

7J ELECTRICITY

Previous Knowledge	KS2: Students may have built 'complete' circuits.				
Lesson Number	Title	Lesson Objectives	Content	Key words	Assessment/Homework
1	Electricity	<ul style="list-style-type: none"> How do we measure electricity? 	<ul style="list-style-type: none"> Circuit symbols Explain that for light bulbs to work you need a complete circuit Explain how switches work Describe how current is and how it is measured 	<ul style="list-style-type: none"> Current circuit 	
2	Models for circuits	<ul style="list-style-type: none"> How can we use models to help us to think about electricity? 	<ul style="list-style-type: none"> Use a model to explain how electricity flows through a circuit Identify what parts of a model represent 	<ul style="list-style-type: none"> current 	
3	Series and Parallel Circuits	<ul style="list-style-type: none"> What are the differences between series and parallel circuits? 	<ul style="list-style-type: none"> State what is meant by series and parallel circuit Describe how changing the number or type of components in a circuit affects the current Describe the differences in how current behaves in series and parallel circuits 	<ul style="list-style-type: none"> Series Parallel 	20 Mark Quiz (Exploring Science)

7J ELECTRICITY

4	Changing the current	<ul style="list-style-type: none"> How can we change the current in a circuit? 	<ul style="list-style-type: none"> Describe how changing the number or types of components in a circuit affects the current Describe how a voltmeter is used Explain why the current increases when the voltage of the supply is increased Explain what is meant by resistance 	<ul style="list-style-type: none"> Resistance Current Voltmeter 	
5	Required Practical: Resistance and current	<ul style="list-style-type: none"> How much current will flow through different lengths of wire? 	<ul style="list-style-type: none"> Describe the relationship between resistance and current 	<ul style="list-style-type: none"> Resistance Current Voltmeter 	Teacher Assessed 15 marks: Calculations from experiment results
6	Using Electricity	<ul style="list-style-type: none"> How do we use electricity safely? 	<ul style="list-style-type: none"> Discuss safety precautions to be followed when using electricity Describe the role of fuses and circuit breakers Explain how the different wires are connected 		
Revision and Assessment					
Where we will use these ideas again	KS4: Physics unit 2 - Electricity:		4.2.1.1	4.2.1.2	4.2.1.3
			4.2.2	4.2.2.4 Required Practical	4.2.3.2