

## Year 6 Technology

|                | Term 1  | Term 2   | Term 3  |
|----------------|---|--|---|
|                | Silent Movies   | Fairground   | Digitally Controlled Product  |
| (knowledge)    | <p>A silent film is a film with no synchronized recorded sound. In silent films for entertainment, the plot may be conveyed by the use of title cards, written indications of the plot and key dialogue lines. Films began with no dialogue, but music and subtitles. Charlie Chaplin Silent Movies: The Kid, Goldrush, City lights. At a later date, he played Hitler and made a speech in the Great Dictator.</p> | <p>There are a variety of products which incorporate a pulley and a drive belt and are driven by a motor or a computer<br/>           Know how control systems are used in everyday life<br/>           Know the appropriate vocabulary related to control systems<br/>           Know how to include an electric motor in a simple circuit<br/>           Know how the direction of rotation and speed of an electric motor can be controlled<br/>           Know how rotation can be transferred from one part of a model to another by using pulleys and a belt</p>   | <p>A Product of Choice-new unit introduced in 2023</p>  |
| (skills)       | <p><b>To design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design with the user in mind, motivated by the service a product will offer</li> <li>• Make products through stages of planning, scripting, rehearsing, making continual refinements.</li> <li>• Ensure products have a high quality finish, using art skills where appropriate using ICT.</li> </ul>                  | <p><b>Material</b></p> <ul style="list-style-type: none"> <li>• Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</li> <li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li> </ul> <p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).</li> </ul> <p><b>To design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design with the user in mind, motivated by the service a product will offer</li> <li>• Make products through stages of prototypes, making continual refinements.</li> <li>• Ensure products have a high quality finish, using art skills where appropriate.</li> </ul> <p><b>Electrical and Electronics</b></p> <p>Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p> <p><b>Mechanics</b></p> <ul style="list-style-type: none"> <li>• Convert rotary motion to linear using cams.</li> <li>• Use innovative combinations of electronics (or computing) and mechanics in product designs.</li> </ul> | <p><b>Material</b></p> <ul style="list-style-type: none"> <li>• Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</li> <li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li> </ul> <p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).</li> </ul> <p><b>To design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).</li> <li>• Make products through stages of prototypes, making continual refinements.</li> <li>• Ensure products have a high quality finish, using art skills where appropriate.</li> <li>• Use prototypes, cross-sectional diagrams and computer aided designs to represent design</li> </ul> <p><b>Electrical and Electronics</b></p> <p>Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p> <p><b>Mechanics Fairground</b></p> <ul style="list-style-type: none"> <li>• Convert rotary motion to linear using cams.</li> <li>• Use innovative combinations of electronics (or computing) and mechanics in product designs.</li> </ul> <p><b>Computing (link to ICT Car models)</b></p> <ul style="list-style-type: none"> <li>• Write code to control and monitor models or products.</li> <li>• Use prototypes, cross-sectional diagrams and computer aided designs to represent design</li> </ul> |
| Key Vocabulary | <p><b>Stage Script Plot Twist Direction</b></p>   | <p><b>Electrical Components</b></p>  |   |

