

## Design and Technology UKS2 – Cycle B

Throughout the year the children will cover a variety of aspects of the design and technology curriculum to ensure all children:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

<b>Autumn 1</b>	<p><b><u>Battle of Britain</u></b>  <b>Food – Seasonality and Celebration</b>            To design and make bread for a celebration, using seasonal ingredients.</p> <p><b>Developing, planning &amp; communicating ideas</b>            Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.            Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p><b>Working with equipment, materials &amp; ingredients to make quality products</b>            Confidently select appropriate equipment, materials, ingredients and techniques and use them.            Use equipment safely, hygienically and accurately.</p> <p><b>Evaluating processes &amp; products</b>            To carry out a sensory evaluation of products/ ingredients.            Evaluate their work both during and at the end of the assignment.</p>
<b>Spring 2</b>	<p><b><u>Earth, Sun &amp; Moon</u></b>  <b>Textiles- Combining different fabric shapes.</b>  <b>Design and make a product using fabric, sewing and fastenings.</b></p> <p><b>Developing, planning &amp; communicating ideas</b>            Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.            Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p><b>Working with tools, equipment, materials &amp; components to make quality products</b>            Confidently select appropriate tools, materials, components and techniques and use them.</p>

	<p>Use tools safely and accurately.</p> <p><b>Evaluating processes &amp; products</b>          Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.          Evaluate their work both during and at the end of the assignment.</p>
<p><b>Summer 2</b></p>	<p><b><u>Climate Change</u></b></p> <p><b>Electrical systems- Monitoring and control</b>  <b>Electrical circuits &amp; components</b></p> <p><b>Working with tools, equipment, materials &amp; components to make quality products</b>          Confidently select appropriate tools, materials, components and techniques and use them.          Use tools safely and accurately. Use Crumble to program a device and control an electrical product.</p> <p><b>Evaluating processes &amp; products</b>          Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.          Evaluate their work both during and at the end of the assignment</p> <p><b>Developing, planning &amp; communicating ideas</b>          Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.          Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p>