

## Knowledge Organiser—Year 6

What does electricity do for us?

### 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 energy as a chemical 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.

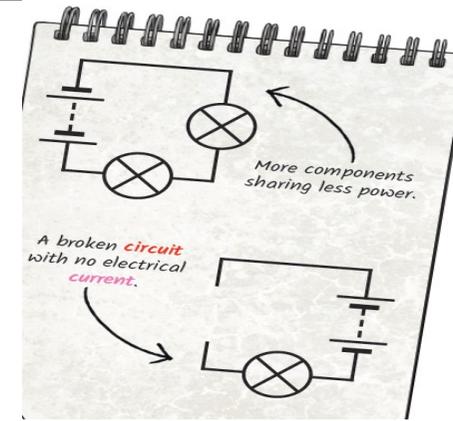
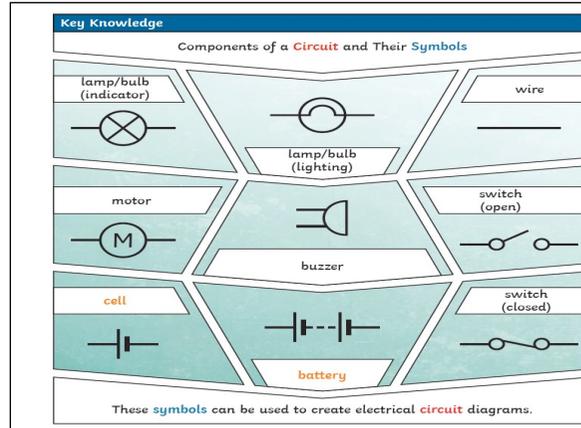
**Amps:** how electric current is measured.

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

**Resistance:** the difficulty that the electric current has when flowing around the circuit.

**Electrons:** very small particles that travel around an electrical circuit.

**Fossil fuels:** coal, oil and natural gas are fossil fuels. Burning them produces heat, which generates electricity.



Garfield Primary

### Key facts

**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. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops.

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.

Fewer batteries or a lower voltage give less power to the circuit.

Lengthening the wires means the electrons have to travel through more resistance.

More buzzers or bulbs mean the power is shared by more components.

**Fun fact:** an electric eel can produce shocks that measure approximately 500 volts.

**Fun fact:** a bolt of lightning can measure up to 3 million volts even though it will last less than a second.

**Fun fact:** a spark of static electricity can measure up to 3,000 volts.

**Historical fact:** the first electric car was invented in 1835 but it wasn't very popular as it was expensive to run.