

Knowledge Organiser

VOCABULARY

Electricity- form of energy formed by charged particles.

Circuit- a complete flow of electricity and the way it affects objects.

Bulb- provides light when powered.

Mains- domestic or wall powered.

Plug- device for making an electrical connection

Buzzer- An electrical device that makes a buzzing sound.

Wire- A long piece of metal that carries an electrical current often covered in plastic for safety.

Motor- A device that changes electrical energy into movement.

Cell- a device used to generate electricity.

Battery- More than one cell/

Conductor- Any material that electricity can pass through or along.

Insulator- Any material that electricity cannot pass through or along.

Symbol- Representation of the components.

Electrons- move around a circuit.

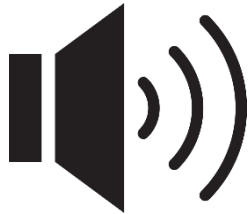
Current- stream of charged particles moving through an electrical conductor.

Voltage- An electrical force that makes electricity move through a wire, measured in volts (V)

Electricity can produce...



Light



Sound



Movement



Heat

The battery produces electricity. It has stored chemical energy.

The chemical energy converts to electrical energy which produces electrons. They travel around the circuit to all the components.

Circuit Components



Cell



Bulb/Lamp



Wires



Buzzer



Switch

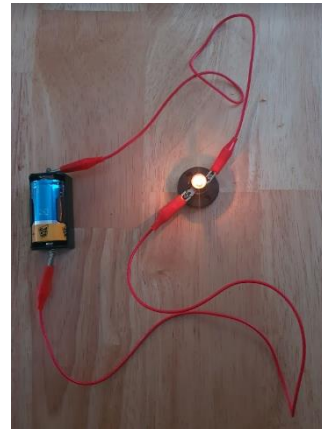


Motor



Battery

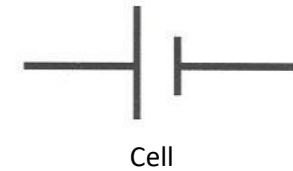
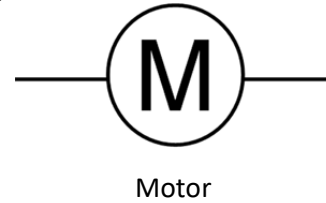
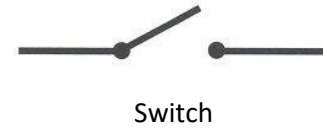
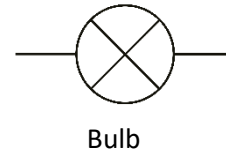
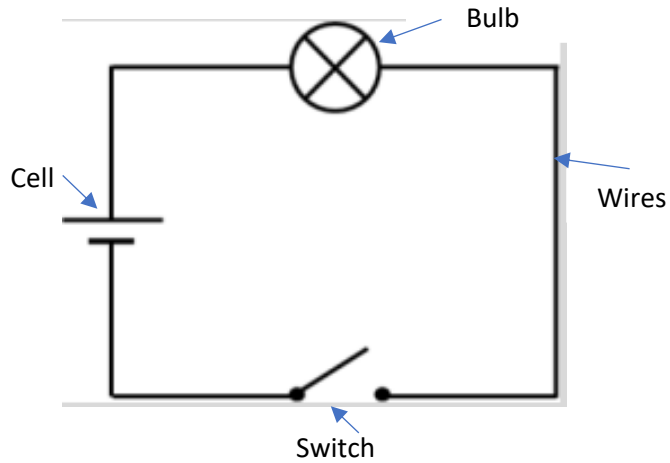
Simple Circuit



This is a simple circuit. It is a complete circuit where electrons can flow around the circuit.



Scientific Diagrams and Symbols



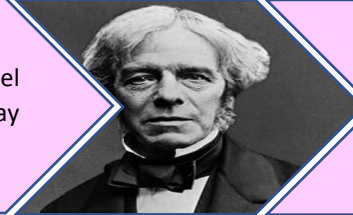
Science Capital

Alessandro
Volta

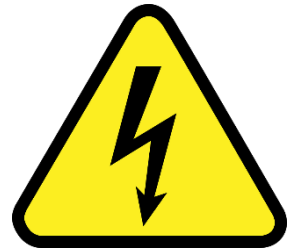


He discovered the first practical method of making electricity.

Michael
Faraday



First person to discover that moving a magnet near a coil of copper wire introduced an electric current in a wire.



Thomas
Edison



He developed many devices including the early version of the electric light bulb.

1941- Solar
Power



1956-
Nuclear
Power



2000-
Wave
Power

