**EVEN SWINDON SCHOOL** 



# Year 6 Term 5— Electricity

#### **VOCABULARY**

<u>Circuit</u>- A path that an electrical current can flow around.

**Symbol**- a visual picture that stands for something else.

<u>Cell</u>- A single unit battery that stores chemical energy.

<u>Battery</u>- A collection of cells which stores chemical energy.

<u>Current</u>- The flow of electrons, measured in amps.

<u>Amps</u>- How electric current is measured.

Voltage- The force that makes the electric current move through the wires. The greater the voltage the more current will flow.

Resistance- the difficulty that the electric current has when flowing around a circuit.

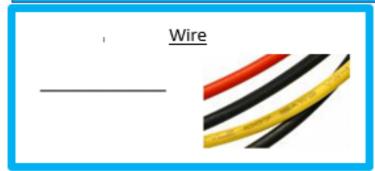
<u>Electrons</u>- Very small particles that travel around an electrical circuit.

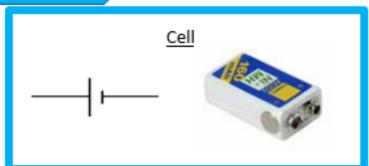


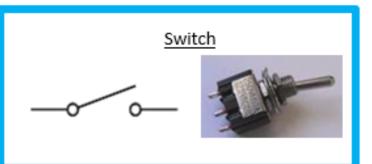
Italian physicist, chemist and pioneer or electricity and power.

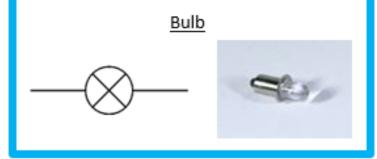
He is credited as the inventor of the electric battery and discovered methane.

## Components of a circuit



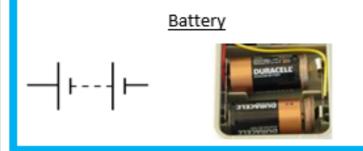


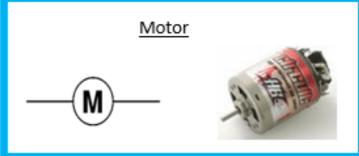






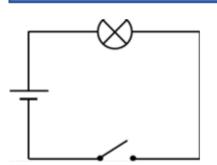




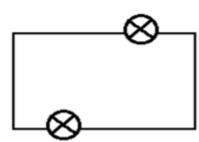


These symbols can be used to complete an electrical circuit.

#### **Series Circuits**



The light will not light until the switch is closed to complete the circuit.



This circuit will not work as there is no battery to provide energy. Light is measured in Lux.

Voltage is measured in Volts. Using a volt metre.

The current is measured in amps using an ammeter.

Watt is a unit of power. (Rate of which energy is consumed).



Thomas Edison 1847-1931

Lived in New Jersey in USA.

Known as one of the
greatest inventors in
history. He invented the
lightbulb, the phonograph
(record and play sound)
and an early video camera.

Electrons

flow

through the circuit

to make

the circuit

work.

## What is a battery?



A cell is a single unit that stores energy. A battery is a collection of cells that store energy.

Batteries have voltage which is the amount of force that makes the electrical current move through the wires. The voltage can be found on the battery.

One end of a battery is an anode and the other a cathode. Electrolytes (liquid) are found in a battery which irons flow through.

### Renewable Energy

Renewable energy is useful energy that is collected from renewable resources, which are naturally replenished on a human timescale.



Solar



Wind



Hydro



Biomass