



PROGRESSION OF SKILLS IN DESIGN AND TECHNOLOGY

	Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cooking and Nutrition	<ul style="list-style-type: none"> Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills. Use a range of small tools, including scissors, paintbrushes and cutlery. (ELG) 	<ul style="list-style-type: none"> Talk about what he/she eats at home and begin to discuss what healthy foods are. Say where some food comes from and give examples of food that is grown. Use simple tools with help to prepare food safely. 	<ul style="list-style-type: none"> Understand the need for a variety of food in a diet. Understand that all food has to be farmed, grown or caught. Use a wider range of cookery techniques to prepare food safely. 	<ul style="list-style-type: none"> Talk about the different food groups and name food from each group. Understand that food has to be grown, farmed or caught in Europe and the wider world Use a wider variety of ingredients and techniques to prepare and combine ingredients safely. 	<ul style="list-style-type: none"> Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active. Understand seasonality and the advantages of eating seasonal and locally produced food. Read and follow recipes which involve several processes, skills and techniques. 	<ul style="list-style-type: none"> Understand the main food groups and the different nutrients that are important for health. Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat. Select appropriate ingredients and use a wide range of techniques to combine them. 	<ul style="list-style-type: none"> Plan healthy meals based on the principles of a healthy and varied diet. Use information on food labels to inform choices. Research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and his/her technical skills.
Processes	<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to express their ideas and feelings. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills. Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Use a range of small tools, including scissors, paintbrushes and cutlery. (ELG) 	<ul style="list-style-type: none"> Create simple designs for a product. Use pictures and words to describe what he/she wants to do. Select from and use a range of tools and equipment to perform practical tasks E.G. cutting, shaping, joining and finishing. Use a range of simple tools to cut, join and combine materials and components safely. Ask simple questions about existing 	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. Generate, develop, model and communicate his/her ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Choose appropriate tools, equipment, techniques and 	<ul style="list-style-type: none"> Use knowledge of existing products to design his/her own functional product. Create designs using annotated sketches, cross-sectional diagrams and simple computer programmes. Safely measure, mark out, cut, assemble and join with some accuracy. Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them. 	<ul style="list-style-type: none"> Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience. Create designs using exploded diagrams. Use techniques which require more accuracy to cut, shape, join and finish his/her work <eg>Cutting internal shapes, slots in frameworks</eg>. Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials 	<ul style="list-style-type: none"> Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product. Create prototypes to show his/her ideas. Make careful and precise measurements so that joins, holes and openings are in exactly the right place. Produce step by step plans to guide his/her making, demonstrating that he/she can apply 	<ul style="list-style-type: none"> Use research he/she has done to inform the design of his/her own innovative products. Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Apply his/her knowledge of materials and





	<ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used. (ELG) 	<p>products and those that he/she has made.</p> <ul style="list-style-type: none"> • Build structures, exploring how they can be made stronger, stiffer and more stable. • Begin to explore and use mechanisms (eg. levers, sliders, wheels and axles) in his/her products. 	<p>materials from a wide range.</p> <ul style="list-style-type: none"> • Safely measure, mark out, cut and shape materials and components using a range of tools. • Evaluate and assess existing products and those that he/she has made using a design criteria. • Investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable. • Explore and use mechanisms (eg. levers, sliders, wheels and axles) in his/her products. 	<ul style="list-style-type: none"> • Investigate and analyse existing products and those he/she has made, considering a wide range of factors. • Use simple techniques to create stable structures. • Understand how mechanical systems such as levers and linkages or pneumatic systems create movement. 	<p>to plan how to use them.</p> <ul style="list-style-type: none"> • Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user. • Apply techniques he/she has learnt to strengthen structures and explore his/her own ideas. • Understand and use electrical systems in products. 	<p>his/her knowledge of different materials, tools and techniques.</p> <ul style="list-style-type: none"> • Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work. • Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable. • Understand how to use more complex mechanical and electrical systems. 	<p>techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities.</p> <ul style="list-style-type: none"> • Use technical knowledge accurate skills to problem solve during the making process. • Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made. • Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately. • Apply his/her understanding of computing to program, monitor and control his/her product.
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