



Curriculum

Year 4 Scheme of Work

Term: Autumn 2

Topic: Science - Electricity

Key Skills and Knowledge:

Electricity

Identify common appliances that run on electricity.
 Construct a simple series electrical circuit. Identifying and naming the basic parts, including, cells, wires, bulbs, switches and buzzers.
 Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
 Recognise that a switch open and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
 Recognise some common conductors and insulators and associate metals with being good conductors.

Working Scientifically

Ask relevant questions and using different types of scientific enquiries to answer them; make systematic and careful observations and, where appropriate, take accurate measurements using standard units.
 To gather, record and present data in a variety of ways to help in answering questions; report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Reading and Writing Opportunities (Long and Short Activities)

Creative Ideas and Hooks

Research a famous scientist – Find out who Thomas Edison was and write a report about him.
 Lemon investigation.
 Investigating which materials are conductors and which are insulators.
 How to save energy.
 Different energy sources.
 Discuss and write about positives and negatives to not having electricity for a day.

Links to PSHCE, Equality and British Values Work

How to save energy.
 Looking after the environment.
 Promoting an eco-friendly school.
 Solar panels and renewable energy.

Key Vocabulary:

Appliances, cell, bulb, buzzer, wires, complete, incomplete, circuit, conductor, insulator, battery, lamp, loop, series, switches, Wind Energy, Geothermal Energy, Hydrogen Energy, Tidal Energy, Wave Energy, Hydroelectric Energy. ...

Resources Available / Visits/Visitors

Electricity box in the Science cupboard
 Games using a circuit, e.g. operation and buzz wire game.

Useful Websites:

BBC Bitesize
Previous Knowledge
 To name some common appliances that use electricity.