



Physics - Electricity progression of substantive knowledge

Statements in red are from linked science units.

Year	Core Knowledge
Year 4	Identify common appliances that run on electricity.
	Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
	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.
	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
	Recognise some common conductors and insulators, and associate metals with being good conductors.
Year 5	Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. (Y5 - Properties and changes of materials)
Year 6	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.
	Use recognised symbols when representing a simple circuit in a diagram.