

Features					
<p>At key stage 1 and 2, the knowledge progression takes full account of the national curriculum's strands of:</p> <ul style="list-style-type: none"> ○ Designing ○ Making ○ Evaluating ○ Using technical knowledge ○ Food technology 					
<ul style="list-style-type: none"> • Skills are dependent on specific knowledge. A skill is the capacity to perform and in order to perform a deep body of knowledge needs to be acquired and retained. 					
<ul style="list-style-type: none"> • These knowledge statements should be what pupils retain for ever. In other words, this knowledge is within their long-term memory and will be retained. 					
<ul style="list-style-type: none"> • When considering pupils' improvement in subject specific vocabulary, pupils could be provided with a knowledge organiser which contains all words used for design technology for their age group. 					
National Curriculum Subject Content					
Strand	Designing	Making	Evaluating	Technical Knowledge	Food Technology
Key Stage 1	<ul style="list-style-type: none"> • <i>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</i> • <i>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</i> 	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • <i>Explore and evaluate a range of existing products.</i> • <i>Evaluate their ideas and products against design criteria.</i> 	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • <i>Use the basic principles of a healthy and varied diet to prepare dishes.</i> • <i>Understand where food comes from.</i>
Class 1	Cycle A -Topic 2,3,4,5,6 Cycle B - Topic 2,3,4,5,6	Cycle A - Topic 2,3,4,5,6 Cycle B - Topic 2,3,4,5,6	Cycle A - Topic 2,3,4,5,6 Cycle B -Topic 2,3,4,5,6	Cycle A - Topic 2,3,4,5,6 Cycle B -Topic 2,3,4,5,6	Cycle A -Topic 5 Cycle B -Topic 5
Class 2	Cycle A - Topic 1,2,3,4,5 Cycle B -Topic1,2,3,4,5	Cycle A -Topic 1,2,3,4,5 Cycle B -Topic1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle B -Topic 3

Key Stage 2	<ul style="list-style-type: none"> 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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. 	<ul style="list-style-type: none"> 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. Understand how key events and individuals in design and technology have helped shape the world. 	<ul style="list-style-type: none"> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products. 	<ul style="list-style-type: none"> Understand and apply the principles of a healthy and varied diet. 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
Class 3	Cycle A -Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B -Topic 1,2,3,4,5	Cycle A -Topic 1,2,3,4,5 Cycle B -Topic 1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B -Topic 1,2,3,4,5	Cycle A -Topic 3 Cycle B - Topic 3
Class 4	Cycle A -Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle A -Topic 1,2,3,4,5 Cycle B- Topic 1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle A - Topic 1,2,3,4,5 Cycle B - Topic 1,2,3,4,5	Cycle A -Topic 4 Cycle B - Topic 4

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing	<ul style="list-style-type: none"> use own ideas to design something begin to describe how their own idea works design a product which moves explain to someone else how they want to make their product make a simple plan before making 	<ul style="list-style-type: none"> think of an idea and plan what to do next according to design criteria explain why they have chosen specific textiles 	<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"> 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 Make annotated designs through sketches and diagrams Make prototypes 	<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 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

<p>Making</p>	<ul style="list-style-type: none"> • use own ideas to make something • make a product which moves • choose appropriate resources and tools 	<ul style="list-style-type: none"> • choose tools and materials and explain why they have chosen them • join materials and components in different ways • measure materials to use in a model or structure 	<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 • make a product which uses both electrical and mechanical components • work accurately to measure, make cuts and make holes 	<ul style="list-style-type: none"> • Select from a wide range of tools and equipment • Use a wide range of materials and components 	<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"> • 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
<p>Evaluating</p>	<ul style="list-style-type: none"> • talk about how they made their model • explain what works well and not so well in the model they have made 	<ul style="list-style-type: none"> • evaluate their work against the design criteria • explain what went well with their work and begin to suggest improvements 	<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"> • Evaluate and analyse a range of existing products • Evaluate their work against design criteria and consider the views of others to improve their work • Look at the work of others, to learn how D&T has shaped the World around them 	<ul style="list-style-type: none"> • suggest alternative plans; outlining the positive features and draw backs • evaluate appearance and function against original criteria 	<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
<p>Technical Knowledge</p>	<ul style="list-style-type: none"> • modify their own model to make it stronger 	<ul style="list-style-type: none"> • make a model stronger and more stable • use wheels and axles, when appropriate to do so 	<ul style="list-style-type: none"> • know how to strengthen a product by stiffening a given part or reinforce a part of the structure • use a simple IT program within the design 	<ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products • understand and use electrical systems in their products 	<ul style="list-style-type: none"> • links scientific knowledge to design by using pulleys or gears • uses more complex IT program to help enhance the quality of the product produced 	<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
<p>Food Technology</p>	<ul style="list-style-type: none"> • cut food safely 	<ul style="list-style-type: none"> • weigh ingredients to use in a recipe • describe the ingredients used when making a dish or cake • know that ingredients can be prepared in a range of ways 	<ul style="list-style-type: none"> • describe how food ingredients come together • weigh out ingredients and follow a given recipe to create a dish • can talk about which food is healthy and which food is not • know when food is ready for harvesting 	<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"> • be both hygienic and safe in the kitchen • know how to prepare a meal by collecting the ingredients in the first place • know which season various foods are available for harvesting 	<ul style="list-style-type: none"> • 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