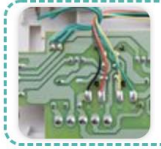
Knowledge Organiser: Year 6 Electricity

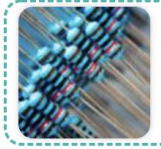
Careers connected to electricity: mechanical engineering technician, electricity distribution worker, electrical engineer, energy engineer

Lesson Sequence

1. Describe the parts of an electric circuit



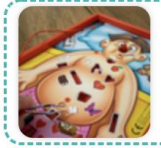
2. Explore voltage and its effect on an electrical circuit



3. Apply knowledge to identify and correct problems in a circuit

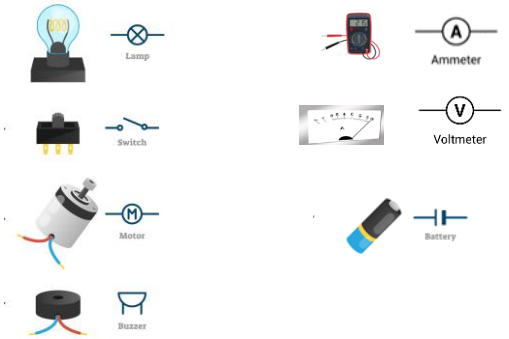
4. Investigate what affects the output of a circuit

5. Build a set of traffic lights

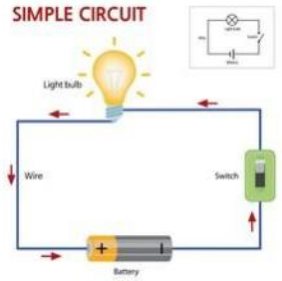


6. Apply knowledge of conductors and insulators

Circuit Symbols

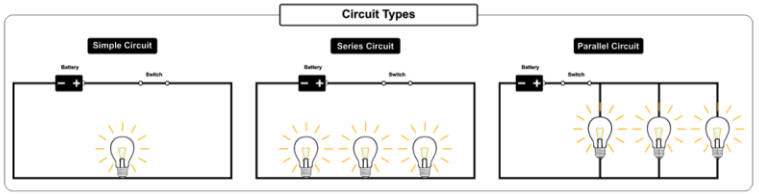


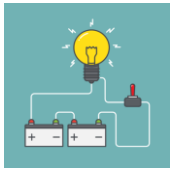
Wires are always drawn with a **straight line** using a **ruler** in scientific diagrams.



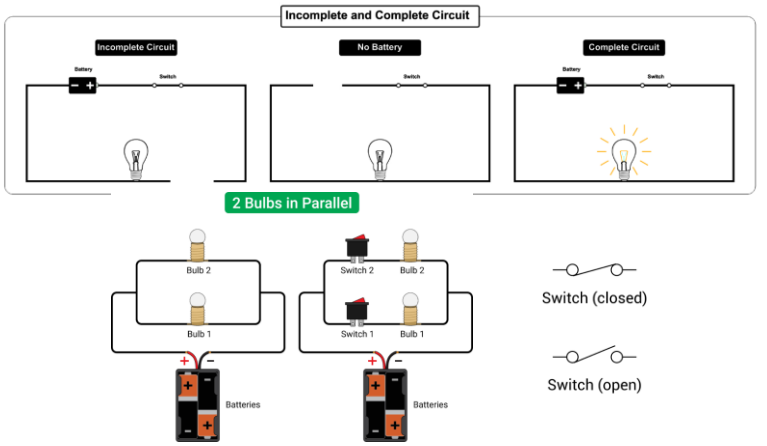
The **current** flows from negative to positive. There are no gaps - it is a **complete** circuit and the bulb lights up.

Different Circuits





Adding more cells (batteries) to a circuit will make bulbs **brighter**, buzzers **louder** and motors **faster**.



Switches can be placed in a **parallel circuit**, so that 1 light can be turned on while another is off (just like in a house).

Unit Rocket Words: Year 6 Electricity

Rocket Words

	circuit	a compete path which allows electricity to flow
	battery	a source of energy in an electrical circuit
	electricity	a form of energy
	resistor	a component that reduces electric current flow
	variable resistor	a component which varies the amount of electric current flow
	dimmer switch	a light control which allows you to change the brightness of a light
	output	the amount of something produced (e.g., brightness of a bulb)
	systematically	working in a methodical way
	synchronised	operating at the same time or rate
	signal	an electrical impulse transmitted or received
	conductor	materials which allow electricity to flow through them easily
	insulator	materials that do not let electricity pass through them easily