



Kindness

Positivity


Respect



SUBJECT MEDIUM TERM PLANNING

<p><b>Year Group:</b> Year 4</p>	<p><b>TERM:</b> Autumn 2</p>	<p><b>Theme:</b> Make a light-up Christmas decoration</p>
<p><b>National Curriculum:</b> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p>		
<p><b>Context:</b> In this unit we want children to use their scientific knowledge about electrical circuits to start designing and creating an everyday light-up Christmas decoration. Children will be able to evaluate existing products. They will show that their design meets a range of requirements and that they can assemble, join and combine materials and components with some accuracy.</p>	<p><b>Concepts:</b> Design- Begin to create own design criteria that is fit for purpose – a Christmas decoration that lights up when switched on Make- select appropriate materials and work with some accuracy Evaluate- use criteria to evaluate product</p>	<p><b>Vocabulary:</b> circuit, bulb, battery, current, open/closed switch, component, conductor</p>
<p><b>Prior Knowledge:</b> D and T skills in Y3 when making a wooden photo frame – working accurately to make cuts and holes, joining materials and combining structures that will hold together.</p>		<p><b>Future Knowledge:</b> Use a wide range of formal circuit symbols to make and produce diagrams for more complex circuits. Understand the difference between voltage and current. Build and use parallel circuits.</p>

**End points /by the end of this unit pupils will...** (NB Crucial/sticky knowledge is highlighted):

- Understand how to use a simple circuit in a product
- Use a number of components in a circuit
- Use their electrical knowledge to help them design and make a working light-up Christmas decoration
- Evaluate pre-existing light up decorations
- Make and evaluate their own decorations

Learning Objective	Teaching Input/ Activities	Key Questions	Resources																																				
<p>1 Evaluate pre-existing light-up Christmas Decorations</p>	<p><a href="#">W&amp;L evaluate Christmas decorations</a> <span style="float: right;">Friday 8<sup>th</sup> December 2017</span></p> <table border="1" data-bbox="763 544 1167 767"> <tr> <td>Decoration</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Decoration						1						2						3						4						5						<p>What makes a good Christmas decoration? Can you suggest some criteria?</p>	<p>Variety of decorations</p>
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<p>2 Design a light-up Christmas decoration</p>	<p>Children decide on a design criteria. Decoration ideas - sketch four options.</p> <p><a href="#">My Light Up Christmas Decoration Design</a> </p> <table border="1" data-bbox="763 995 1308 1286"> <tr> <td><a href="#">View (front/back or both)</a></td> <td> <p><b>Design Criteria</b></p> <ol style="list-style-type: none"> <li>1. Is the light obvious?</li> <li>2. Is it easy to turn on and off?</li> <li>3. Does it stand up well?</li> <li>4. Is it strong and sturdy?</li> <li>5. Is it bright and Christmassy?</li> </ol> <p><b>Equipment I will need</b></p> </td> </tr> </table>	<a href="#">View (front/back or both)</a>	<p><b>Design Criteria</b></p> <ol style="list-style-type: none"> <li>1. Is the light obvious?</li> <li>2. Is it easy to turn on and off?</li> <li>3. Does it stand up well?</li> <li>4. Is it strong and sturdy?</li> <li>5. Is it bright and Christmassy?</li> </ol> <p><b>Equipment I will need</b></p>	<p>What will your design need to be successful? Who is it for? What materials will you need? Why will that be the best material for the job?</p>																																			
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<p>3 -4 Make a light –up Christmas decoration</p>	<p>Children use a variety of skills to create their chosen design.</p>		<p><b>Cardboard, paper, tissue paper-shiny,</b></p>																																				

			<p>paper-cellophane, beads / sequins pom- poms cotton wool ribbon paint felt-tip pens pipe cleaners glue / sellotape / masking tape paper clip split pin switch</p>
<p>5 Evaluate your light-up Christmas decoration</p>	<p>Traffic light each of the criteria/peer assessment</p>  <p><u>WALT evaluate a Christmas decoration.</u> I put a traffic light next to my design criteria to show how I felt my final decoration met it. WWW: _____ _____ _____ EBI: _____ _____</p>	<p>Look back at your design criteria. How successful was your light-up decoration? What was successful about your design? How could you improve it? What would you change next time if you repeated the process?</p>	