

Explaining Science

Making Conclusions

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| Remember science words I have used before | Remember & use science words correctly | Begin to use complex words correctly |
| Begin to use science models to describe | Use science models to describe | Use science models to describe & begin to explain |
| Add science labels & information to diagrams | Annotate diagrams to help describe & explain | Begin to create & annotate my own diagrams |

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| Describe simple patterns in charts & graphs | Describe simple patterns, trends & relationships | Describe patterns, trends & relationships |
| Describe my results by linking cause & effect | Describe trends & use science (models) to explain | Use data in conclusions & science models to explain |

Key Knowledge

- Construct a range of simple closed series circuits. Draw these circuits with correct component symbols (named).
- *Recognise and solve 'errors' in circuits to make them work.*
- A switch opens and closes a circuit.
- Conductors allow electrical (*energy*) to pass through them. Insulators do not allow electrical (*energy*) to pass through.

Key Vocabulary

Electric (electricity), source, energy, transfer, flow, closed / open circuits, series, cell, battery, positive, negative, wire, bulb, buzzer, motor, switch, clip, light, sound, conductor, insulator, metal, copper, iron, steel, non-metals, plastic, wood, glass, rubber, **pattern, trend, relationship, conclusion, valid (validity).**

Science Enquiry Types of Enquiry you may use are:

- Researching
- Sorting & classifying
- Finding patterns
- Comparative and fair testing

In this topic you will explore, investigate, observe, measure and describe how electrical energy transfers (flows) around a circuit. You will also use and make switches and investigate whether materials are good conductors or insulators of electricity.

Energy Transfer Model

Electrical energy **transfers** around the circuit to make components work.

A **switch** connects (closed) or breaks (open) the circuit. This controls the flow of electrical energy to turn the circuit on or off.

