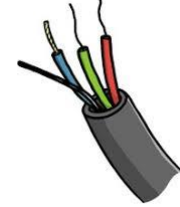


Year 6 Knowledge Organiser- How do I brighten a bulb?

Vocabulary Dozen			
Cell 	A cell is a device containing electrodes that is used for generating current.	Component	A component is a device (such as a bulb) that fulfils the function of the circuit.
Electricity 	Electricity is a form of energy resulting from the existence of charged particles.	Bulb 	A glass bulb which provides light by passing an electrical current through a filament.
Motor 	"A motor is a machine that uses electricity to make things move, like a car or a toy."	Insulator	An insulator is a material or an object that does not readily allow electricity to flow through it.
Circuit 	A complete and closed path around which a circulating electric current can flow.	Wire 	A wire is a long thin piece of metal that carries an electrical current often covered in plastic for safety.

Key Knowledge

How can we make a bulb brighter or dimmer?

1. Use more cells

More batteries give more power.

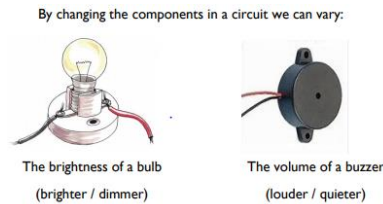
This makes bulbs brighter, buzzers louder, and motors go faster.

2. Add more bulbs, buzzers or motors

If we keep the same number of cells but add more things, like bulbs or motors, they will get less power. This makes them dimmer, quieter, or slower.

3. Use stronger cells

Cells with higher voltage give more energy. This makes bulbs shine brighter, buzzers sound louder, and motors move faster.



What is a switch and how does it work in a circuit?

How Electricity Works

Electricity helps many things work. It travels around a circuit.

A circuit is like a loop or a path. When the circuit is joined, electricity can flow and make things work — like lights, motors, or buzzers.

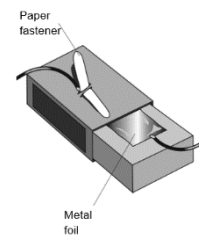
A switch is used to control the circuit.

- When the switch is off, the circuit is broken, and the light or buzzer stops.

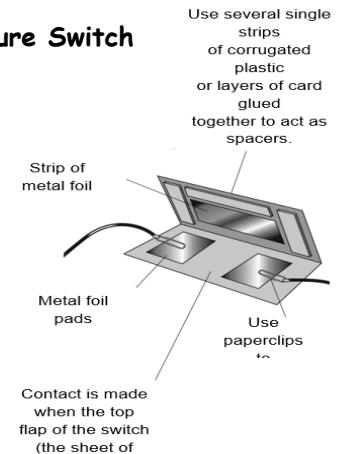
When the switch is on, the circuit is complete, and the light or buzzer works again.

The different types of switches to use in a circuit.

A Slide Switch



A Pressure Switch



A Tilt Switch.



Useful Weblinks

<https://www.bbc.co.uk/bitesize/topics/zj44jxs>



<https://classroom.thenational.academy/units/electrical-circuits-06f7>