



Vocabulary	Meaning
Electricity	The presence and flow of electric charge (electrons)
Renewable (green) energy	Energy collected from natural sources that are constantly replenished
Non-renewable energy	Energy that cannot be readily replaced; most sources are fossil fuels (made from carbon)
Climate change	The long-term alteration of temperature and weather patterns
Circuit	A path through which electrical current flows
Bulb	Glass containing a wire filament that emits light with electricity
Wire	Conducts electricity around a circuit – the wire is plastic coated
Cell	Changes energy into electricity, two or more cells are a battery
Series circuit	One path for the current to flow
Parallel circuit	Two or more paths for the current to flow
Current	The rate of flow of electric charge past a point
Voltage	How much energy is provided to the circuit
Electrons	Part of an atom; a negative charge
Conductor	Materials that let electricity pass through them easily
Insulator	Materials that do not allow electricity to pass through them
Atom	Tiny particles that are the basic building blocks of all matter
Electrons	Part of an atom; a negative charge
Switch	A device for breaking the connection in an electric circuit

Circuit	Bulb	Series circuit	Parallel circuit

Key knowledge – Conductors and Insulators

5 Electrical Conductors

- silver
- gold
- copper
- steel
- sea water

5 Electrical Insulators

- rubber
- glass
- oil
- diamond
- dry wood

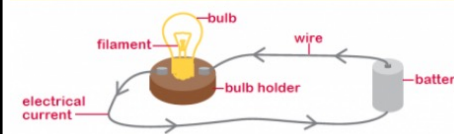
Conductor or insulator?

An electrical current flows through some materials (conductors).

An electrical current does not flow through other materials (insulators).

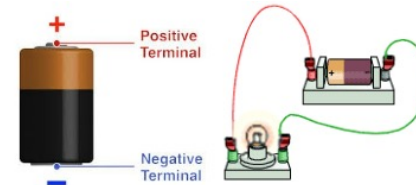


Key knowledge – Electrical circuits



A circuit is a path through which electrical current flows. As it flows, it makes components (parts) of the circuit work.

An electric current will not flow if there is no power source. A cell has two ends labelled + (positive) and – (negative).



A switch is used to break an electrical circuit.



A dimmer is used to vary the brightness of an electric light.

