

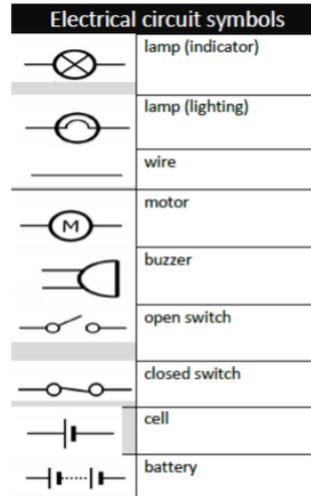
Electricity - Knowledge Organiser – Year 4

Key knowledge

- To understand what components are required to build a simple circuit.
- To recognise how to adapt or change the layout of components.
- To understand that some materials are better conductors of electricity than others.
- To recognise that a circuit must be complete to work; that a lamp must be part of a complete circuit to light and to recognise that a switch opens and closes a circuit.

Key definitions

battery	A small device that provides power for electrical items.
buzzer	An electrical device that makes a buzzing sound.
cell	A device used to generate electricity. A battery is an example of a cell.
circuit	A complete route which an electrical current can flow around.
conductor	Any material that can pass through or along.
current	A flow of electricity through a wire.
device	Uses electrical energy to perform a task e.g. a buzzer.
insulator	Any material that electricity cannot pass through or along.
motor	A device that changes electrical energy into movement.
socket	A device that you can plug electrical equipment into.
voltage	An electrical force that makes electricity move through a wire.
wire	A long piece of metal that carries an electrical current, often covered in plastic for safety.

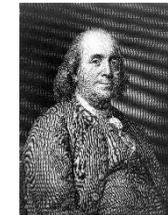


Key vocabulary

battery/cell	connection
bulb	device
buzzer	insulator
circuit	power
conductor	wire

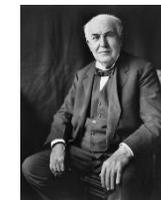
Key scientists

Benjamin Franklin (1706-1790)



Franklin investigated lightning and found it to be electricity. This led to further exploration of electricity.

Thomas Edison (1847-1931)



Edison invented the domestic lightbulb.

5 Electrical Conductors



5 Electrical Insulators

