

## DT Year 6 - Electrics



### INTENT

This half terms unit links to the light and electricity unit in science and the history work on 'A Local History Study: Victorian Shropshire'. The children will use their knowledge of various components to build a circuit and then design, make and evaluate their very own lamp with a shadow element. The children will be encouraged to design a product which is inspired by the Victorian era and will become increasingly confident with the components of an electrical circuit.

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| <p><b>Disciplinary Knowledge</b><br/> <i>How have experts expressed quality and value throughout history?</i></p> | <ul style="list-style-type: none"> <li>• I can design with the user in mind, motivated by the service a product will offer (rather than simply for profit).</li> <li>• I can use prototypes, cross-sectional diagrams, and computer aided designs to represent designs.</li> </ul> |
| <p><b>Substantive Knowledge (Practical)</b><br/> <i>Methods, techniques, media, materials.</i></p>                | <ul style="list-style-type: none"> <li>• I can create circuits using electronics kits that employ a number of components with increasing confidence.</li> </ul>                                                                                                                    |

### Vocabulary

electronics circuit bulb battery  
wires electrical current cell lamp buzzer  
open/closed switch motor resistors  
LED's transistors

