Knowledge Organiser

Vocabulary

pictures	Key word	definition
	**circuit**	a complete route which an electric current can flow through
	**current**	a flow of electricity through a wire
	**battery**	a small device that provides power for electrical items
	**appliance**	something that uses electricity
	**conductor**	any material that electricity can pass through or along
	**insulator**	any material that electricity cannot pass through or along
	**buzzer**	an electrical device that makes a buzzing sound
	**motor**	a device that changes electrical energy into movement
	**wire**	a long thin piece of metal that carries an electrical current. It is often covered in plastic for safety
	**electrical safety**	the concept that electricity can be hazardous is not used appropriately

Key facts

Electricity has been known about since the Ancient Greeks but it wasn't until the 16th century that a physicist, named William Gilbert, used the word 'electric.'

In 1752, Benjamin Franklin carried out an experiment with a thunderstorm in which he found out that lightning was actually electrically charges and could give people a shock.

Thomas Edison, in 1879, created the first long-lasting light bulb. Although it started with just one bulb, he soon managed to generate enough electricity to power a neighbourhood.

Since then, the use of electricity has become vital to our everyday life.

Electrical safety

Further Reading

Check out: https://www.dkfindout.com/uk/science/electricity/ for lots more information on electricity

GLUE ME

What I am expected to know from the National curriculum
• identify common appliances that run on electricity
• construct a simple series electrical circuit, identifying and naming its basic parts, 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
• recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
• recognise some common conductors and insulators, and associate metals with being good conductors
• QR code for end of unit assessment:

QUESTIONS TO DEEPEN YOUR LEARNING

Character	Critical Thinking	Creativity	Communication	Citizenship	Collaboration
Which parts of electricity do I need to understand?	Why do I need to know about electricity?	How can I investigate electricity?	How could I present my electrical investigations?	How does electricity have an effect on everyone?	What have other discovered about electricity?