



Electricity Year 4

Learning outcomes with context

- To construct a simple series circuit, identifying/naming its basic parts, including cell, wire, bulb, switch and buzzer
- To use their circuits to create simple devices
- To draw the circuit as a pictorial representation (not necessarily using conventional circuit symbols)
- To know about precautions for working safely with electricity
- To identify whether or not a lamp will light in a simple series circuit
- To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- To recognise some common conductors and insulators, and associate metals with being good conductors
- To understand the contributions and inventions made and discovered by Thomas Edison and Benjamin Franklin

Learning outcomes without context

- To set up simple practical enquiries, comparative and fair tests
- To make systematic and careful observations using notes and simple tables
- To take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- To gather, record, classify and present data in a variety of ways to help in answering questions
- To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- To report on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions
- To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- To use straightforward scientific evidence to answer questions or to support their findings
- To recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations
- How simple electrical circuits and components can be used to create functional products

Key vocabulary children should know by the end of the topic

Electricity	A type of energy.
Circuit	A closed loop in which electricity can travel.
Conductors	Carries electrical charge easily.
Insulators	Does not let electricity travel through easily.
Switch	Used to control circuits to break them or complete them.

