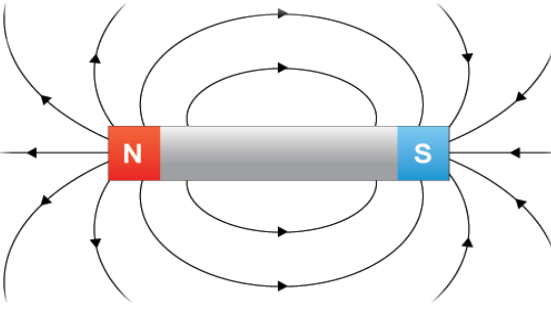


1. Key Terms		
1	Magnetism	A non contact force caused by magnets
2	Magnetic field	The area of influence around a magnet
3	Magnetic pole	Each end of a magnet. The magnetic field is strongest at the poles
4	Attraction	When two opposite magnetic poles are pulled together
5	Repulsion	When two similar magnetic poles are pushed apart
6	Current	The flow of electrical charge
7	Electromagnet	A coil of wire which carries current wrapped around a metal core, which becomes a magnet
8	Relay	An electrically operated switch

2.) Command words		
1	Describe	Report details about something
2	Explain	Make an idea clear to someone by revealing relevant facts about it
3	Suggest	Give a reasonable possible explanation for something, even if you do not have all the evidence you want

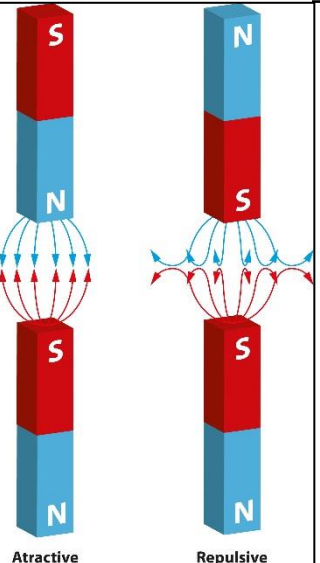
3.) Magnetic fields



The magnetic field lines around a bar magnet.

The magnetic force is strongest at the poles where the field lines are most concentrated and weakest in the middle

4.) Attraction and repulsion

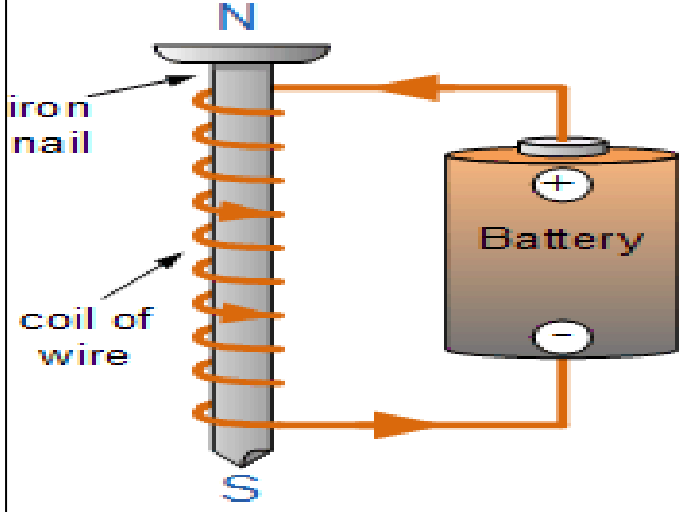


Opposite magnetic poles (a North and a South) will exert an attractive force on one another and come together

Like poles (two Norths or two Souths) will repel (push away) each other.

A magnet, no matter the pole, will always attract a magnetic material (like an iron nail), even if it repels another magnet.

5.) Electromagnets

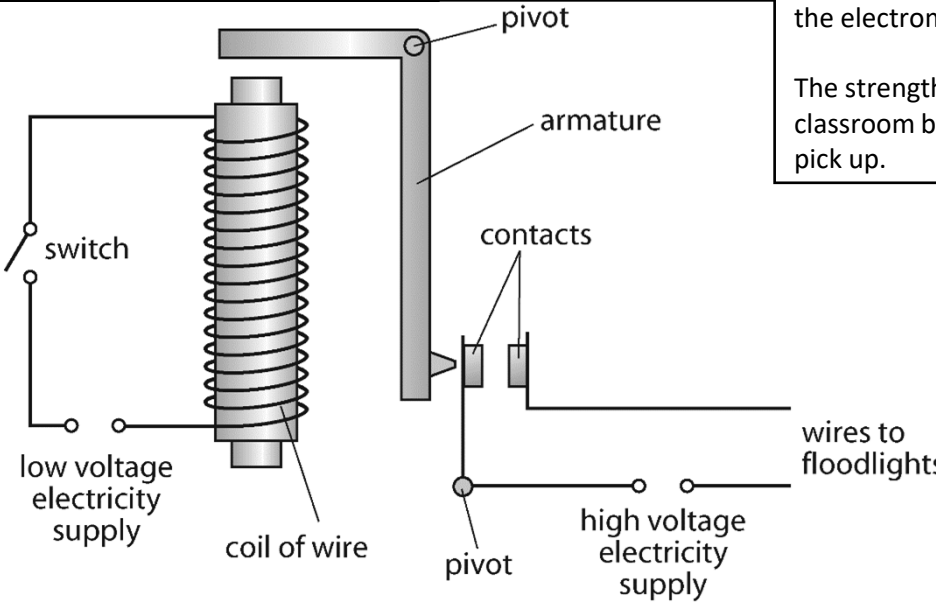


An electromagnet consists of a coil of wire and an iron core which becomes a magnet when current flows through the coil.

Increasing the current or the number of coils makes the electromagnet stronger.

The strength of an electromagnet can be tested in the classroom by measuring how many paper clips it can pick up.

6.) Relays



A relay switch. When the switch is pressed the coil of wire makes a magnetic field which attracts the pivot towards the core.

This pushes the two contacts together, completing the secondary circuit which now switches on