

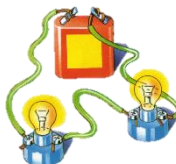


Electricity

Science
Year 6
Summer Term

Overview

During this topic, we will investigate how different components function including testing the brightness of bulbs and the volume of buzzers. We will also be drawing and labelling circuits with the correct symbols.



Knowledge & Understanding

In this unit, the pupils will:

- 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

Enquiry Skills & Concepts

In this unit, the pupils will be:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions.
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Topic Vocabulary

cell - a device used to generate electricity, or to make chemical reactions by applying electricity

component – a part of an electrical circuit

conductor – a material in which electricity can flow through

electricity - is the flow of tiny particles called electrons and protons

insulator - a material in which electricity can not flow through

voltage - the force of an electric current as measured in volts

Working Scientifically

analyse – explore why something happened the way it did

comparative test – a test that compare one event to another and identify different outcomes

controlled variable – a variable that is kept the same in an experiment

dependent variable – a variable being tested or measure in an experiment

evaluation – examining how your test could be improved / changed in the future

fair test– a test that controls all but one variable when attempting to answer a scientific question

independent variable – a variable that is changed in an experiment

Home – School link project

- During this topic pupils can choose to:
- Draw an electrical circuit with symbols to represent.