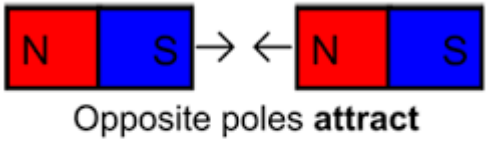
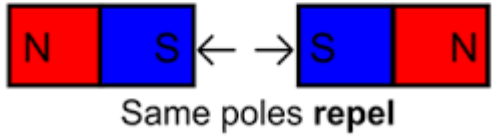
Forces and Magnets Year 3 Spring 2

Vocabulary Dozen

force	*The scientific word for the pushing and pulling effect*	*In physics, a **force** is the pulling or pushing effect that something has on something else.*
friction	*The force that makes it difficult for things to move when they touch each other*	***Friction** is the force that makes it difficult for things to move freely when they are touching each other.*
motion	*A motion is an action, gesture, or movement*	*The **motion** of the boat made me feel sick.*
accelerate	*Speeding up*	*The car **accelerated** out of the car park.*
decelerate	*Slowing down*	*I need to **decelerate** or I will fall off my bike.*
balanced force	*When two forces are equal and there isn't any motion*	*When we pushed the door on either side there was a **balanced force** so the door did not move.*
magnet	*A piece of iron or other material which attracts some metals towards it.*	*The **magnet** picked up all the paper clips.*
magnetic	*Capable of being attracted by a magnet or acquiring the properties of a magnet*	*Because the fridge is magnetic my magnet stuck to it.*
pole	*Each of the two opposite points on the surface of a magnet at which magnetic forces are strongest.*	*The **pole**s of the magnet are coloured red and blue on my magnet.*
attract	*The force of one object pulling another object towards it*	*My magnet can **attract** different objects.*
repel	*The force of one object pushing another object away from it*	*Two magnetic poles **repel** each other.*
magnetic field	*The area around a magnet where the magnetic force works*	*Some magnets have a very strong **magnetic field**.*



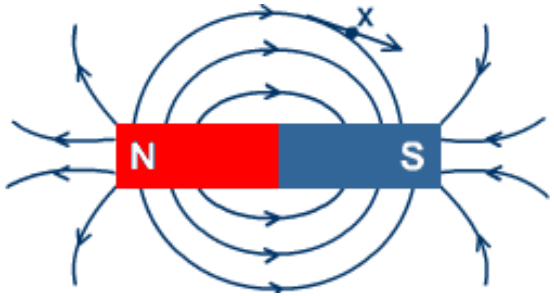
Opposite poles **attract**



Same poles **repel**

Magnetic Materials	Non-Magnetic Materials
1. Iron 2. Steel 3. Nickel	1. Aluminium 2. Copper 3. Gold 4. Silver

Magnetic Field Diagram



Magnetism is strongest at either end of the magnet

This is a **compass.**

1. *A compass is used to find which direction you are facing.*
2. *They were invented over 2000 years ago*
3. *It was often used by sailors and explorers in the past to navigate their way around the world*
4. *The thin metal pin inside is suspended so that it can spin freely*
5. *The pin always points North*
6. *Today people usually use a Global Positioning System (GPS)*