Year 6

Electricity

Statutory Requirements:

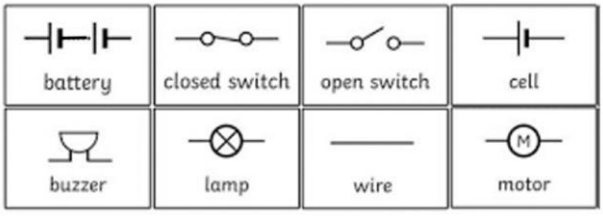
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram

Working Scientifically:

- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Using test results to make predictions to set up further comparative and fair tests.

Key Learning Steps:

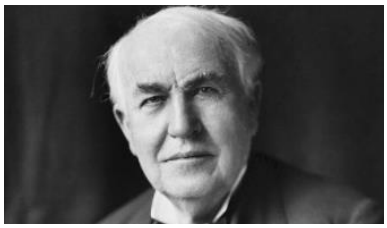
1. Construct and draw series circuits using symbols
2. Complete and incomplete circuits
3. Variations within circuits
4. Plan - voltage experiment
5. Investigate - voltage experiment
6. Evaluate - voltage experiment



Key Vocabulary:

- series circuit
- cell
- battery
- bulb
- current
- voltage
- complete circuit
- incomplete circuit
- switch
- buzzer
- series circuit
- independent variable
- dependent variables
- controlled variables
- repeatability
- accuracy
- evaluation

Key Scientists:



Classic

Thomas Edison (1847-1931)
Inventor of the fuse, light bulb and film camera.

Contemporary

Johnny Srouji (1964-)
Vice President of Hardware Technologies at Apple.