

**Bullion Lane Primary School
Medium Term Plan for Design Technology**

Year: 3/4

Cycle: A

Term: Spring 2

Topic: Construct a model that lights up

Knowledge	Skills	Vocabulary
<ul style="list-style-type: none"> • To plan how to make a model that lights up. • Know that lights are designed with the particular needs of the user in mind and that these needs can vary wildly. • Understand that lights are made out of a variety of material suited to particular purposes. • Understand lights can be switched on and off. • Design and make a simple circuit incorporated a battery, bulb, wires and switches. • Use research to support the design. • Plan a product using drawings and labels. • Construct a working model. • Evaluate the model. 	<p>Drawing, planning and communicating ideas</p> <ul style="list-style-type: none"> *Generate ideas for an item, considering its purpose and user/s. *Identify a purpose and establish criteria for a successful product. *Plan the order of their work before starting. *Explore, develop and communicate design proposals by modelling ideas. *Make drawings with labels when designing. <p>Working with tools, equipment, materials and components to make quality products (including food)</p> <ul style="list-style-type: none"> *Select tools and techniques for making their product. *Measure and mark out, cut, score and assemble components with more accuracy. *Work safely and accurately with a range of simple tools. *Think about their ideas as they make progress and be willing to change things if this helps them improve their work. *Measure, tape or pin, cut and join fabric with some accuracy. *Demonstrate hygienic food preparation and storage. *Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT. <p>Evaluating processes and products</p> <ul style="list-style-type: none"> *Evaluate their product against original design criteria, e.g. how well it meets its intended purpose. *Disassemble and evaluate familiar products. 	<p>Light</p> <p>Electric</p> <p>Circuit</p> <p>Conductor</p> <p>Insulator</p> <p>Wires</p> <p>Bulb</p> <p>Switch</p> <p>Improve</p> <p>Change</p> <p>Design</p> <p>Tools</p> <p>Evaluate</p> <p>Review</p> <p>Make</p> <p>Angles</p> <p>Fold</p> <p>Vertical</p> <p>Horizontal</p>