

Year 4 Science – Electricity

Key Knowledge

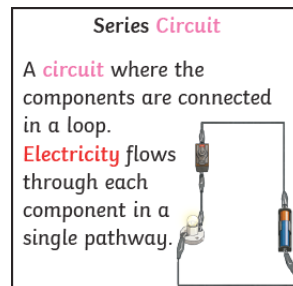
- identify common appliances that run on electricity
- construct a simple series electrical circuit
- identify and name the basic parts of a simple circuit, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- recognise some common conductors and insulators, and associate metals with being good conductors

Key Skills

- setting up simple practical enquiries
- recording findings using simple scientific language,
- use straightforward scientific evidence to answer questions and support their findings.

Do you remember learning?

- Learning about light in Year 3



Key Vocabulary

Battery (Cell)	A source of electrical energy that pushes electricity around a circuit.
Wire	A conductor that connects components and allows electricity to flow.
Bulb (Lamp)	A component that lights up when electricity flows through it.
Switch	A device that opens or closes a circuit to stop or allow the flow of electricity.
Conductor	A material that allows electricity to pass through it easily (e.g. metal).
Insulator	A material that does not allow electricity to pass through (e.g. plastic).
Open circuit	A circuit that is not complete, so electricity cannot flow.
Closed circuit	A complete circuit where electricity can flow.
Series circuit	A circuit where components are connected in a single path.

cell: Normally, we would call this a **battery** but scientifically, this is a cell. Two or more cells joined together form a **battery**.



bulb: Lights up in a complete **circuit**.



buzzer: Makes a noise in a complete **circuit**.



wires: Used to connect the different components in the **circuit** together.



motor: Produces movement in a complete **circuit**.



switch: Used to turn other components in the **circuit** on or off.

