



ELECTRICITY (PHYSICS)

Statements in *red* are linked from other topics

Progression in Scientific knowledge, concepts & skills	EYFS (Early Learning Goals)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	KS3
<u>Concepts</u> Cause and effect Energy Working Scientifically	Children know about similarities and difference in relation to places, objects, materials and living things.				Identify common appliances that run on electricity		Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in a circuit	Electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge
	Children talk about features of their own immediate environment and how environments might vary from one another				Construct a simple series electrical circuit and name its basic parts Identify whether a lamp will light based on whether the circuit is a complete loop Recognise the function of a switch in a circuit		Compare and give reasons for how components function (brightness of bulbs, loudness of buzzers) Know and use recognised circuit symbols when representing a simple circuit in a diagram	Potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential



St. Mary's and Our Lady of Grace Catholic Academies - Progression in Scientific knowledge, concepts and skills



	Children make observations of animals and plants and explain why some things occur and talk about changes				Identify common conductors and insulators			difference (p.d.) to current Differences in resistance between conducting and insulating components (quantitative) Static electricity
Possible learning questions					Could we cope without electricity at home?		Could we live without electricity? How has electricity changed the world?	