

## Scientific Vocabulary

Electricity - a form of energy that can be carried by wires and is used for heating and lighting.

Bulb - the glass part of an electric lamp, which gives out light when electricity passes through it.

Battery - a container of one or more cells in which chemical energy is converted into electrical energy and used as a source of power.

Buzzer - an electrical device that is used to make a buzzing sound.

Cells - a cell is a single unit used for converting chemical or solar energy into electricity.

Circuit - a complete route which an electric current can flow around.

Switch - a small control for an electrical device which you use to turn the device on or off.

Wires - a long thin piece of metal that is used to fasten things or to carry electric current.

Motor - a device that uses electricity or fuel to produce movement.

Conductors - a substance that heat or electricity can pass through or along.

Insulators - a non-conductor of electricity or heat.

Electrical appliances - an electrical device or machine in your home that you use to do a job such as cleaning or cooking.

Mains - where the supply of water, electricity, or gas enters a building.

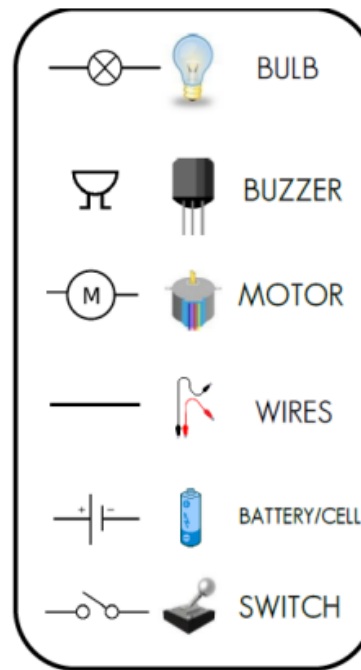
Component - the parts that something is made of.

Current - a flow of electricity through a wire or circuit.

Energy - the power from sources such as electricity that makes machines work or provides heat.

## Electricity Year 4

Key:



Typical electrical appliances and devices which require different electrical power: battery, mains, and both battery and mains, for example.....

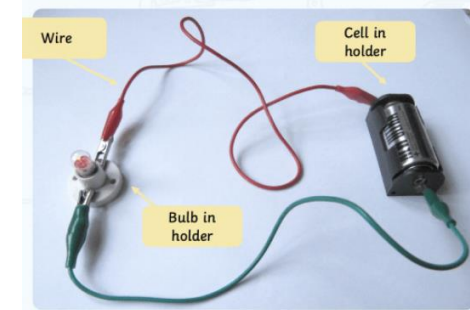


## Top Takeaways

Having studied this topic you should be able to:

- 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

## A simple circuit



## Conductors and Insulators



### **Scientific Skills**

- ask relevant questions and use different types of scientific enquiries to answer them
- set up simple practical enquiries, comparative and fair tests
- gather, record, classify and present data in a variety of ways to help in answering questions
- record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- use results to draw simple conclusions, make predictions, suggest improvements and raise further questions
- identify differences, similarities or changes related to simple scientific ideas and processes