

Camestone Curriculum Intent

Exploring Learning Together

We are ambitious for all pupils to acquire the skills, knowledge and characteristics to be well prepared for the next steps in their learning journey.

Camestone Curriculum Aims

Pupils read purposefully to gain information to support their subject learning. Where appropriate, quality texts in English are linked to subjects to connect new and existing knowledge.

Oracy is developed through speaking and listening opportunities. Pupils become articulate, critical thinkers, able to debate and reason.

Pupils develop Camestone values including creativity, motivation and positivity through broad subject provision. Subject teaching enables pupils to develop independence, teamwork and their personal and cultural identity.

Design and Technology

Design and technology (DT) is taught as a discrete subject, linked to other subjects through a thematic approach.

The National Curriculum for Design and technology (DT) aims to ensure that all pupils:

- 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

Area of Learning from EYFS Framework	Examples
Physical Development Fine motor	Develop fine motor skills to use a range of tools competently, safely and confidently. Explore, use and refine a variety of artistic effects to express

Design and Technology: Key Stage 1					
	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	<i>Design - purposeful, functional, appealing products for themselves and other users based on design criteria</i> <i>Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</i>	<i>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</i> <i>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</i>	<i>explore and evaluate a range of existing products</i> <i>evaluate their ideas and products against design criteria</i>	<i>build structures, exploring how they can be made stronger, stiffer and more stable</i> <i>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i>	<i>use the basic principles of a healthy and varied diet to prepare dishes</i> <i>understand where food comes from</i>
Y1	<ul style="list-style-type: none"> ● think of an idea and plan what to do next ● explain why they have chosen specific materials and components 	<ul style="list-style-type: none"> ● use own ideas to make something ● join materials and components in different ways 	<ul style="list-style-type: none"> ● explain what went well with their work 	<ul style="list-style-type: none"> ● make a model stronger and more stable ● use wheels and axles that work 	<ul style="list-style-type: none"> ● describe the ingredients used when making a dish ● know that fruit is part of a healthy balanced diet ● describe where fruit grows (Science) ● cut fruit safely
Projects	Fruit Pictures, Buildings - Stable Structures , Vehicles (wheels and axles) Fire Engines				
Y2	<ul style="list-style-type: none"> ● use own ideas to design something and describe how their own idea works ● design a product for a given purpose ● explain to someone else how they want to make their product and make a simple plan before making 	<ul style="list-style-type: none"> ● choose tools and materials and explain why they have chosen them ● make a product which fulfils the given purpose ● choose appropriate resources and tools ● measure materials to use in a model or structure 	<ul style="list-style-type: none"> ● describe how something works ● explain what works well and not so well in the product they have made 	<ul style="list-style-type: none"> ● make their own product stronger, better joined or more appealing 	<ul style="list-style-type: none"> ● cut food safely ● know about how ingredients are part of a healthy, balanced diet ● describe where some ingredients come from
Projects	Pizzas , Kites , Puppets				

Design and Technology: Key Stage 2

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	<p>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</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p>	<p>investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>understand how key events and individuals in design and technology have helped shape the world</p>	<p>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>apply their understanding of computing to program, monitor and control their products.</p>	<p>understand and apply the principles of a healthy and varied diet</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed</p>
Y3	<ul style="list-style-type: none"> ● prove that a design meets a set criteria. ● design a product and make sure that it looks attractive ● choose a material for both its suitability and its appearance 	<ul style="list-style-type: none"> ● follow a step-by-step plan, choosing the right equipment and materials ● select the most appropriate tools and techniques for a given task ● work accurately to measure, make cuts and make holes 	<ul style="list-style-type: none"> ● explain how to improve a finished model ● know why a model has, or has not, been successful 	<ul style="list-style-type: none"> ● know how to strengthen a product by stiffening a given part or reinforce a part of the structure 	<ul style="list-style-type: none"> ● describe how food ingredients come together ● weigh out ingredients and follow a given recipe to create a dish ● talk about which food is healthy and which food is not (Science)
Yr 3 Projects	<p>Moving Monsters (Pneumatics), Photograph Frames, Bread</p>				
Y4	<ul style="list-style-type: none"> ● use ideas from other people when designing ● produce a plan and explain it 	<ul style="list-style-type: none"> ● know which tools to use for a particular task and show knowledge of handling the tool ● know which material is likely to give the best outcome 	<ul style="list-style-type: none"> ● evaluate and suggest improvements for design ● evaluate products for both their purpose and appearance 	<ul style="list-style-type: none"> ● links scientific knowledge by using lights, switches or buzzers ● use electrical systems to enhance the quality of the product 	<ul style="list-style-type: none"> ● know how to be both hygienic and safe when using food ● bring a creative element to the food product being designed

	<ul style="list-style-type: none"> persevere and adapt work when original ideas do not work communicate ideas in a range of ways, including by sketches and drawings which are annotated 	<ul style="list-style-type: none"> measure accurately 	<ul style="list-style-type: none"> explain how the original design has been improved present a product in an interesting way 		<ul style="list-style-type: none"> know which season various foods are available for harvesting
Yr 4 Projects	Torches , Seasonal Food , Dyeing Fabrics (Molar Art)				
Y5	<ul style="list-style-type: none"> come up with a range of ideas after collecting information from different sources produce a detailed, step-by-step plan explain how a product will appeal to a specific audience design a product that requires pulleys or gears 	<ul style="list-style-type: none"> use a range of tools and equipment competently make a prototype before making a final version make a product that relies on pulleys or gears 	<ul style="list-style-type: none"> suggest alternative plans; outlining the positive features and drawbacks evaluate appearance and function against original criteria 	<ul style="list-style-type: none"> links scientific knowledge to design by using pulleys or gears 	
Yr 5 Projects	Moving Toys (pulleys and gears) , Tudor Pouches (sewing), Roundhouses (structures)				

<p>Y6</p>	<ul style="list-style-type: none"> ● use market research to inform plans and ideas. ● follow and refine original plans ● justify planning in a convincing way ● show that culture and society is considered in plans and designs e.g. environmental considerations or benefits of product 	<ul style="list-style-type: none"> ● know which tool to use for a specific practical task ● know how to use any tool correctly and safely ● know what each tool is used for ● explain why a specific tool is best for a specific action ● make a product which uses both electrical and mechanical components 	<ul style="list-style-type: none"> ● know how to test and evaluate designed products ● explain how products should be stored and give reasons ● evaluate product against clear criteria 	<ul style="list-style-type: none"> ● use electrical systems correctly and accurately to enhance a given product ● know which IT product would further enhance a specific product ● use knowledge to improve a made product by strengthening, stiffening or reinforcing 	<ul style="list-style-type: none"> ● be both hygienic and safe in the kitchen ● know how to prepare a meal by collecting the ingredients in the first place ● explain how food ingredients should be stored and give reasons ● work within a budget to create a meal ● understand the difference between a savoury and sweet dish
<p>Yr 6 Projects</p>	<p>Building Bridges, Fairgrounds, Burgers</p>				