



Pinner Wood School



Year Group	4	Term	Spring 1	Subject	Science	Topic	Electricity
						Key Question	How does that bulb glow?
Prior Learning and other Curriculum Links	<ul style="list-style-type: none"> I can explain that I need light in order to see things and that dark is the absence of light. I can show that light is reflected from surfaces. (Year 3)				Target Tracker statements (Skills)	<ul style="list-style-type: none"> - I can talk about common appliances that run on electricity. - I can construct and draw with labels a simple series electrical circuit which includes cells, wires, bulbs, switches and buzzers. - I can predict if a lamp will light or not in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. - I can explain that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. - I can show that some materials are conductors and some are insulators, and can explain that metals are good conductors. 	
Fundamentals	<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 				Key Facts/Sticky Knowledge	<p>The children should understand and know about health and safety.</p> <p>They would know the importance of having a power source for the circuit (mains or battery)</p> <p>They would have learnt about materials in Year 1 and 2 and the properties of these.</p> <p>Electricity is a type of energy that can build up in one place to flow to another.</p> <p>A power station is a place where electricity is created and sent to our homes</p>	

	<p>series circuit.</p> <ul style="list-style-type: none"> Recognise some common conductors and insulators, and associate metals with being good conductors. 		<p>The first power plant opened in 1882 and was opened by Thomas Edison.</p> <p>Thomas Edison was a very famous inventor who helped us make the most of electricity from bulbs to fuses</p>
<p>Our Curriculum Journey</p>	<p>Stunning Start: N/A</p> <p>Journey: Children will learn about what electricity is and how it was discovered. They will identify which appliances use electricity in their homes and how to keep themselves safe. Children will construct circuits, start to create pictorial circuits and conduct an investigation into how easily different types of switches can break and reconnect a circuit. They will learn to identify electrical and nonelectrical appliances. They will be able to explain, with support, how a circuit works. Children will be able to name at least two electrical conductors and insulators. They will be able to create a simple series circuit both with and without a switch. They will be able to accurately record their findings in a table.</p> <p>Show stopper: N/A</p>		
<p>Key Vocabulary (revisited)</p>	<p>electricity, electrical, mains, plugged in, battery, power, rechargeable</p>	<p>Key Vocabulary (new)</p>	<p>electricity, electrical, mains, plugged in, battery, power, rechargeable, solar, wind up, movement, cell, wire, bulb, bulb holder, buzzer, motor, component, circuit, complete circuit, flow, break, make, metal, connect, disconnect, positive, negative, switch, property, electrical conductor, Venn diagram, table, conclusion, evidence, annotate</p>