



GILES BROOK SCHOOL

# Knowledge Organiser

## Science: Electricity

### Useful websites:

[BBC Bitesize](#)

[The School Run](#)

A circuit diagram uses symbols to represent the parts of a circuit.

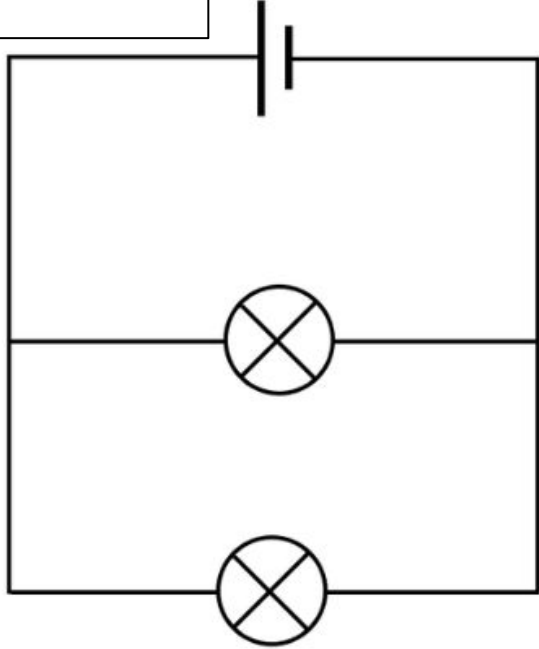
### I already know:

- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts
- recognise that a switch opens and closes a circuit
- recognise some common conductors and insulators

Switches can stop the current of electricity in a circuit by creating a gap. They need to be made of a conductive material such as metal but must have an insulator coating for safety.

Alessandro Volta made the first battery in 1800. Volts are named after Volta.

The length of wire reduces amps - the more wire, the more resistance.



Battery



Wire



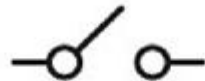
Bulb



Buzzer



Motor



Switch (off)



Switch (on)

Parallel Circuit

## Key Vocabulary

cell/battery	A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells.
voltage	The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.
amps	How electric current is measured.
electrons	Very small particles that travel around an electrical circuit.
current	The flow of electrons, measured in amps.
resistance	The difficulty that the electric current has when flowing around a circuit.
circuit	A path that an electrical current can flow around.
parallel circuit	- A parallel circuit distributes voltage equally.