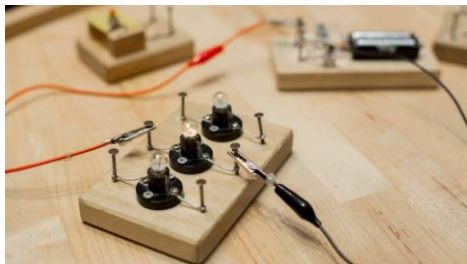
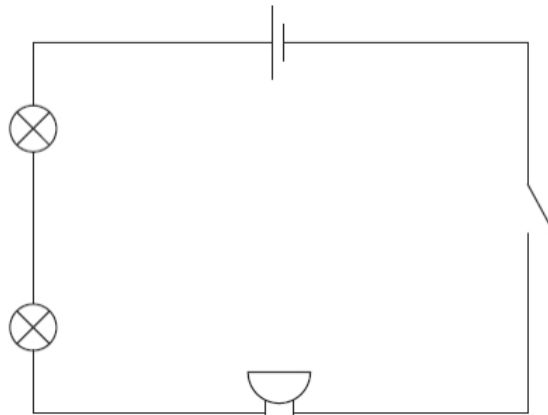


An example of circuit diagram. This one includes two lamps, a switch, a buzzer and a battery.



Year Six Science Electricity



What is needed to make an electric current flow?

A **complete** circuit is needed for an electric current to flow. This means there is a complete loop without any gaps through wires and components, from one terminal of a battery (power source) to its other terminal.

If the battery and components are arranged in one single loop, we call this a series circuit.

Did you know that the lamps will glow brighter in a circuit if you add more batteries?

The larger the electric current flowing through a lamp the brighter it will be. If we increase the voltage of the batteries in the circuit then the lamps will glow brightly (however if the voltage becomes too great the lamps will burn out).

Did you know that the flow of electricity is also affected by the number of components in the circuit?

For example If we increase the number of lamps in a series circuit then they will glow dimly.

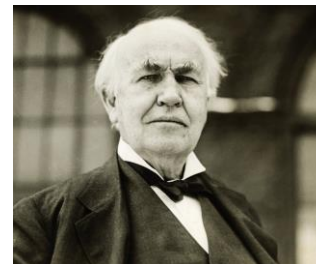


Significant person

Shirley Ann Jackson Born 1946 - A nuclear scientist who contributed to the design and build of the tiny electrical circuits we use in our mobile phones.

Significant person

Thomas Edison 1877-1931 - had a huge influence on modern life. He contributed to inventions such as the light bulb and the motion picture camera as well as improving the telephone.



Key vocabulary

Electrical Conductor	Lets electricity flow through the circuit easily
Electrical insulator	Does not let electricity flow through the circuit easily. Plastics, ceramics and air are insulators.
Electrical circuit	The path along which electric current can flow
current	The flow of electrical energy through the circuit
battery	A store of energy which can be used as a source of power
component	A part of the circuit, for example batteries, lamps, switches, motors and buzzers
Mains electricity	Electricity supplied to a household through wires from power stations