MABLETHORPE PRIMARY ACADEMY

Mablethorpe Primary Academy — Science

Year 5/6 Themes: Electricity- Can the brightness of a lamp and the volume of a buzzer be changed by adding more or less cells?

Term 1

Prior Knowledge and Overview: Children will associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. They will also compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. Additionally, they will use recognised symbols when representing a simple circuit in a diagram.

Key Vocabulary

Ammeter	An instrument for measuring electric current in amperes.
Appliance	A device that uses electricity to perform a function.
Electrical current	When electric charges flow from one place to another in a circuit.
Electrons	Are the negatively charged particles of atom.
Motor	Self-contained devices that convert electrical, chemical, or nuclear energy into mechanical energy.
Resister	The part of an electric circuit that resists or limits the power of an electric current in a circuit.
Voltage	A measure of how strong the current is.

Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. If you use a battery with a higher voltage, the same thing happens. Adding more bulbs to a circuit will make each bulb less bright.

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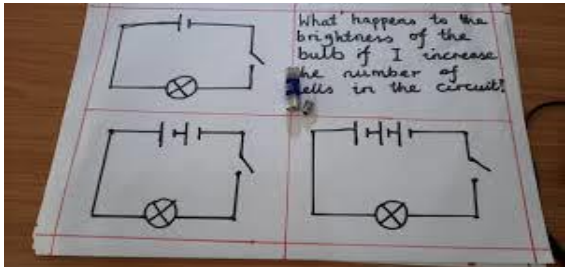
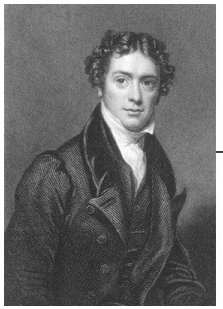
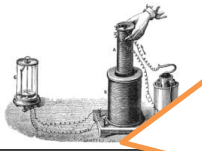
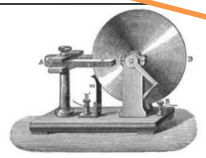


Michael Faraday (1791-1867) known as the father of Electricity.

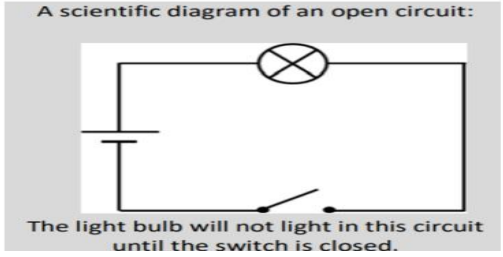
His main discoveries include the principles underlying electromagnetic induction, diamagnetism and electrolysis.



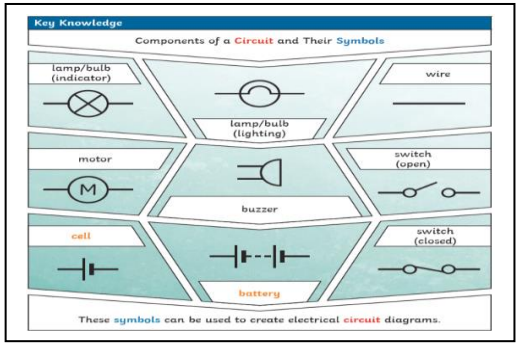
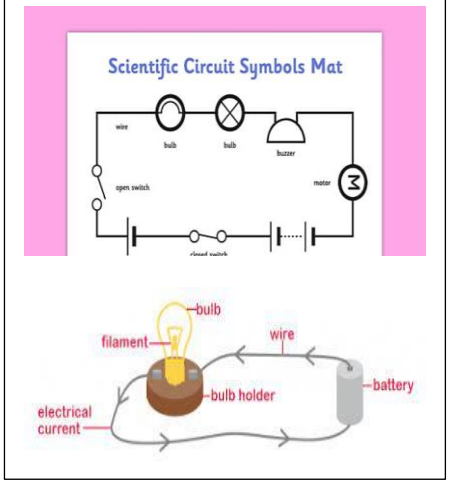




Michael Faraday made great inventions that earned him the title the father of electricity, such as inventing the first electric motor and dynamo and producing the first electric current from a magnetic field.



Fuse- a safety device in an electric plug or circuit.

Conductor-made from materials that electricity can flow through easily.

Insulator- a material that does not easily allow heat or electricity to pass through it.