

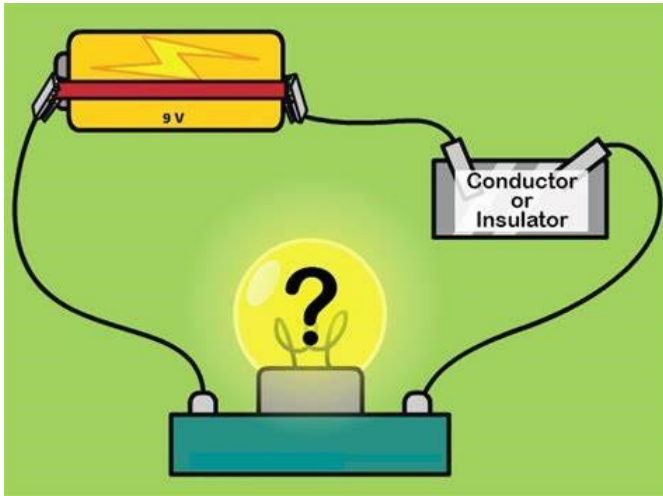


What I should already know:

Electricity can be dangerous
 Electrical appliances need to be plugged in to work
 Some appliances work because they have a battery

By the end of this unit I will know:

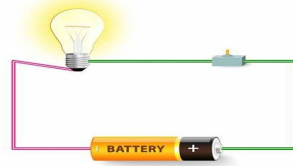
How to construct a simple circuit
 How to produce light, sound and movement through a simple circuit
 How electricity flows a round a circuit and give reasons why some circuits do not work
 Which materials are good conductors and which are good insulators
 The safe use of electrical components and the dangers of mains electricity



Investigation:

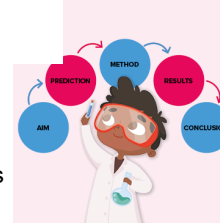
How does a circuit work?
 Can we light up a bulb?
 What types of materials conduct and insulate from electricity?

YEAR 4: Switched On
Science: Physics



Working Scientifically

Using straightforward scientific evidence to answer questions or to support their findings.
 Identifying differences, similarities or changes related to simple scientific ideas and processes.

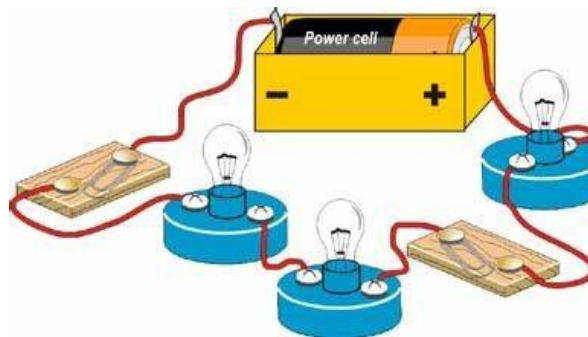


Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Setting up simple practical enquiries, classifying and presenting data in a variety of ways to help answer questions

Recording findings using simple scientific language , drawings, labelled diagrams, keys , bar charts and tables



Vocabulary

Battery	A device that stores energy which can ne used to make electricity
Bulb	Emits light when powered by electricity
Buzzer	An electrical device that makes a buzzing noise and is used for signalling
Cell	Another name for a battery in a circuit
Complete circuit	A circuit that has all the correct parts so that electricity can flow around it
Component	A part of an electrical circuit
Conductor	An object or type of material that allows the flow of an electrical current
Electricity	A form of energy resulting from the existence of charged particles
Electrical appliance	An appliance that needs electricity to work
Insulator	An object or material that does not allow electricity to flow along it
Motor	A machine powered by electricity
Plug	A device that makes an electrical connection
Rechargeable	A battery which is able to have its electrical energy restored by connection to a power supply
Short circuit	A malfunction or fail of the electrical flow in a circuit
Solar	Power form the sun
Switch	An electrical for making and breaking the connection in an electrical circuit

