

YEAR 6

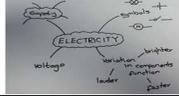
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
ELECTRICITY PHYSICS	<p>The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</p> <p>No Specific ELG links.</p>				<p>Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>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</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors</p>		<p>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</p> <p>Use recognised symbols when representing a simple circuit in a diagram</p> <p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p>

ELECTRICITY COMPOSITES

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
 Use recognised symbols when representing a simple circuit in a diagram

COMPONENTS

	1	2	3	4	5	6	End Point
	What are circuit symbols and why are they used?	How can I change the brightness of a bulb?	What effect does voltage have on buzzer volume?	What is the effect of changing one component in a circuit?	How can I use my knowledge of circuits to make a product?	How do we use electricity safely?	Know how to vary the function of different components. Understand the effect voltage has on different components.
CONCEPTS	ENERGY	ENERGY	ENERGY	ENERGY	ENERGY	ENERGY	Know how to vary the function of different components.

							Understand the effect voltage has on different components.
SKILLS	Use recognised symbols when representing a simple circuit in a diagram	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	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	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
KNOWLEDGE Science Knowledge Organiser: Electricity Year 6 - Twinkl	Symbols are used to depict components	Component functions can vary – loudness, speed, brightness	Voltage affects component function	Changing one part of the circuit can affect the other components	Circuits are used in everyday products	Safety precautions must be taken when using electrical equipment	Electrical circuits are constructed in different ways. The function of components can be affected in a variety of ways.
LESSON LINK	MTP Term 1	MTP Term 1	MTP Term 1	MTP Term 1	MTP Term 1	MTP Term 1	
PROGRESSIVE VOCABULARY	symbol circuit diagram	component function volume brightness speed	voltage cell circuit volume brightness	component function volume brightness speed	symbol circuit diagram voltage cell circuit	electricity safety precaution conductor insulator	Articulate and recognise subject specific knowledge
CURRICULUM EXPERIENCES	Children using the electrical equipment to create, test and investigate circuits and how the function of components can be affected.	Children using the electrical equipment to create, test and investigate circuits and how the function of components can be affected.	Children using the electrical equipment to create, test and investigate circuits and how the function of components can be affected.	Children using the electrical equipment to create, test and investigate circuits and how the function of components can be affected.	Children using the electrical equipment to create, test and investigate a burglar alarm system	Children using the electrical equipment to create, test and investigate circuits and how the function of components can be affected.	Children using the electrical equipment to create, test and investigate a burglar alarm system
END POINT	Children will be able to correctly draw electrical circuits	Children can vary brightness/volume	Children understand what voltage is	Children can vary brightness/volume	Make a burglar alarm	Children understand safety precautions around electrical equipment	