

Year4				
<i>Topic</i>	<i>Prior Learning</i>	<i>Present learning</i>	<i>Misconceptions</i>	<i>Future learning</i>
<p>Electricity National Curriculum</p> <ul style="list-style-type: none"> Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 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. 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. 	<ul style="list-style-type: none"> Explore how things work. (Nursery - Electricity) 	<p>Knowledge and Understanding-</p> <ul style="list-style-type: none"> common appliances that run on mains and on battery -hazards/dangers of using electricity -how to remain safe while using electricity - switch helps to break the circuit -Know the difference between a conductor and an insulator, giving examples of each -what are dependent and independent variables in a fair test -Recognise some common conductors and insulators and associate metals being good conductors <p>Investigations:-</p> <ul style="list-style-type: none"> -plan a fair test to find out how you can change the brightness of a bulb -plan a fair test to find out which materials can carry electricity(to sort conductors and insulators) -construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers <p>Vocabulary: conduct hazard electricity electric current appliances mains cell</p>	<p>Some children may think:</p> <ul style="list-style-type: none"> electricity flows to bulbs, not through them electricity flows out of both ends of a battery electricity works by simply coming out of one end of a battery into the component. 	<ul style="list-style-type: none"> Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. (Y6 - Electricity) 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. (Y6 - Electricity) Use recognised symbols when representing a simple circuit in a diagram. (Y6 - Electricity)

