Lunt's Heath Primary School – Knowledge Organiser					
Science Focus	Electricity	Year 6	Term Summer 1		

W	What? (Key Knowledge)				
Electricity					
What is -Electricity is created by generators					
Electricity?	which can be powered by gas, coal,				
0	oil, and wind or solar.				
	-The electrical energy can be				
	converted into other types of energy				
	such as light, heat, movement or				
	sound.				
	-Electricity is dangerous, so be careful				
	when using electrical appliances.				
	Subheading				
A series circuit	-Electricity can flow through the				
(One pathway	components in a complete electrical				
around the	circuit.				
circuit)	-A circuit always needs a power				
	source, such as a battery, with wires				
	connected to both the positive (+) and				
	negative (-) ends. (A battery is made				
	from a collection of cells connected				
	together).				
	-A circuit can also contain other				
	electrical components, such as bulbs,				
	buzzers or motors, which allow				
	electricity to pass through.				
	-Electricity will only travel around a				
	circuit that is complete. That means it				
	has no gaps.				
What is a	-You can use a switch in a circuit to				
switch?	create a gap in a circuit. This can be				
300001.	used to switch it on and off.				
	-When a switch is open (off), there is				
	a gap in the circuit.				
	Electricity cannot travel around the				
	circuit.				
	-When a switch is closed (on), it				
	makes the circuit complete. Electricity				
т	can travel around the circuit.				
Increasing the	-The more cells that are used in a				
brightness of a	circuit, the brighter the bulb or louder				
bulb or the	the buzzer.				
volume of a	-If one cell is used, the higher its				
buzzer.	voltage, the more powerful the cell is.				
	Possible Experiences				
-Design and mak	re a set of traffic lights or burglar				
alam.					

-Identify the effects of changing a component in a circuit.

What? (Key Vocabulary)						
Spelling	Definition/Sentence					
Generator	A machine that make					
	electrical energy.					
Component	A part of something (a part					
	of a circuit).					
Voltage	Voltage is a measure of					
	the difference in electrical					
	energy between two parts					
	of a circuit					
Circuit	A path that an electrical					
	current can flow around.					
Cell/Battery	A device that stores energy					
	as a chemical until it is					
	needed. A cell					
	is a single unit. A battery					
	is a collection of cells.					
Current	The flow of electrons,					
	measured in amps.					
Amps	How electric current is					
	measured					
Resistance	The difficulty that the					
	electric current has when					
	flowing around a circuit.					
Electrons	Very small particles that					
	travel around an electrical					
	circuit.					
Diagrams and Symbols						
Components of a Circuit	and Their Symbols					
lamp/bulb						
(indicator)	/// wire					
lamp/bulb						
(lighting)						
motor	switch (open)					
	(open)					
-(M)- //	\_\\_\\_\\_\\					
buzzer						
Julio						
cell	switch (closed)					
H \						
battery						

These symbols can be used to create electrical  $\ensuremath{\mbox{circuit}}$  diagrams.

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