



By the end of ...	ELECTRICITY Progression in Key Concepts	PoS suggested year
Key Stage 1	<ul style="list-style-type: none"> • <i>Recognise that electricity can be dangerous</i> • <i>Recognise that batteries produce electricity</i> • <i>Recognise that electricity travels through wires</i> 	Year 1 or 2
Key Stage 2	<ul style="list-style-type: none"> • Identify common appliances that run on electricity • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells (batteries), wires, bulbs, switches and buzzers • Identify whether or not a lamp (bulb) will light in a simple series circuit, based on whether or not the lamp (bulb) 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 (bulb) lights in a simple series circuit • Recognise some common conductors and insulators, and associate metals with being good conductors. 	Year 4
	<ul style="list-style-type: none"> • Associate the brightness of a lamp (bulb) or the volume of a buzzer with the number and voltage of cells (batteries) used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • Use recognised symbols when representing a simple circuit in a diagram. 	Year 6
Key Stage 3	<p>Current electricity</p> <ul style="list-style-type: none"> • <i>Recognise that</i> electric current <i>is</i> measured in amperes • <i>Investigate</i> series and parallel circuits: <ul style="list-style-type: none"> ○ currents add where branches meet ○ current as flow of charge • <i>Recognise that</i> potential difference <i>is</i> measured in volts • <i>Compare</i> battery and bulb ratings; • <i>Recognise that</i> resistance, measured in ohms, <i>is</i> the ratio of potential difference (p.d.) to current • <i>Investigate</i> differences in resistance between conducting and insulating components (quantitative). 	Year 7, 8 or 9
	<p>Static electricity</p> <ul style="list-style-type: none"> • <i>Observe and describe the</i> separation of positive or negative charges when objects are rubbed together: transfer of electrons, forces between charged objects • <i>Investigate</i> the idea of electric field: forces acting across the space between objects not in contact. 	