

What did we learn before: Year 2 Term 1 - Different materials and their uses.

Key knowledge by subject

SCIENCE

Electricity

A **circuit** is a complete flow of **electricity**.

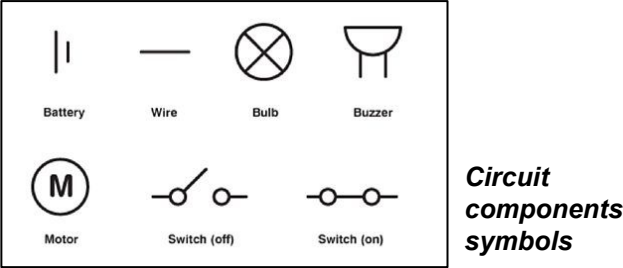
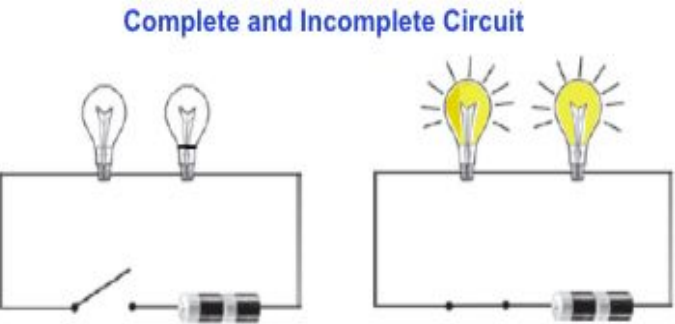
A **circuit** needs to be complete for electrical devices to work.

Some materials are **conductors**, some are **insulators**.

A **switch** completes and joins a circuit.

Wires carry an electrical current.

Each part of a circuit has its own function, e.g. a **battery** provides power.



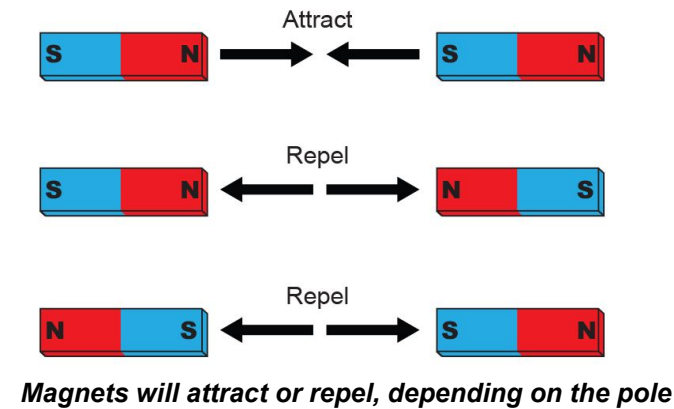
Magnets

Many metals are magnetic.

A **magnet** can **attract** or **repel** materials. A magnet attracts metals and repels non-metal objects.

Magnets are surrounded by a **magnetic field**.

A magnet has two **poles** – north and south.



Key vocabulary

Circuit	A circuit is a path which electricity flows along.
Electricity	A source of energy.
Conductor	A material which allows electricity to flow through it.
Insulator	A material which does not allow electricity to flow through.
Battery	A source of power.
Bulb	Provides light using the power from an electrical circuit.
Buzzer	An electrical device used to signal or show something.
Motor	Converts electrical energy into mechanical or moving energy.
Switch	A switch controls the flow of electricity - it can be turned on or off.
Wire	Wires carry electricity along the circuit.

Key knowledge (continued)

Electricity is always trying to move from one object to another.

Static electricity is created when electricity cannot move.

PSHCE links

Electrical components and circuits should be used with care.

Hazards should be identified and avoided.

Electrical products should not be used near water.

Staying Safe with Electricity



Don't pull wires.



Don't put your fingers in sockets.



Don't fly kites or climb trees near power lines.



Don't use radios or hair dryers near water.

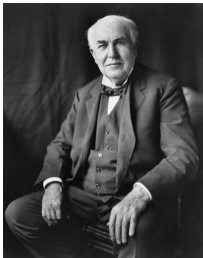
GEOGRAPHY / HISTORY

A **thunderstorm** is a storm with thunder and lightning.

Moisture and warm air causes thunderstorms.

Benjamin Franklin and Thomas Edison were the first well known scientists to discover electricity.

Edison invented a working light bulb after hundreds of failed attempts. He showed a great amount of perseverance.



Thomas Edison, the inventor of the light bulb



Lewis H Latimer improved the light blub by making it stronger and last longer

Electricity provided clean, safe light for people.

Key vocabulary

Static electricity	This is made when energy is trapped and cannot move.
Magnet	A rock or a piece of metal that can pull certain types of metal toward itself.
Magnetic field	The area around a magnet in which the force stretches out.
Attract	When a material is pulled towards a magnetic pole by force.
Repel	When a magnetic pole gives out a force which pushes the other pole away.
Pole	The opposite ends of a magnet; the north and south poles.
Hazard	When something is dangerous.
Thunderstorm	A thunderstorm forms when moisture and warm air meet.