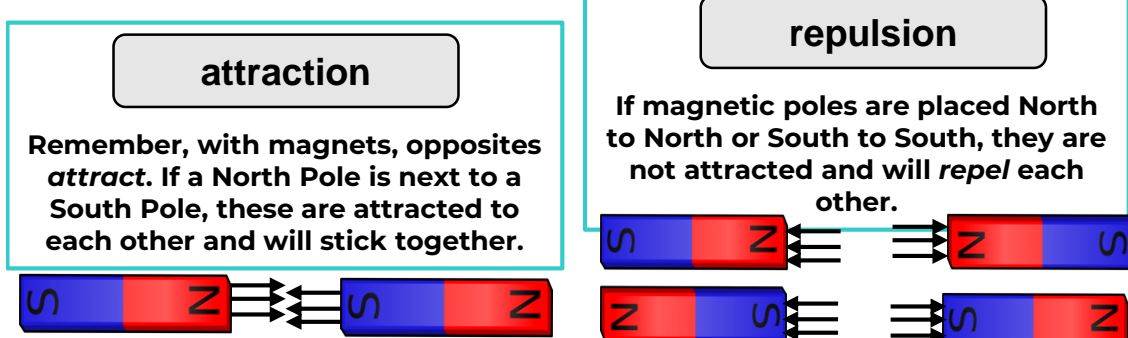
Aluminium and copper are examples of metals which won't stick to a magnet.

Some items can be magnetised by stroking a magnet along them in one direction. This can be useful for things like magnetising a screwdriver.

The Earth is a giant magnet, with a North and South Pole. It is magnetic because of the large amount of iron-rich molten rocks under its surface. The Earth's magnetic field stretches into space.

A compass works because it's north end is drawn to align with the Earth's magnetic field. A compass has helped people navigate for many years!

- STICKY KNOWLEDGE**
- Forces can be pushes or pulls.
 - Friction is a force that acts between two surfaces or objects that are moving (or trying to move) across each other.
 - Magnets exert attractive and repulsive forces on each other.
 - Magnets exert non-contact forces, which work through some materials.
 - Magnets exert attractive forces on some materials which are affected by magnet strength, object mass, distance from object and object material.



KEY VOCABULARY Learn these words and their definitions. (See also diagrams)	
Key Word	Definition
Force	a push, pull, twist or turn caused when two objects interact with each other
Friction	A force that acts between two surfaces or objects that are moving (or trying to move) across each other
Contact force	Any force that requires contact (touching) to occur.
Non-contact force	A force that doesn't require contact.
Attract / attractive	To pull or draw oneself or itself.
Repel / repulsive	To force back or push away.
compass	An instrument containing a magnetised pointer which shows direction.
Magnetic field	The area around a magnet where the force of magnetism acts.
North Pole / South pole	One of two locations on the Earth which is the end of the axis of rotation; creates a magnetic field around it. From the South pole, all directions are north, from the North pole, all directions are south!
magnetic	attracted to a magnet
pole	the area of a magnet where the magnetic force is strongest