

electricity

plug

positive

negative

electrical

electrical circuit

component

connection

short circuit

symbol

loose

mains

## Welton Primary School—Science Knowledge Organiser



Year: 4 Electricity Physics

### What should I already know?

- I know about similarities and differences in relation to places, objects, materials and living things.
- I can talk about the features of their own environment.

Vocabulary

A form of energy that is carried

by wires and used to provide heating, lighting, and power devices.

A device with 2 or 3 prongs on the

end of an electrical cord.

Where an electric charge flows

into the battery.

Where an electric charge flow out

An object that has been invented

Where the supply of water, elec-

tricity, or gas enters a building.

A complete route around which an

electric current can flow.

Parts that something is made of.

An incomplete or broken loop

where electricity cannot flow.

To disrupt an electrical circuit.

A drawing or shape that

represents an object.

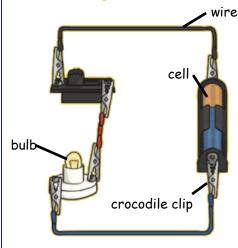
### Uses of Electricity

Simple Series Electrical Circuit

- Electricity is a type of energy.
- It is used to power lots of different things, including many items that we use in everyday life.
- Electricity can be created in a number of different ways. For example: burning fossil fuels, solar power, wind power and water power.



# Complete Circuit



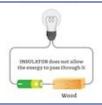
Simple Serves Electrical en sav		
	complete circuit	A complete loop with electricity flowing the way it is supposed to flow.
	cell	A single source of stored power.
	battery	One or more cells together form a battery that gives power.
	connection	Joining 2 or more components together.
	crocodile clip	Sprung metal clip with teeth used to make a temporary connection.
	bulb	The glass part of an electric lamp, which gives out light when electricity passes through it.
	switch	A small control that you use to turn a device on or off.
	wire	A long thin piece of metal used to carry an electric current.
	buzzer	An electrical device that is used to make a buzzing sound.
	motor	A device that uses electricity or fuel to produce movement.

#### Conductors and Insulators

When they are placed in a circuit, some materials allow electricity to pass freely through them. These are called electrical conductors. Metal is a good conductor.



When they are placed in a circuit, some materials do not allow electricity to pass freely through them. These are called electrical insulators.



Conductors