

# DT Long Term Plan

# Pencoy's Primary School

|    | Autumn  | Spring   | Summer   |
|----|---|--|--|
| Y1 | <b>What foods should we eat for a healthy diet?</b>   | <b>What is a bridge and how are they built?</b>  | <b>How can I join different materials together to make a product?</b>  |
|    | <u>Food and Nutrition</u> <ul style="list-style-type: none"> <li>diet - healthy foods</li> <li>taste exploring of different fruits and vegetables</li> <li>cutting, peeling, slicing techniques</li> <li>design, make and evaluate product and process</li> </ul> | <u>Strong structures</u> <ul style="list-style-type: none"> <li>investigate different types of free -standing structures (bridges focus)</li> <li>explore construction/ joining techniques</li> <li>design, make and evaluate product and process</li> </ul> | <u>Textiles - puppets -</u> <ul style="list-style-type: none"> <li>investigate puppets as a product</li> <li>explore joining techniques for fabric</li> <li>create and use templates</li> <li>design, make and evaluate product and process</li> </ul> |
|    | <u>Cross curricular links:</u>  | <u>Cross curricular links:</u>   | <u>Cross curricular links:</u><br>History - Punch and Judy   |
| Y2 | <b>How do we make moving pictures?</b>  | <b>How do I prepare fruit and Vegetables?</b>  | <b>How can a toy move?</b>   |
|    | <b>Mechanisms</b> <ul style="list-style-type: none"> <li>Sliders and levers</li> <li>Moving picture designs</li> </ul>  | <b>Food</b> <ul style="list-style-type: none"> <li>Cutting, peeling, slicing techniques</li> <li>How do fruit and Vegetables grow?</li> <li>Why are these healthy foods?</li> </ul>  | <b>Mechanisms</b> <ul style="list-style-type: none"> <li>Wheels and Axles</li> <li>Recycled moving toys</li> </ul>   |
|    | <u>Cross curricular links:</u>  | <u>Cross curricular links:</u><br>Geography – fruits growing in the Caribbean  | <u>Cross curricular links:</u><br>Geography – Africa   |
| Y3 | <b>How do I use a net to create a package?</b>  | <b>How can we link levers to make a ___ move?</b>  | <b>How healthy is your sandwich?</b>   |
|    | <b>Structures</b> <ul style="list-style-type: none"> <li>Shell structures</li> <li>3D shapes using nets</li> <li>CAD</li> <li>Scoring, folding and cutting</li> </ul>   | <b>Mechanisms</b> <ul style="list-style-type: none"> <li>Levers and linkages</li> <li>Pivots</li> </ul>  | <b>Food</b> <ul style="list-style-type: none"> <li>Food groups</li> <li>Fresh and processed foods</li> <li>Preparation of ingredients e.g. cutting , grating, chopping.</li> </ul>   |
|    | <u>Cross curricular links:</u><br>Ancient Egypt   | <u>Cross curricular links:</u><br>Stone Age  | <u>Cross curricular links:</u>   |
| Y4 | <b>What is the best design for an archaeologist bag?</b>  | <b>How do I make the torch light up?</b>   | <b>What makes this a healthy product?</b>  |
|    | <b>Textiles</b> <ul style="list-style-type: none"> <li>2D to 3D designs</li> <li>Design, make and evaluate a purposeful product using joined fabric shapes</li> </ul>   | <b>Electrical Systems</b> <ul style="list-style-type: none"> <li>Design, make and evaluate a purposeful electrical system.</li> </ul>  | <b>Food</b> <ul style="list-style-type: none"> <li>Healthy and varied diet</li> <li>Design, make and evaluate a food product.</li> <li>What makes it healthy?</li> </ul>   |

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|    | <ul style="list-style-type: none"> <li>● Create and use templates to cut fabric</li> <li>● Join two pieces of fabric choosing the most appropriate stitch</li> </ul>   | <ul style="list-style-type: none"> <li>● Use programming to make a system work.</li> </ul>   | <ul style="list-style-type: none"> <li>● Use utensils to prepare and combine food.</li> <li>● Fresh vs processed ingredients</li> </ul>  |
|    | <p><u>Cross curricular links:</u><br/>History: Maya</p>  | <p><u>Cross curricular links:</u><br/>Science: electricity</p>   | <p><u>Cross curricular links:</u></p>  |
| Y5 | <p><b>How can I join fabrics effectively?</b></p>  | <p><b>How can I use IT to help me design and make a strong frame structure?</b></p>  | <p><b>Where does our food come from?</b></p>   |
|    | <p><b>Textiles</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a purposeful product using joined fabric shapes.</li> <li>● Develop stitches to include more than one type for joining and embellishment</li> <li>● Include a means of fastening e.g. Velcro, ties and buttons.</li> </ul>   | <p><b>Structures</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a purposeful, strong and stable 3D framed structure.</li> <li>● Use a range of joining techniques appropriate to the materials and structure.</li> <li>● Use CAD to aid designing</li> </ul> | <p><b>Food - local</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a food product which celebrates seasonality.</li> <li>● Demonstrate knowledge of how to use utensils and equipment (including heat sources) to prepare and cook food.</li> </ul>   |
|    | <p><u>Cross curricular links:</u></p>  | <p><u>Cross curricular links:</u><br/>Computing – use of CAD packages</p>  | <p><u>Cross curricular links:</u><br/>Science – changes and properties of materials</p>  |
| Y6 | <p><b>How can electrical systems improve products?</b></p>   | <p><b>How can I make a vehicle drive?</b></p>  | <p><b>How can food celebrate culture?</b></p>  |
|    | <p><b>Electrical systems (monitoring and control)</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a product that incorporates electrical sensors that respond to changes in the environment.</li> <li>● Write programs that include inputs and outputs.</li> <li>● Select and use tools and materials to create a well-finished product.</li> </ul> | <p><b>Pulleys and Gears</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a vehicle powered by a pulley system with an electrical circuit.</li> <li>● Use a range of joining techniques to create a chassis that can support a pulley system.</li> </ul>        | <p><b>Food – culture</b></p> <ul style="list-style-type: none"> <li>● Design, make and evaluate a product that celebrates culture e.g. pasties</li> <li>● Understand how and why food is important to culture.</li> <li>● Demonstrate knowledge of how to use utensils and equipment (including heat sources) to prepare and cook food.</li> </ul> |
|    | <p><u>Cross curricular links:</u></p>  | <p><u>Cross curricular links:</u></p>  | <p><u>Cross curricular links:</u></p>  |

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Pencoys Primary School