Year 6:

Electricity

Key Learning

Symbols for different components in a circuit:

Battery

More batteries or a higher voltage create more power to flow through the circuit.

Wire

Bulb

By changing the components in a circuit we can vary:

The brightness of a bulb (brighter or dimmer)

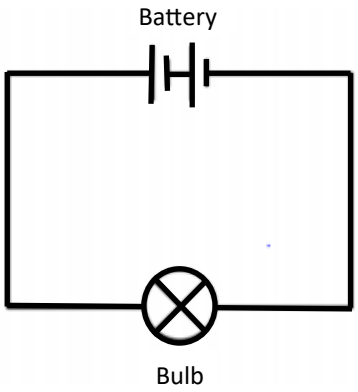
The volume of a buzzer (louder or quieter)

Buzzer

Motor

Open switch

Closed switch



If a switch is open, the circuit is not complete. When a circuit is not complete, components such as bulbs, buzzers and motors will not work.

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

The hazard symbol warns of high voltage. You should not touch anything with this symbol on.

Key Vocabulary

current	A flow of electrons in a circuit
electrons	Very small particles that travel around an electric circuit and carry energy.
voltage	The force of an electrical current that makes electricity move through a wire.
battery	A container or one or more cells that is used to generate a current.
switch	A device used for making and breaking the connection in an electrical circuit.
filament	A conducting wire or thread with a high melting point which forms part of an electrical bulb.
static electricity	A stationary electric charge, typically produced by friction, which causes sparks, crackling or the attraction of dust.
resistance	A measure of the difficulty of passing an electric current through a conductor. The more resistance in a circuit, the less electricity will flow through.