

Science Knowledge Organiser

Topic: Electricity

Year: 3/4
(LKS2)

Strand: Physics

What should I already know?

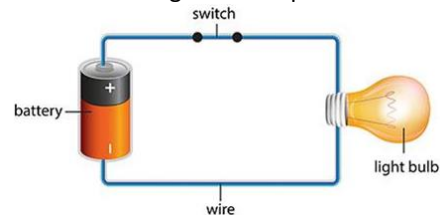
That some common items will use electricity. Electricity can be dangerous.

What will I know by the end of the unit?

- Common appliances that run on electricity.



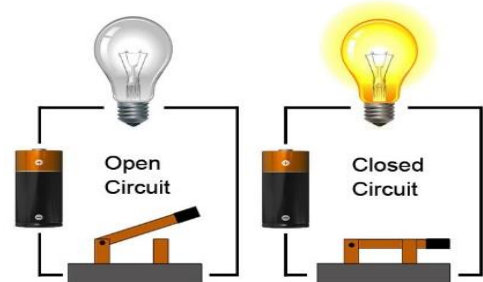
- How to construct a simple series circuit, identifying and naming the basic parts.



- Identify whether or not a lamp will light in a simple series circuit.

- Identify some common conductors and insulators.

- Recall that a switch is able to open and close a circuit.



Vocabulary

Circuit	A closed path through which an electric current flows or may flow.
Cell	A device that is used to generate electricity (A battery is an example).
Appliance	A device or piece of equipment designed to perform specific tasks (some run on electricity).
Insulator	A material in which very little electric current will flow through it.
Conductor	A material in which a lot of electric current will flow through it.
Component	A device that is added to a circuit to make it work in a particular way.
Bulb	A lamp made of glass containing wire that creates light.
Motor	A machine, usually powered by electricity that supplies motion power to an object
Switch	A device that is used to open and close a circuit.
Light	Emitted through a bulb, one of the effects of electricity.
Sound	Commonly emitted through a buzzer, one of the effects of electricity.
Heat	Warmth that may be felt through the components of a circuit, one of the effects of electricity.
Movement	Common through the addition of a moving component, one of the effects of electricity.

Key Questions/Investigations

Which appliances use electricity?

Which materials can be used to complete a circuit?

Classifying and Grouping: identifying electrical appliances and non-electrical appliances.

Comparative and Fair Testing: testing materials that can or cannot be used to connect across a gap in a circuit.