



Year 2, Term 3B

Electricity (is a Year 4 topic and should only be taught after consideration whether further depth or consolidation of the KS1 POS is required).	
Programme of study	Learning Intentions
<p>This unit reviews the knowledge children have already gained in other units on materials and physical processes. It introduces children to the concept of electricity and the role it plays in everyday life. They will learn about the hazards associated with mains electricity.</p>	<p>I will know where electricity comes from.</p> <p>I will know that there are many devices around me and that they are powered by electricity, and that this comes from either batteries or the mains.</p> <p>I will know that electricity can be dangerous and how to keep safe.</p>
<p>End of Year Expectations Pupils should be taught to:</p> <ul style="list-style-type: none"> • identify appliances that are powered by electricity. • describe the dangers associated with mains powered appliances as opposed to battery powered. • name the components and describe the effect of completing a circuit to light a bulb, including cells, wires, bulbs, switches and buzzers • explain why components need to be connected correctly in order for a circuit to operate. Children can identify the need for a complete circuit for a bulb/buzzer to operate. • explain that a bulb will not light in terms of there being a break somewhere in the circuit. They may suggest that the break is due to a faulty component. • 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 	<p>I will know that different components are needed to create a circuit and I can name each component</p> <p>I can make a complete circuit, using batteries, wires and bulbs.</p> <p>I will know how to add an extra device to a simple circuit. I will know that a circuit only works if it is a complete loop</p> <p>I can give a reason why my circuit doesn't work.</p> <p>I will know which materials allow electricity to flow</p> <p>I will design and make a model which includes an electrical circuit</p> <p>I can draw a diagram of a circuit used within a model.</p>
<p>Vocabulary</p> <ul style="list-style-type: none"> • words related to electrical circuits <i>bulb, bulb holders, buzzer, battery, switch, circuit, connection, mains, wire</i> • comparative expressions <i>brighter, less bright, dimmer, more powerful, less powerful</i> 	