



Medium Term Unit Planning

Lesson title and learning Intention	Threshold concepts (success criteria)	Milestones (success criteria)	Lesson structure/differentiation
Science – Understand electric circuits/work scientifically			
1. Symbols	Understand electric circuits	Use recognised symbols when representing a simple circuit in a diagram.	Identify from circuit diagrams those circuits that will or won't work. Draw an accurate circuit diagram using appropriate symbols. Find out and explain why electrical components behave as they do in terms of resistance. Show effect of this in own circuits.
2. Investigate	Understand electric circuits Work scientifically	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells 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. Plan enquiries, including recognising and controlling variables where necessary.	To set up a series of enquiries that explore electrical circuits and various effects – choose which investigation to do. Pupils to use the sticky-note approach to their investigations.
3. Results	Understand electric circuits	Compare and give reasons for variations in how components function, including the	Pupils to create a results table and graphs Use subjective (or qualitative) descriptions (bright, very bright, dim, very dim) and then ammeters, light



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	<p>Work scientifically</p>	<p>brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>Report findings, including written explanations, causal relationships and conclusions</p>	<p>meters, sound meters and timers in order to provide them with quantitative data. Compare findings with parallel circuits and suggest why there is a difference. This research and data will be used to inform the desired effects for their artwork.</p>
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