

Year 4: Electricity Autumn 2 Year B

What should I already know? I know that electricity is important and makes our life a lot more comfortable; I know that electricity is used for lighting, heating and to operate many appliances and toys; I know that electricity needs to be used carefully.

Key Vocabulary

Electricity	A form of energy that provides power to make appliances work.
Energy	Power from sources that makes machines work or provides heat.
Circuit	A complete route which an electric current can flow around.
Current	The flow of electricity through a wire or circuit.
Conductor	A material that allows electricity to pass through it.
Components	The parts that something is made up of.
Insulator	A material that does not allow electricity to pass through it.
Switch	A component which allows you to turn a device on or off.
Wire	Long thin pieces of metal that can be covered in plastic.
Crocodile clips	Clips that attach wires to components in a circuit.
Battery	Small devices that provide the power for electrical items.
Cell	Another word for a battery.
Electrocute	To be injured or killed by electric shock.
Appliance	A device in a home that is used to do a job such, eg: cooking
Electrical safety	Rules to follow to ensure that we are safe around electricity

I am learning to...

- Identify common appliances that run on electricity.
- Identify the dangers associated with good conductors of electricity.
- Construct a simple circuit, and identify and name its basic parts.
- Investigate simple switches.
- Investigate which material are good conductors and which are not
- Predict and investigate the effects of adding more components to a simple circuit.

Scientific diagrams



Key misconceptions

Electricity works by coming out of one end of a cell. Children discover that electricity travels in an uninterrupted loop in a circuit.

Key skills - working scientifically

Asking questions, designing a fair test, investigating and answering questions, observing, reporting and drawing conclusions.

Key scientists

Thomas Edison (1847-1931) was an inventor who helped develop a long-lasting incandescent, electric lightbulb and the power grid. Edison took the most recent ideas and made a long-lasting light bulb.

What will I be learning next?

Systematically identifying the effect of changing one component at a time in a circuit; compare and give reasons for variations in how components function and use recognised symbols when representing a simple circuit in a diagram.