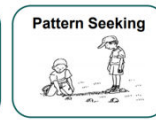
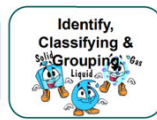
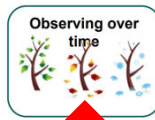


Key Vocabulary

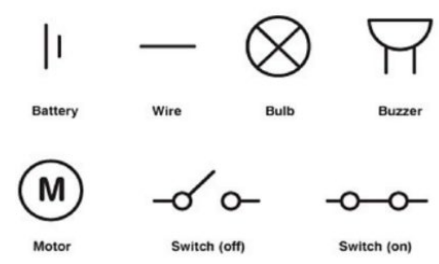
Mains	The electricity that is delivered to homes and businesses through the electrical grid.
Component	Any part of an electrical circuit.
Battery/Cell	The source of electric power in a circuit.
Complete Circuit	An uninterrupted path of electricity that runs from the source, round the circuit and back to the source.
Conductor	An object or material that allows electricity to flow through it.
Electrodes	A conductor that is used to carry current to non-metallic solids, liquids or gases.
Voltage	The pressure that pushes electricity.
Current	The flow of electricity through a circuit.

Conceptual Science Knowledge – Electricity

- Construct a simple series electrical circuit, identifying and naming its components, including cells, wires, bulbs, switches and buzzers
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
- Understand the difference between electrical current and voltage.
- Identify why the correct voltage is necessary for specific electrical appliances
- 



Physics



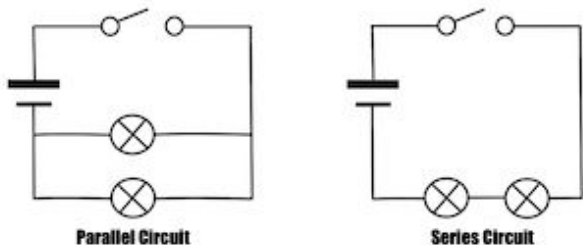
Domain Knowledge (prior knowledge needed)

Electricity is briefly defined as the flow of electric charge and it is used to power electrical appliance. Conductors allow electricity to travel freely whilst insulators prevent it

Working Scientifically Knowledge – Observation Over Time

- Plan a scientific enquiry and identify which variable will change.
- Taking measurement and using results to make predictions

Circuit Types



Questions for experts

What impact does voltage have on an electrical circuit?  
 What would happen if a circuit was always powered by too much voltage?

Where can this take you?

- Electrical Engineer
- Electrician
- Aerospace Engineer

