

Design and Technology - Lower Key Stage Two

Progressive statements

Year Group	Design	Make	Evaluate	Technical Knowledge	Cooking and Nutrition
	<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 <i>[for example, cutting, shaping, joining and finishing]</i>, 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 D+T 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 <i>[for example, gears, pulleys, cams, levers and linkages]</i> understand and use electrical systems in their products <i>[for example, series circuits incorporating switches, bulbs, buzzers and motors]</i> 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.
Year 3	<ul style="list-style-type: none"> I can design with purpose by identifying opportunities to design I can use software to design and represent product designs 	<ul style="list-style-type: none"> I can cut materials accurately and safely by selecting appropriate tools I can measure and mark out to the nearest millilitre I can apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (<i>such as slots or cut outs</i>) I can select appropriate joining techniques I can make products by working efficiently (<i>e.g. by carefully selecting materials</i>) 	<ul style="list-style-type: none"> I can refine work and techniques as work progresses, continually evaluating the product design 	<ul style="list-style-type: none"> I can control and monitor models using software designed for this purpose I can use scientific knowledge about forces to choose appropriate mechanisms for a product (<i>such as levers, winding mechanisms, pulleys and gears</i>) 	<ul style="list-style-type: none"> I can prepare ingredients hygienically using appropriate utensils I can measure ingredients to the nearest gram accurately I can assemble or cook ingredients (controlling the temperature of the oven or hob if cooking) I can follow a recipe
Year 4	<ul style="list-style-type: none"> I can design with purpose by identifying opportunities to design I choose appropriate software to design and represent product designs I can identify some of the great designers in all of the areas of study (<i>including pioneers and horticultural techniques</i>) to generate ideas for designs 	<ul style="list-style-type: none"> I can make a range of products by working efficiently and independently (<i>e.g. by carefully selecting materials</i>) I understand the need for a seam allowance I can join textiles with appropriate stitching I can select the most appropriate techniques to decorate textiles I can choose suitable techniques to construct products or to repair items 	<ul style="list-style-type: none"> I can refine work and techniques as work progresses, continually evaluating the product design I can disassemble products to understand how they work I can improve upon existing designs giving detailed reasons for choices 	<ul style="list-style-type: none"> I can control and monitor models using software designed for this purpose I can create series and parallel circuits I can strengthen materials using suitable techniques 	