

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	Structures – photo frame <ul style="list-style-type: none"> • Know that freestanding photograph frames stand up on their own, without support or attachments • Evaluate existing products, considering: how well they've been made • Identify features of photo frames, materials they are made from and how they are joined • Begin to produce annotated sketches, to help me develop and improve my ideas and communicate my ideas to others • Effectively join materials indifferent way • Apply an understanding of how to strengthen, stiffen and reinforce more complex structures • Evaluate the outcome with reference to the design criteria. 	<ul style="list-style-type: none"> • Design features of my product that will appeal to the person or people who I designed it for • Begin to measure, mark out, cut, shape and assemble materials/components with some accuracy • Begin to assemble, join and combine materials and components with some accuracy • Select and use appropriate equipment to cut materials • Measure carefully to avoid mistakes • To join wood to make lynx frames. • Continue working on product even if original didn't work • Select and use appropriate utensils and equipment 	

		to prepare and combine materials <ul style="list-style-type: none"> Record the evaluations using e.g. tables and simple graphs. 	
Spring 1	Textiles - bookmark <ul style="list-style-type: none"> Know how key events and individuals in textiles have helped shape the textiles industry 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. Know and use technical vocabulary relevant to the project. Choose and join textiles in different ways considering appearance and functionality 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"> Design and make a functional bookmark communicating initial ideas through annotated sketches Use research into the features of an appealing bookmark to inform design criteria Begin to assemble, join and combine materials and components with some accuracy: stitching and sewing (joining) Systematically work through phases of a design. Evaluate the product while making with reference to the design criteria and the views of others. 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 	
Summer 2	Food Technology – Sandwich Bread Roll <ul style="list-style-type: none"> Understand that food comes from UK and the wider world Know about the history, traditions and modern production of bread. Pupil know where bread comes from and how it has changed over time Understand how key events and individuals in design and technology have helped shape the world Describe and explain how healthy diet equals a balance of food, in order to have active / healthy bodies 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"> Discuss design features of my product that will appeal to the person or people who I designed it for Plan and work through the main stages of a recipe in order, listing ingredients, utensils and equipment. Select appropriate tools and materials, fit for purpose; explain choices, considering functionality Independently use some of the techniques; chopping, mixing, spreading, kneading. With adult support, prepare simple ingredients and cook some dishes safely and hygienically Use simple cooking equipment safely Evaluate the ongoing work and the final product with reference to the design criteria and the views of others 	Science: Healthy Diet/hygiene

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.