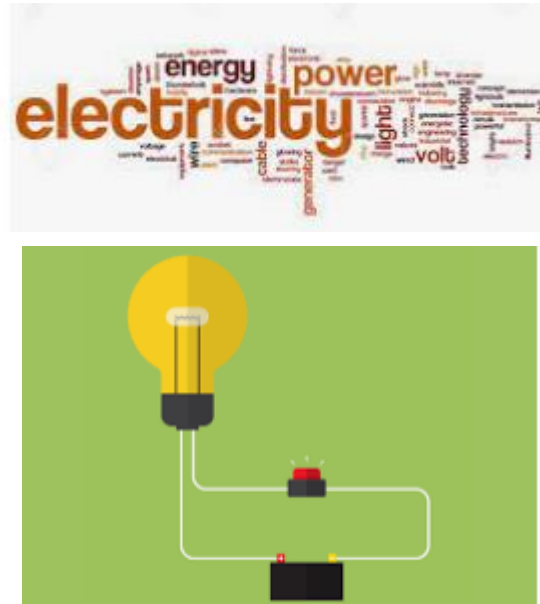


Science: Electricity

Y4 summer 1



National Curriculum Objectives:

- ✓ identify common appliances that run on electricity
- ✓ construct a simple series electrical circuit identifying and naming its 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 opens 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:

- ✓ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables using results to draw simple conclusions,
- ✓ identifying differences, similarities or changes related to simple scientific ideas and processes

Key Vocabulary:

Appliance	a piece of equipment that has a special purpose
Battery	a container that stores energy until it is needed
Bulbs	a rounded glass container that produces light when an electric current is passed through it
buzzer	an electric signalling device that makes a buzzing sound
Cells	a device used to generate electricity, or to make chemical reactions by applying electricity
Circuit	a complete path around which electricity can flow
Component	a part that combines with other parts to form something bigger
Conductor	a substance or material that allows electricity to flow through it
Construct	build or make
Electricity	a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for machines
Insulator	materials that do not allow electricity to pass through them
Mains	what we use to power everyday items, like the kettle, the television, or the toaster
Switch	a small control for an electrical device which you use to turn the device on or off
Wires	a flexible metallic conductor used to carry electric current in a circuit

Sequence of Learning:

Objectives (key knowledge):

Lesson 1 To know which common appliances run on electricity	Lesson 2 To know how to construct a simple electrical circuit	Lesson 3 To know how draw and label all the components of a simple circuit	Lesson 4 To know if a lamp will light up or not light up, based on whether or not it is part of a complete loop with a battery	Lesson 5 To know some common conductors and insulators	Lesson 6 To know how a switch works in a circuit
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