Science (strand: Electricity) Essential Skills and Knowledge and EYFS to Y6



Aspect	EYFS	KS1		Lower KS2		Upper KS2	
	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Identifying and naming	Some light sources need electricity or batteries to work, such as a torch, and some do not, such as candles				Identify and name a range of familiar devices and equipment that require electricity for power. Identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers).		Identify and name components of a circuit and define terms, such as voltage and current in relation to series circuits.
Series circuits			Create working circuits in the context of D&T (e.g. to light a bulb or work a buzzer)		Construct operational series circuits, using a range of components and switches for control, and use these to make simple devices.		Work scientifically to construct a series circuit for specific device or outcome and explain how it works.
Circuit symbols					Predict if a circuit will work based on whether it is a complete loop and draw simple circuits, using their own or conventional circuit symbols.		Draw a series circuit, using the conventional circuit symbols.
Current and voltage					Recognise that a cell (battery) is a power source, generating and pushing current (electricity) through a circuit, and by adding cells the power source increases.		Describe the relationship between the number or voltage of a cell or cells and the effect it has on a bulb or buzzer for example.
Conductors and insulators					Sort and classify materials into those that are conductors and those that are insulators, identifying similarities within the groups.		Predict materials that could be good conductors of electricity and conductors of electricity and conduct a fair test to show this.
Safety (in PHSE)			Identify dangerous scenarios from pictures or video clips.		Recognise the dangers of working with electricity and explain how to work safely.		Demonstrate how to work safely with electrical circuits.