

Electricity - Y3 & Y4

Key Vocabulary	
Appliance	A piece of equipment or device designed to perform a particular job.
Battery	A device that stores electrical energy as chemical energy. Two or more cells joined together form a battery.
Cell	A component that converts stored chemical energy to electrical energy.
Circuit	A complete route that electricity can flow around.
Electricity	A type of energy that can flow through certain materials, e.g. from a power source through wires to an appliance.
Electrical Conductor	A material that allows electricity to flow through it.
Electrical Insulator	A material that does not allow electricity to flow through it.
Main Electricity	Electricity supplied to buildings through a network of power lines.

Cell	Bulb	Wires	Buzzer	Motor	Switch
					
A cell is a component that converts stored chemical energy to electrical energy.	A bulb is an electrical component that produces light.	Wires are a component that connect other components together to create a circuit .	A buzzer is an electrical component that produces sound.	A motor is an electrical component that produces movement.	A switch is a component that controls the flow of electricity in a circuit .

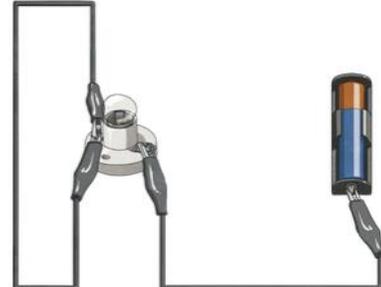
Complete Circuit

Complete **circuits** will work because the components are all connected as part of a continuous loop.



Incomplete Circuit

An incomplete **circuit** will not work because it will either be missing components or connected in such a way that it does not form a continuous loop.



Electrical Insulators

 plastic

 rubber

 wood

Electrical Appliances		Non-Electrical Appliances
Battery-Powered Appliances	Mains-Powered Appliances	
These appliances require the use of batteries as an electrical power supply.	These appliances require the use of mains electricity as an electrical power supply.	These appliances do not require the use of electricity .
		

Electricity Conductors

 water

 metal

 graphite

Electrical Safety

 **Electrical hazard**



Exposed electrical wires can cause electric shocks or result in fires.

Keep electrical appliances and components away from water.