## Year 4 Autumn 2 Electricity

Week	NC objectives	REMEMBER (prior knowledge)	KNOW (new knowledge)
1 2 3 4 5 6	<ul> <li>identify common appliances that run on electricity</li> <li>construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>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</li> <li>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>recognise some common conductors and insulators, and associate metals with being good conductors</li> </ul>	Children know about similarities and differences in relation to places, objects, materials and living things.  They talk about the features of their own immediate environment and how environments might vary from one another.  They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)	To know and explain ways that electricity is generated.  (Coal,wind,solar,Nuclear)  To know and identify electrical appliances and the types of electricity they use. E.g.  Washing Machine = Mains electricity  Mobile phone = Battery power  To know electricity can only flow around a complete circuit that has no gaps. There must be

	wires connected to both the positive
	and negative end of the power
	supply/battery.  To know that a conductor is something that allows electricity to pass through it and that metals are good conductors.
	To know that insulators do not allow electricity to pass through them
	To know that Switches can be used to open or close a circuit. When off, a switch 'breaks' the circuit to stop the
	flow of electricity. When on, a switch 'completes' the circuit and allows
	the electricity to flow.  To know basic elements in a circuit. E.g
	Bulb
	Cells
	Wires
	Switches
	Buzzers

Vocabulary	Prior knowledge vocabulary	New vocabulary
	Electricity, switch, wires	appliance, battery power, main power, circuit, series, cell,
		battery, bulb, buzzer, break in circuit conductor, insulator