Leybourne Ss Peter & Paul CEP Academy - Knowledge Organiser

Science Topic : Electricity	Year 6	Term 2

Key Knowledge

To know that electricity can only flow through a complete circuit
To know that the brightness of a bulb or the volume of a buzzer depends on the number of batteries used in the circuit
To know that adding more batteries (cells) to a circuit will make a bulb (lamp) brighter or a buzzer louder
To know that using a battery with a higher voltage will make a bulb brighter or a buzzer louder
I can work out how changing a circuit will affect the brightness of a bulb or the volume of a buzzer
I can work out how opening and closing switches will affect the components in a circuit
I know the circuit symbols for some components, like a battery (cell), bulb (lamp), buzzer, motor and switches

Components of a circuit

	BULB A component which lights up when electricity passes through it in a circuit	
M	**MOTOR** A component which moves (spins) when electricity passes through it in a circuit	
	BUZZER A component which makes a sound when electricity passes through it in a circuit	
	WIRE Plastic-coated electrical wire which conducts electricity around a circuit	
	SWITCH Part of a circuit which can easily be opened or closed to control the flow of electric current	
	Battery A safe store of electrical energy.	

Know how to…

make a bulb brighter or a buzzer louder
change a circuit to affect the brightness of a bulb or the volume of a buzzer
affect the components in a circuit by opening and closing switches

Key Vocabulary

Electrical conductors	Materials which allow electricity to flow through them easily, for example, metals
Electrical insulators	Materials which do not allow electricity to travel through it easily, for example, plastics
Electrical circuit	An **electrical circuit** is a path or line through which an **electrical** current flows. The path may be closed (joined at both ends), making it a loop. A closed **circuit** makes **electrical** curre nt flow possible. It may also be an open **circuit** where the electron flow is cut short because the path is broken.
Component	A part or element of a larger whole
Bulb	A replaceable component that produces light from **electricity** is called a **lamp**. Lamps are commonly called light **bulbs**
Motor	An **electric motor** is an **electrical** machine that converts **electrical** energy into mechanical energy
Buzzer	A **buzzer** or **beeper** is an audio signalling device
Wire	**Electric** current (**electricity**) is a flow or movement of **electrical** charge. The **electricity** is conducted through copper **wires**
Switch	A **switch** is an **electrical** component that can disconnect or connect the buzzer or light to the circuit
Battery	**Battery** (**electricity**) In **science** and technology, a **battery** is a device that stores chemical energy and makes it available in an **electrical** form
Cell	A **cell** is a device used to generate **electricity**, or to make chemical reactions by applying **electricity**. A battery is one or more **cells**, connected.