

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	
Autumn 2	Textiles – use patterns (design & make a bag) <ul style="list-style-type: none"> • To understand how key events and individuals in design and technology have helped shape the world in textiles • To know how to specify a design to make it more appealing to a specific target group. • To know different types of stitches for the purpose of functionality and aesthetics. • To explain how to join materials in different ways. • Know and use technical vocabulary relevant to the project. • Know how to evaluate their product against the product criteria they have generated individually, as a means to improve their work. 	<ul style="list-style-type: none"> • To use pattern pieces to measure, mark and cut fabric; to sew design elements according to a design • Design and make a functional cloth bag, communicating initial ideas through annotated sketches • Use research into the features of an appealing functional bag to inform design criteria • Select and use a range of tools to perform practical tasks; stitching and sewing (joining), cutting and systematically work through phases of a design. • Investigate the effect of different stitches in joining seams and how they contribute to the overall effectiveness and durability of the product. • Evaluate the outcome with reference to the design criteria 	

<p>Summer</p>	<p>Cooking & Nutrition – planning a menu</p> <ul style="list-style-type: none"> • Particular dishes are associated with different cultures and places • Some ingredients are easier to grow in some parts of the world than in others (owing to conditions such as climate) and are often found in dishes that originate where they are found • Some ingredients are more readily available at certain times of the year than others, owing to changes in climate. • Ingredients are grown under different farming practices and organic ingredients can be more expensive • Some flavours complement each other more than others and some ingredients go well together • A healthy dish can involve more than one food group or one food group if it is part of a healthy balanced diet. • Local restaurants cater for the local community and menus are designed so that they appeal to lots of people. • Food being served to the public is regulated in accordance with good food hygiene practices. • Washing hands and ingredients, where appropriate, reduces microorganisms and cooking instructions are important for this purpose too. • Ingredients, flavours and textures can be changed through boiling, grilling, baking and frying 	<ul style="list-style-type: none"> • Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. • Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. • Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas. • Consider the availability and costings of resources when planning out designs; • Make, decorate and present the food product appropriately for the intended user and purpose. • Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. • Understand how key chefs have influenced eating habits to promote varied and healthy diets. • Select and use a range of utensils, including knives, chopping boards, weighing scales, measuring jugs, baking trays. • Select and use a range of healthy ingredients such as bread, fruits, vegetables and spreads (considering and giving reasons for choices). • Review which dishes were most popular and use this as a means to evaluate own dish and suggest improvements, relating this process to real life scenarios (such as developing a menu/informing stock purchase) • Review work against own design criteria, including aspects such as presentation, food combinations, popularity and healthiness 	<p>Science : Observing changes of state, understanding allergies and bacteria, questioning and exploring these concepts</p> <p>Maths : through market research recording feedback and establishing results. Through pricing and budgeting products.</p> <p>Geography: Climates</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.