

**Year 6 Spring 2**  
**STEM challenge (science investigators)**

| Week                       | NC objectives   | REMEMBER<br>(prior knowledge)  | KNOW<br>(new knowledge)   |
|----------------------------|---|--|---|
| 1<br>2<br>3<br>4<br>5<br>6 | <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> <p>□ 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</p> <p>LO: to know how to create a simple circuit using an output</p> <p>LO: to use scientific understanding to design a product</p> <p>LO: to build and construct using design</p> <p>LO: to test and evaluate designs</p> <p>LO: to present scientifically</p> | <ul style="list-style-type: none"> <li>- How to be safe using electricity</li> <li>- identify and compare the suitability of a variety of everyday materials</li> <li>- know how to manipulate them to create desired outcome</li> <li>- know how to make conclusions from an experiment's results</li> <li>- Know how to construct a simple circuit</li> <li>- Know how to use different outputs within a circuit (buzzer, bulb) and control with a switch</li> <li>- Know how to explain observations using scientific vocabulary</li> <li>- Know how to present information and evaluate based on simple experiments</li> </ul> | <ul style="list-style-type: none"> <li>- Know how to use symbols to draw and plan an electrical circuit</li> <li>- Know how to adjust components of a circuit to alter the outputs</li> <li>- Know how changing the voltage and power source can affect brightness of a bulb/volume of a buzzer</li> <li>- Know how to set up an experiment to draw conclusions</li> <li>- Know how to evaluate a product using scientific understanding</li> </ul> |

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|  |  | <ul style="list-style-type: none"> <li>- recognise some common conductors and insulators, and associate metals with being good conductors</li> <li>-</li> </ul> | and aspects of design functionality |
|--|--|---|-------------------------------------|