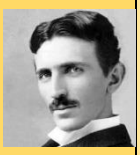
Croxby Primary Academy

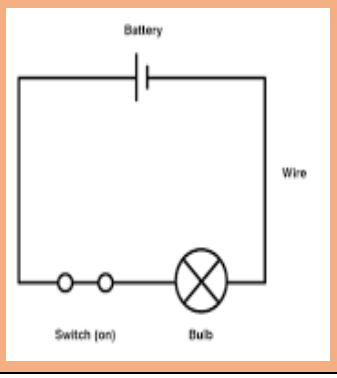
Year 6: Electricity Knowledge Organiser

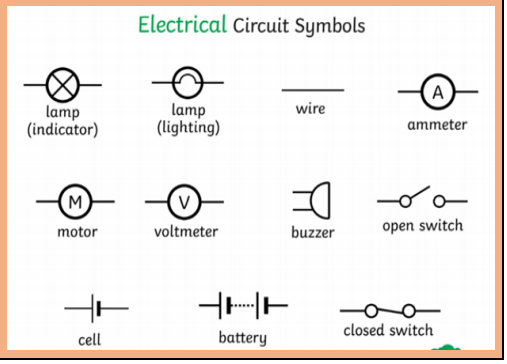
Key People/Scientists	
	**Nikola Tesla (1856-1943)** He was an engineer and scientist known for designing the alternating-current (AC) electric system, which is the predominant electrical system used across the world today.

Misconceptions/Key facts
Misconception: In an open circuit, current flows to the part where there is a gap and 'turns back' to the battery when it finds that it cannot flow through the gap. **Fact**: In an open circuit, current does not flow at all. **Misconception**: A change in one place of a circuit only affects the parts 'downstream' from the change (sequential model). **Fact**: An electric circuit is a complete system and different parts of the circuit interact so that a change in one place affects the whole circuit.

Key Questions	
What happens to a bulb when more batteries are added to a circuit?	Increasing the voltage increases the brightness of the bulb.
What happens to the volume of a buzzer when higher voltage batteries are used in a circuit?	Using batteries with a higher voltage increases energy supply, thus making bulbs, buzzers or motors, brighter, louder or faster.
What happens when you add two bulbs to a series circuit?	If more light bulbs or other resistors are placed in a series circuit, there is more resistance in the circuit, and so the current, and the brightness of both bulbs would be reduced.
What is the effect of having a gap in the circuit?	If the circuit is broken at any point there won't be any current that will flow.
What is electric current?	Electric current is the rate of flow of electric charges.

Diagrams/Visual Aids





Key Vocabulary	
brightness	The lightness or darkness of reflected light, determined in large part by the light's intensity.
bulb	A glass bulb which provides light by passing an electrical current through a filament.
buzzer	An electrical device that makes a buzzing noise and is used for signalling.
diagram	A simplified drawing showing the appearance, structure, or workings of something.
motor	A machine powered by electricity that supplies motive power for a vehicle or other moveable device.
series circuit	A complete and closed path around which a circulating electrical current can flow.
switches	A device for making and breaking the connection in an electrical circuit.
symbols	A drawing which represents the electrical component in the circuit.
voltage	An electrical force that makes electricity move through a wire, measured in volts.
volume	The quantity or power of sound; degree of loudness.