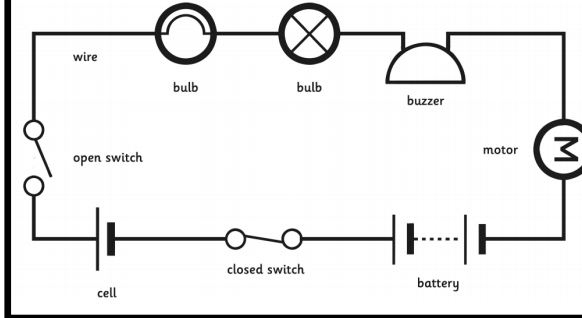


Key vocabulary

circuit	A path that an electrical current can flow around.
cell/ battery	A device that stores energy as a chemical until it is needed. A cell is a single unit. A battery is more than one cell.
current	The flow of electrons, measured in amps.
amps	How electric current is measured.
voltage	The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.
component	A part of an electrical circuit (e.g. wire, bulb, buzzer)

Circuits show the path that an electrical current can flow around.

We can use symbols to draw an electrical circuit.



Circuit symbols

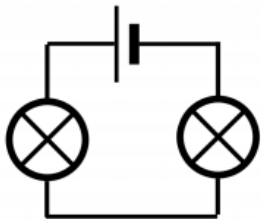
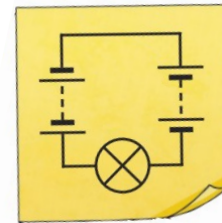
	Bulb	
	Cell	
	Battery	
	Open Switch	
	Closed Switch	
	Buzzer	
	Motor	
	Voltmeter	
	Resistor	
	Ammeter	

Variation in how components function

When changes are made to circuits, components can function differently.

What will make a bulb brighter or a buzzer louder?

- Adding more batteries or a higher voltage so that there is more power flowing through the circuit.

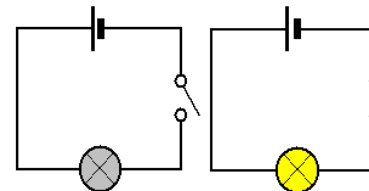


What will make a bulb dimmer or a buzzer quieter?

- Having fewer batteries or a lower voltage so there is less power to the circuit.
- Adding more buzzers or bulbs. The power will then be shared by more components.

How do I stop the flow of current?

- If switches are open or wires are removed from a circuit, bulbs and buzzers will turn off. This is because there is no longer a closed circuit for current to flow.



Knowledge objective	Self-assessment (✓)
I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.	
I can compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.	
I can use recognised symbols when representing a simple circuit in a diagram.	