

Topic Title: Electricity **Year Group**: 6 **Academic Year**: 2022/2023

Science Intent:

To build on their work from Year 4 to construct simple series circuits to help them to answer questions about what happens when they change different components

Prior Scientific Learning/Linked Topics: Maths Links: Literacy Links (including texts/media used): Y4-Writing investigations and drawing conclusions Identify common appliances that run on electricity • Construct simple series 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	
Scientific Knowledge	Working Scientifically
 Associate the brightness of a lamp or the volume of a buzzer with a number and voltage of cells used in a circuit Compare and give reasons for variations for 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 	 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments

Content:

- The children will demonstrate their knowledge from Year 4 using components to build a complete circuit.
- The children will use symbols to draw a circuit diagram.
- Children will investigate the effect of increasing or decreasing the voltage on different parts of the circuit.
- Children will plan and complete a scientific enquiry.

Key Vocabulary: At the beginning of each topic, the children have the opportunity to explore, learn and understand the key vocabulary.



Stunning Start/Marvellous Middle/Fabulous Finish:	OAA/Trips/Visits/Visitors: