

## Design and Technology

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in the process of designing and making.

**When designing and making, pupils will be taught to:**

<p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>
<p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to perform practical tasks accurately</li> <li>• Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>
<p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products</li> <li>• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• Understand how key events and individuals in design and technology have helped shape the world</li> </ul>
<p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• Understand and use mechanical systems in their products</li> <li>• Understand and use electrical systems in their products</li> <li>• Apply their understanding of computing to program, monitor and control their products</li> </ul>

<b>Year 3</b>	<ul style="list-style-type: none"> <li>• Houses/Hill Forts</li> <li>• Moving monsters</li> </ul>
<b>Year 4</b>	<ul style="list-style-type: none"> <li>• Information books with moving parts</li> <li>• Torches</li> <li>• Picture frames</li> <li>• Dart frog bean bags</li> </ul>
<b>Year 5</b>	<ul style="list-style-type: none"> <li>• Boats</li> <li>• Hoovers</li> </ul>
<b>Year 6</b>	<ul style="list-style-type: none"> <li>• Bridges</li> <li>• Levers and Pulleys</li> <li>• Fairground rides</li> <li>• Gliders</li> </ul>

## Cooking and Nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating.

### Pupils will be taught to:

- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

### Areas to be covered:

Year 3	<ul style="list-style-type: none"><li>• Sandwiches</li></ul>
Year 4	<ul style="list-style-type: none"><li>• Soups and smoothies</li></ul>
Year 5	<ul style="list-style-type: none"><li>• Bread Making</li></ul>
Year 6	<ul style="list-style-type: none"><li>• After school club 'Let's Get Cooking' currently offered to year 6 pupils</li></ul>