A part or element of an

electrical circuit

Component



| Knowledge C | organiser Science Elect | ricity rear 6 | | ACADEMIES TRUST |
|-----------------------|---|---|--|--|
| Vocabulary a | nd definitions | Components | | |
| circuit | The path or line through which an electrical current flows | Battery (cell) | Creates a flow of electro function | ons around the circuit to allow other components to |
| cell | Power source of a circuit (usually a battery) | lightbulb | Contains filaments that release light when electricity passes through it | |
| | | buzzer | Creates a sound when electricity passes through it | |
| | | motor | Converts electricity into movement | |
| switch | A small gap in the conductor where you can close or open the circuit | wire | Has a metal core and pla | stic coating. The metal core conducts electricity. |
| conductor | Allows electricity to flow through it. Metals conduct electricity. | Contributions to our knowledge of electricity | | |
| | | Benjamin Franklin | | Michael Faraday |
| insulator | Something that does not conduct electricity. Plastic and wood do not conduct electricity. | -Observed that lightning had a natural electrical current -Invented the lightning rod - Developed terms such as conductor and battery | | -Discovered that we can use magnets to make electricity -Invented the Faraday generator, that is used in gas stations, power stations and wind turbines -Invented the Faraday cage |
| voltage | Makes electric charges move | Circuit diagram symb | ools | Circuit diagram example |
| electron | A negatively charged particle | I | \otimes \forall | Switch |
| electrical current | The flow of charged particles | Battery Wire | Bulb Buzzer | Battery = |

Switch (off)

Switch (on)

Motor

