



Cronton C.E. Primary Design and Technology Progression of Skills

Developing, planning and communicating ideas	Across EYFS	Across Year One and Two	Across Year Three and Four	Across Year Five and Six
	<p>Have their own ideas on what to make and how they are going to make it.</p> <p>Copy ideas from what they have seen or experienced.</p>	<p>Begin to draw on their own experience to help generate ideas and research conducted on criteria.</p> <p>Begin to understand the development of existing products: What they are for, how they work, materials used.</p> <p>Start to generate ideas by drawing on their own and other people's experiences.</p> <p>Begin to develop their design ideas through discussion, observation, drawing and modelling.</p> <p>Identify a purpose for what they intend to design and make.</p> <p>Understand how to identify a target group for what they intend to design and make based on a design criteria.</p> <p>Develop their ideas through talk and drawings and label parts.</p> <p>Make templates and mock ups of their ideas in card and paper or using ICT.</p>	<p>With growing confidence generate ideas for an item, considering its purpose and the user/s.</p> <p>Understand how well products have been designed, made, what materials have been used and the construction technique.</p> <p>Start to order the main stages of making a product.</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Confidently make labelled drawings from different views showing specific features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p>	<p>Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.</p> <p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Use results of investigations, information sources, including ICT when developing design ideas.</p> <p>Draw up a specification for their design- link with Mathematics and Science.</p> <p>Plan the order of their work, choosing appropriate materials, tools including saws, mitre blocks, clamps and techniques.</p> <p>Accurately apply a range of finishing techniques, including those from art and design.</p> <p>With growing confidence select appropriate materials, tools and techniques.</p> <p>Suggest alternative methods of making if the first attempts fail.</p>

			<p>Start to understand whether products can be recycled or reused.</p> <p>When planning explain their choice of materials and components including function and aesthetics.</p> <p>Identify the strengths and areas for development in their ideas and products.</p> <p>When planning consider the views of others, including intended users, to improve their work.</p>	<p>Identify the strengths and areas for development in their ideas and products.</p> <p>Start to understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.</p>
<p>Working with tools, equipment, materials and components to make quality products.</p>	<p>Across EYFS</p> <p>Use scissors, rulers and knives (knives with supervision) safely to make models or products.</p> <p>Use skills such as threading to develop fine motor skills.</p> <p>Use construction toys, junk materials and other resources in the environment to make things.</p> <p>Use glue, sellotape, masking tape to join materials together independently.</p>	<p>Across Year One and Two</p> <p>Begin to make their design using appropriate techniques.</p> <p>Begin to build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>With help measure, cut and score with some accuracy.</p> <p>Begin to select tools and materials; use correct vocabulary to name and describe them.</p> <p>Learn to use hand tools e.g. scissors and a hole punch safely.</p> <p>Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g.</p>	<p>Across Year Three and Four</p> <p>Select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.</p> <p>Explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Start to understand that mechanical and electrical systems have an input, process and output.</p> <p>Know how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how simple electrical circuits and components can be used to create functional products.</p> <p>Measure, mark out, cut, score and assemble components with more</p>	<p>Across Year Five and Six</p> <p>Aim to make and to achieve a quality product.</p> <p>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.</p> <p>Select appropriate materials, tools and techniques including saws, mitre blocks, clamps e.g. cutting, shaping, joining, finishing and use them accurately.</p> <p>Understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how more complex electrical circuits and components can be used to create functional products.</p> <p>Understand that mechanical and</p>

		<p>glues or masking tape.</p> <p>Demonstrate how to cut, shape and join fabric to make a simple product.</p> <p>Use basic sewing techniques running stitch. Select and use simple finishing techniques to improve the appearance of their product.</p>	<p>accuracy.</p> <p>Start to work safely and accurately with a range of techniques and simple tools.</p> <p>Start to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Understand how to reinforce and strengthen a 3D framework.</p> <p>Start to measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Now sew using a range of different stitches, to weave and knit running and over stitch.</p> <p>Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p>electrical systems have an input, process and output.</p> <p>Begin to measure and mark out more accurately.</p> <p>Demonstrate how to use skills in using different tools and equipment safely and accurately with growing confidence cut and join with accuracy to ensure a good-quality finish to the product.</p> <p>Weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Assemble components to make working models.</p> <p>Demonstrate understanding and confidence when making modifications as they go along.</p> <p>Construct products using permanent joining techniques.</p> <p>Know how to reinforce and strengthen a 3D framework.</p> <p>With confidence pin, sew and stitch materials together to create a product – using running, over and blanket stitch.</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>
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Evaluating processes and products	Across EYFS	Across Year One and Two	Across Year Three and Four	Across Year Five and Six
	Explain to an adult what they have made and how they have made it and how it works.	<p>Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria).</p> <p>When looking at existing products explain what they like and dislike about products and why.</p> <p>Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>With confidence talk about their ideas, saying what they like and dislike about them.</p>	<p>Evaluate their products carrying out appropriate tests.</p> <p>Start to evaluate their work both during and at the end of the assignment.</p> <p>Begin to disassemble and evaluate familiar products and consider the views of others to improve them. Evaluate the key designs of individuals in design and technology has helped shape the world.</p>	<p>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Evaluate their work both during and at the end of the assignment.</p> <p>Record their evaluations using drawings with labels. Evaluate against their original criteria and suggest ways that their product could be improved. Seek evaluation from others.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>
Food and Nutrition	Across EYFS	Across Year One and Two	Across Year Three and Four	Across Year Five and Six
	<p>Know that food comes from plants. E.g. use apples from school trees to make crumble. Make Pumpkin Soup at Harvest time.</p> <p>Know that different foods can be combined to make another food – e.g. make bread, cookies or cakes.</p> <p>Know that some foods are more healthy for us than others.</p>	<p>Begin to understand that all food comes from plants or animals.</p> <p>Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>Start to understand how to name and sort foods into the five groups in 'The Eat well plate'</p> <p>Know that everyone should eat at least five portions of fruit and vegetables every day and understand why.</p> <p>Know how to prepare simple dishes safely and hygienically, without using a heat source.</p> <p>Know how to use techniques such</p>	<p>Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading and using either a claw or bridge hold for cutting.</p> <p>Start to understand that a healthy</p>	<p>Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Begin to understand that seasons may affect the food available.</p> <p>Understand how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Understand how to use a range of</p>

		<p>as cutting using a bridge hold and grating.</p>	<p>diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'</p> <p>Know that to be active and healthy, food and drink are needed to provide energy for the body.</p>	<p>techniques such as peeling, chopping, slicing, grating, mixing, spreading using either a claw or bridge hold for cutting.</p> <p>Know that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.</p>
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