

SMRP Science Knowledge Organiser for Year 6 Term 4 Electricity

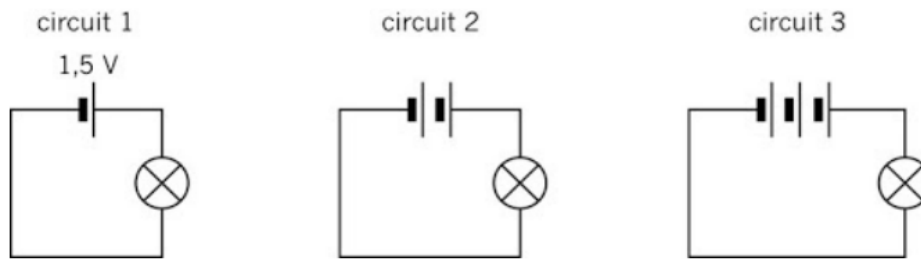
Science Knowledge

If the number of cells in a circuit increase, the brightness of the lamp or the volume of the buzzer increases, because the voltage in the circuit is greater.

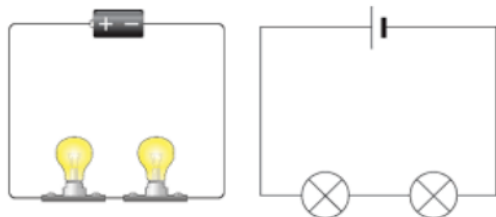
Components within a circuit will work if the circuit is not broken and there is a source of energy.

The bulb will be brighter if you increase the current by adding more batteries or having a battery with a higher voltage.

Adding more cells in a circuit will make the bulbs brighter. The bulb in circuit 2 will be brighter than in circuit 1 and in circuit 3 will be brighter than in 1 and 2.



Adding bulbs to a circuit will make each bulb dimmer

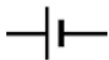








What does the lamp need to light up?

When a light bulb is connected to an electrical power supply, an electrical current flows from one metal contacts to the other – making the circuit complete. As the current travels through the wires and the filament, the filament heats up to the point where it begins to emit photons, which are small packets of visible light.



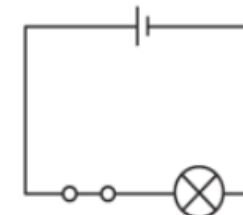
Circuit Symbols

cell	
battery	
wire	
bulb	
buzzer	
motor	
switch	

Science Vocabulary

Word	Definition
cells	A device used to generate electricity, e.g. battery
electrical component	Part of a circuit that does a job
electrons	Carry electricity around the circuit
parallel Circuit	In a parallel circuit, the current that flows is divided between each of the components
series circuit	In a series circuit, the current that flows through each of the components is the same
voltage	An electrical force that pushes electricity around a circuit (measured in volts)
current	The flow of electricity around a circuit (measured in amps)

SIMPLE CIRCUIT DIAGRAM



PARALLEL CIRCUIT DIAGRAM

