

**KS2 DT Curriculum NC End Points:****Designing**

- Can 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.
- Is able to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

**Making:**

- Is able to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing],
- Can accurately select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

**Evaluating:**

- Is able to investigate and analyse a range of existing products.
- Can evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Understands how key events and individuals in design and technology have helped shape the world.

**Technical Knowledge:**

- Applies their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Understands and can use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].
- Understands and can use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
- Applies their understanding of computing to program, monitor and control their products.

**Food technology:**

- Understand and can apply the principles of a healthy and varied diet.
- Can 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

Term	Learning Focus		Cross Curricular links
	Knowledge	Skills	
Spring 1	<b>Textiles - puppet</b> <ul style="list-style-type: none"> <li>• To know how to specify a design to make it more appealing to a specific target group.</li> <li>• To know different types of stitches for the purpose of functionality and aesthetics.</li> <li>• Know and use technical vocabulary relevant to the project.</li> <li>• Know how to evaluate their product against the product criteria they have generated individually, as a means to improve their work</li> </ul>	<ul style="list-style-type: none"> <li>• Design and make a functional puppet communicating initial ideas through annotated sketches</li> <li>• Use research into the features of an appealing puppet to inform design criteria</li> <li>• Select and use a range of tools to perform practical tasks; stitching and sewing (joining), cutting and systematically work through phases of a design.</li> <li>• Investigate the effect of different stitches in joining seams and how they contribute to the overall effectiveness and durability of the product.</li> <li>• Evaluate the outcome with reference to the design criteria</li> </ul>	

<p>Summer 2</p>	<p><b>Food Technology - pizza</b></p> <ul style="list-style-type: none"> <li>• A range of utensils can be used for a range of techniques to prepare ingredients hygienically including the bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking.</li> <li>• The food's appearance is how it looks to the eye.</li> <li>• The food's texture is how the product feels in the mouth.</li> <li>• Sensory evaluation means evaluating food products in terms of the taste, smell, texture and appearance.</li> <li>• A preference test means trying different things (foods) and deciding which is preferred.</li> <li>• A strawberry huller is tool to remove the stalk and leaves from a strawberry.</li> <li>• Processed food includes ingredients that have been changed in some way to enable them to be eaten or used in food preparation and cooking</li> <li>• Know how to use appropriate equipment and utensils to prepare and combine food.</li> <li>• Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.</li> <li>• Know and use relevant technical and sensory vocabulary appropriately</li> </ul>	<ul style="list-style-type: none"> <li>• Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose.</li> <li>• Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</li> <li>• Plan the main stages of a recipe, listing ingredients, utensils and equipment.</li> <li>• Select and use appropriate utensils and equipment to prepare and combine ingredients.</li> <li>• Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.</li> <li>• Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs.</li> <li>• Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.</li> </ul>	<p><b>Science: Healthy Diet/hygiene</b></p>
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**Ambition / Intent:**

At Camrose Primary School, we believe that Design Technology is essential to a rich and balanced education that develops the whole child. The study of Design Technology gives children an insight into how the world is being shaped around them for the evolving needs of people and communities from past to present. In a rapidly changing age of technology, it is essential that children are equipped with the knowledge and technical skills to creatively solve real life problems, so that they have the ability to make their own impact on the world around them.

**Design / Implementation:**

The National Curriculum provides the structure and skill development for the Design & Technology curriculum being taught throughout the school. At Camrose, we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum through well planned and resourced projects and experiences. We have determined that Design Technology will be taught in two or three units across the school year. During Design and Technology units, our children draw upon subject knowledge and skills within Mathematics, Science, History, Computing and Art. Through the evaluation of past and present technology they can reflect upon the impact of Design Technology on everyday life and the wider world.

**Impact:**

At Camrose, we ensure all of our pupils are able to approach problems creatively and in a range of ways. By providing a range of contexts and the necessary skills, we endeavour to support pupils in their future educational journey and in the understanding of the ever-developing world around them. The skills and attributes they develop will benefit them beyond school and into adulthood: the ability to use time efficiently, work with others productively, show initiative, independence, resilience and manage risks effectively will ensure well-rounded citizens who will make a difference in the wider world.