

DCPS Subject Overview

Design Technology KS1



NC Statement	Y1	Y2
Cooking and Nutrition:		
<ul style="list-style-type: none"> Talk about what they eat at home and begin to discuss what healthy foods are 	YUM YUM	STEM
<ul style="list-style-type: none"> Say where some foods come from and give examples of food that is grown 	YUM YUM	STEM
<ul style="list-style-type: none"> Use simple tools with help to prepare food safely 	YUM YUM	STEM
<ul style="list-style-type: none"> Understand the need of a variety of food in a diet 	YUM YUM	STEM
<ul style="list-style-type: none"> Understand that all food has to be farmed, grown or caught 	YUM YUM	STEM
<ul style="list-style-type: none"> Use a wide range of cookery techniques to prepare food safely 	YUM YUM	
Processes:		
<ul style="list-style-type: none"> Create simple designs for a product. 	DT topics	DT topics
<ul style="list-style-type: none"> Use pictures and words to describe what he/she wants to do. 	DT topics	DT topics
<ul style="list-style-type: none"> Select from and use a range of tools and equipment to perform practical tasks e.g cutting, shaping, joining and finishing. 	STEM	DT topics
<ul style="list-style-type: none"> Use a range of simple tools to cut, join and combine materials and components safely. 		DT topics
<ul style="list-style-type: none"> Ask simple questions about existing products and those that they have made. 		DT topics

<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. 		DT topics
<ul style="list-style-type: none"> Use wheels and axles in a product. 	DT topics	
<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria. 		DT topics
<ul style="list-style-type: none"> Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT. 		DT topics
<ul style="list-style-type: none"> Choose appropriate tools, equipment, techniques and materials from a wide range. 		DT topics
<ul style="list-style-type: none"> Safely measure, mark out, cut and shape materials and components using a range of tools. 		DT topics
<ul style="list-style-type: none"> Evaluate and assess existing products and those that they have made using a design criteria. 	DT topics	DT topics
<ul style="list-style-type: none"> Investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable. 	Materials – STEM	Great Fire of London
<ul style="list-style-type: none"> Explore and use mechanisms e.g levers, sliders, wheels and axles in their products. 	DT topics	



DCPS Subject Overview

Design Technology KS2

NC Statement	Y3	Y4	Y5	Y6
Cooking and nutrition:				
• Talk about the different food groups and name food from each group.	STEM	STEM	Hoops 4 Health	
• Understand that food has to be grown, farmed or caught in Europe and the wider world.	STEM	International Week		
• Use a wider variety of ingredients and techniques to prepare and combine ingredients safely.	STEM	International Week		
• Understand what makes a healthy and balanced diet, and that different food and drinks provide different substances the body needs to be healthy and active.	STEM	NUFC Match Fit	Hoops 4 Health	STEM
• Understand seasonality and the advantage of eating seasonal and locally produced foods	STEM			
• Read and follow recipes which involve several processes, skills and technique.	STEM	International Week		
• Understand the main food groups and the different nutrients that are important to for health	STEM	STEM	Hoops 4 Health	STEM
• Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable to eat.	STEM			
• Select appropriate ingredients and use a wide range of techniques to combine them.	STEM	International Week		
• Confidently plan a series of healthy meals based on the principles of a healthy and varied diet	STEM			
• Use information on food labels to inform choices.		Matchfit NUFC		PSHE
• Research, plan and prepare and cook savoury dishes, applying their knowledge of ingredients and their technical skills		International Week		
Processes				
• Use knowledge of existing products to design their own functional product		It's All Greek To Me Rotten Romans	Invaders and Settlers.	DT Topics
• Create designs using annotated sketches, cross-sectional drawing and simple computer programs		DT Topics	DT Topics	

<ul style="list-style-type: none"> Safely measure, mark out, cut, assemble and join with some accuracy 	DT Topic	It's All Greek To Me	DT Topics	DT Topics
<ul style="list-style-type: none"> Make suitable choices from a wider range tools and unfamiliar materials and plan out the main stages of using them 		It's All Greek To Me Rotten Romans	DT Topics	
<ul style="list-style-type: none"> Investigate and analyse existing products and those they have made, considering a wide range of factors 	DT Topic	It's All Greek To Me		
<ul style="list-style-type: none"> Strengthen frames using diagonal struts 		It's All Greek To Me		
<ul style="list-style-type: none"> Understand how mechanical systems such as levers, linkages or pneumatic systems create movement. 			DT Topics	
<ul style="list-style-type: none"> Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience. 	DT Topic	It's All Greek To Me	PSHE 7 Billion Ideas	DT Topics
<ul style="list-style-type: none"> Create designs using exploded diagrams 				DT Topics
<ul style="list-style-type: none"> Use techniques which require more accuracy to cut, shape, join and finish their work 	DT Topic	It's All Greek To Me		DT Topics
<ul style="list-style-type: none"> Use their knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them 	DT Topic	It's All Greek To Me Rotten Romans		DT Topics
<ul style="list-style-type: none"> Consider how existing products and their own finished products might be improved and how they meet the needs of the intended user 	DT Topic	DT Topics	DT Topics	DT Topics
<ul style="list-style-type: none"> Apply techniques they have learnt to strengthen structures and explore their own ideas 				Bridges Project
<ul style="list-style-type: none"> Understand and use electrical systems in products 		STEM		WW2/ STEM:
<ul style="list-style-type: none"> Use their research into existing products and their market research to inform the design of their own innovative product 		DT Topics	7 Billion Ideas PSHE	
<ul style="list-style-type: none"> Create prototypes to show their ideas 	DT Topic	DT Topics	7 Billion Ideas PSHE	
<ul style="list-style-type: none"> Make careful and precise measurements so that joins, holes and openings are in exactly the right place 			DT Topics	
<ul style="list-style-type: none"> Produce step by step plans to guide their making, demonstrating that they can apply their knowledge of different materials, tools and techniques 			Infinity & Beyond	
<ul style="list-style-type: none"> Make detailed evaluations about existing products and their own, considering the views of others to improve their work 	DT Topic	DT Topics	DT Topics	DT Topics
<ul style="list-style-type: none"> Build more complex 3-D structures and apply their knowledge of strengthening techniques to make them stronger or more stable 			DT Topics 7 Billion Ideas PSHE	

<ul style="list-style-type: none"> Understand how to use more complex mechanical and electrical systems 				Bridges Project STEM
<ul style="list-style-type: none"> Use research they have done into famous designers and inventors to inform the design of their innovative products 				WW2/ STEM/ Bridges Project
<ul style="list-style-type: none"> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 		DT Topic		
<ul style="list-style-type: none"> Apply their knowledge of materials and techniques to refine and rework their product to improve its functional properties and aesthetic qualities 		Rotton Romans		WW2
<ul style="list-style-type: none"> Use technical knowledge accurate skills to problem solve during the making process 	DT Topic	DT Topic	DT Topic	DT Topic
<ul style="list-style-type: none"> Use their knowledge of famous designs to further explain the effectiveness of existing products and products they have made 				Bridges Project
<ul style="list-style-type: none"> Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately 		It's All Greek To Me		Bridges Project
<ul style="list-style-type: none"> Apply their understanding of computing to program, monitor and control their product 	Computing		Computing	