Electricity		
	Skills and Knowledge	**Key Vocabulary**
EYFS	• know electricity can be dangerous • explore a range of battery powered device	Battery, electricity, switch
Year 4 Circuits	• identify common appliances that run on electricity • identify mains operated and battery operated devices • describe some of the dangers associated with mains electricity • name some components of a simple electrical circuit • know that batteries are sources of electricity • recognise that for a circuit to work it must be complete • construct a working circuit • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, • wires, bulbs, switches and buzzers • make drawings of simple working circuits (pictorial only circuit symbols covered in year 6) • make circuits from drawings provided • 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 are methodical in tracing faults in simple circuits • describe the effect of making and breaking one of the contacts on a circuit • explain why some circuits work and others do not • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • describe how switches work • construct a home-made switch • identify materials as conductors or insulators • construct simple circuits and use them to test whether materials are electrical conductors or insulators • recognise some common conductors and insulators, and associate metals with being good conductors	Battery, cell, wires, switch, crocodile clips, buzzer, bulb, circuit, symbols, insulator, conductor, plastic, metal, appliance, component

	• relate knowledge about metals and non-metals to their use in electrical appliances • describe the use of conductors and insulators in components including connecting wires • identify playdough and graphite as non-metal conductors and explain why this is unusual	
Year 6 Electricity	• know that the 'amount' of electricity (voltage) depends on the number of batteries • construct some working series circuits with specified components • recognise conventional circuit symbols • use recognised symbols when representing a simple circuit in a diagram • draw circuit diagrams and construct circuits from diagrams using conventional symbols • explore how to change the brightness of bulbs and the volume of a buzzer • describe ways of changing the brightness of a bulb in a circuit or the volume of a buzzer • compare different circuits (e.g. for brightness of bulb) • recall that the amount of electricity is measured in voltage • 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 • explore the thickness of a wire in a circuit • describe the differences between wires usually used for circuits and fuse wires • describe what would happen if all the lights in a home were connected in the same circuit and one broke • explain the current in circuits using simple models and analogies (e.g. piped water, bicycle chain, children and sweets)	Voltage, current, series, component, circuit, conductor, positive/negative terminal,