

types of magnet

### Forces and Magnets Overview

Forces are pushes and pulls which make things move and stop moving.

Most forces need contact between objects, but magnets can act at a distance.

Magnets are made up of materials that create a magnetic field (the area in space where the force of magnets can be detected)

Magnets have at least one North pole and one South pole.

Magnets can attract or repel one another. They attract some materials and not others.

### Magnets

A magnet is made of materials that create a magnetic field.

Magnets create a **magnetic force** that causes objects to **attract** (pull together) or **repel** (push apart).

Unlike most other forces, magnetic force does not require objects to touch one another. Magnets can act at a distance.

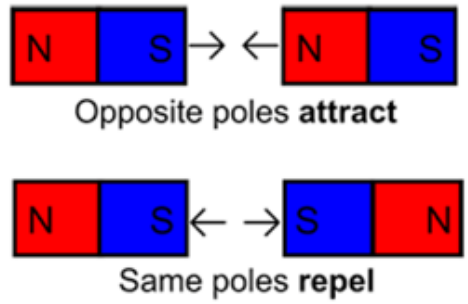
Magnets have two poles- a North pole and a South pole.

The North pole of one magnet will repel the North pole of another magnet. However, it will attract the South pole of another magnet.

KEY VOCABULARY		
Iodestone	Magnet	Opposite
Attract	Repel	Fair test
Magnetic field	Magnetic Poles	

# Forces and Magnets

magnetic	non-magnetic



### Magnetic Fields

- 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.
- Magnetic field describes the area around a magnet, or something functioning as a magnet, in which the magnet's power to attract things is felt.

### Forces

*A force is the push or pull of an object in a particular direction.*

Forces are shown by arrows in diagrams. The bigger the arrow, the bigger the force. The direction of the arrow shows the direction of the force. Forces act in opposite directions to each other. When an object moves across a surface, friction acts as an opposite force. Friction is a force that holds back the motion of an object. Some surfaces create more friction than others which means that objects move across them slower. On a ramp, the force that causes the object to move downwards is gravity.

