

Electricity	Key learning	Possible evidence	Knowledge at end of the unit	Vocabulary by end of unit
Year 4	1. Identify common appliances that run on electricity 2. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers 3. 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 4. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit 5. Recognise some common conductors and insulators, and associate metals with being good conductors.	Can identify electrical appliances including central heating systems, showers etc Can draw and label a diagram of a complete circuit Can identify complete and incomplete circuits. Can add a switch to a simple circuit and state why it is necessary and its function Group materials depending on whether they are conductors or insulators of electricity	Recognise appliances that use and do not use electricity and how to stay safe around electricity Know all elements are required for a complete series circuit and name the parts involved. Bulb, buzzer, wires, switch, battery, cell. From a given circuit or diagram of a circuit, chn should identify if it is a complete, working circuit and if not, what is missing or give reasons why it wouldn't work. Can draw circuits using own symbols. State the function and necessity of a switch and know when the lamp will light. Know that a switch opens and closes a circuit Know why some materials conduct electricity and some do not. Group and identify conductors and insulators of electricity. Know metals are good conductors.	Appliances Circuit Battery (two or more cells) Cell (single unit transferring chemical energy to electrical energy) Bulb Wires Buzzer Series circuit Switch Electricity Electrical Conductors Electrical Insulators Generate Renewable and non renewable
Year 6	1. associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit 2. compare and give reasons for variations in how	Can make electric circuits and demonstrate how variation in the working of particular components, such as the brightness of bulbs can be changed by increasing or	Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. If you use a cell with a higher voltage, the same thing happens. Adding more bulbs to a circuit will make each bulb less bright. Using more motors or	Circuit, complete circuit, circuit break circuit diagram, circuit symbol, cell, battery,

	components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches 3. use recognised symbols when representing a simple circuit in a diagram	decreasing the number of cells or using cells of different voltages Can state how a switch works within an electrical circuit Can draw circuit diagrams of a range of simple series circuits using recognised symbols	buzzers, each motor will spin more slowly and each buzzer will be quieter. Turning a switch off (open) breaks a circuit so the circuit is not complete and electricity cannot flow. Any bulbs, motors or buzzers will then turn off as well. Can use recognised circuit symbols to draw simple circuit diagrams. Know correct symbols to use to represent individual components.	voltage
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