



Science – Electricity



General Knowledge

Key Vocabulary

Circuit	A path that an electrical current can flow around
Symbol	A visual picture that stands for something else.
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.
Current	The flow of electrons, measured in amps.
Amps	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.
Electrons	Very small particles that travel around an electrical circuit.
Switch	Used to turn off other components.
Buzzer	Makes a noise in a complete circuit.

Series Circuit: A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter.

Making a bulb brighter or dimmer

More batteries or a higher voltage create more power to flow through the circuit. Shortening the wires means the electrons have less resistance to flow through.

Making a bulb dimmer or a battery brighter

Fewer batteries or a lower voltage give less power to the circuit. More buzzers or bulbs mean the power is shared by more components. Lengthening the wires means the electrons have to travel through more resistance.

DID YOU KNOW?

- 1.) If you make the wires longer, the bulb will get dimmer. This is because there is more resistance.
- 2.) If you add more bulbs, the bulbs get dimmer. This is because there is also more resistance.
- 3.) If you add more batteries, the bulbs will get brighter. This is because there is less resistance and a greater current.

