



# D&T Year Group Progression Document



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Designing</b>						
<b>Understanding contexts, users and purposes</b>	Year 1 children should: <ul style="list-style-type: none"> <li>state what products they are designing and making</li> <li>describe what their products are for</li> <li>begin to use simple design criteria to help develop their ideas</li> </ul>	Year 2 children should: <p>work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment</p> <ul style="list-style-type: none"> <li>say whether their products are for themselves or other users</li> <li>say how their products will work</li> <li>say how they will make their products suitable for their intended users</li> <li>use simple design criteria to help develop their ideas</li> </ul>	Year 3 children should: <p>work confidently within a range of contexts, such as the home, school, leisure.</p> <ul style="list-style-type: none"> <li>describe the purpose of their products</li> <li>explain how particular parts of their products work</li> </ul>	Year 4 children should: <p>gather information about the needs and wants of particular individuals and groups</p> <ul style="list-style-type: none"> <li>develop their own design criteria and use these to inform their ideas</li> </ul>	Year 5 children should: <p>work confidently within a range of contexts, such as culture, enterprise, industry and the wider environment</p> <ul style="list-style-type: none"> <li>indicate the design features of their products that will appeal to intended users.</li> </ul>	Year 6 children should: <p>carry out research, using surveys, interviews, questionnaires and web-based resources</p> <ul style="list-style-type: none"> <li>identify the needs, wants, preferences and values of particular individuals and groups</li> </ul>
<b>Generating, developing, modelling and</b>	Year 1 children should: <ul style="list-style-type: none"> <li>generate ideas by</li> </ul>	Year 2 children should: <ul style="list-style-type: none"> <li>use knowledge of</li> </ul>	Year 3 children should: <ul style="list-style-type: none"> <li>share and clarify</li> </ul>	Year 4 children should: <ul style="list-style-type: none"> <li>generate realistic</li> </ul>	Year 5 children should: <ul style="list-style-type: none"> <li>model their ideas</li> </ul>	Year 6 children should: <p>generate innovative</p>

<b>communicating ideas</b>	drawing on their own experiences • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits.	existing products to help come up with ideas • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use information and communication technology, where appropriate, to develop and communicate their ideas	ideas through discussion. • use annotated sketches and computer-aided design to develop and communicate their ideas	ideas, focusing on the needs of the user • use annotated sketches, cross-sectional drawings and computer-aided design to develop and communicate their ideas	using prototypes and pattern pieces • use annotated sketches, cross-sectional drawings, CAD and exploded diagrams to develop and communicate their ideas • make design decisions that take account of the availability of resources	ideas, drawing on research • make design decisions, taking account of constraints such as time, resources and cost
<b>Making</b>						
<b>Planning</b>	Year 1 children should: • select from a range of tools and equipment. • select from a range of materials and components.	Year 2 children should: plan by suggesting what to do next • select from a range of tools and equipment, explaining their choices • select from a range of materials and components according to their characteristics	Year 3 children should: select tools and equipment suitable for the task • select materials and components suitable for the task	Year 4 children should • explain their choice of materials and components according to functional properties and aesthetic qualities • order the main stages of making	Year 5 children should: • explain their choice of tools and equipment in relation to the skills and techniques • begin to formulate step-by-step plans as a guide to making	Year 6 children should: • produce appropriate lists of tools, equipment and materials that they need • formulate step-by-step plans as a guide to making
<b>Practical skills and techniques</b>	Year 1 children should: • follow procedures for safety and hygiene with guidance.	Year 2 children should: • follow procedures for safety and hygiene • use a range of	Year 3 children should: • follow procedures for safety and hygiene • measure, mark	Year 4 children should: • discuss procedures for safety and hygiene • use a wider range	Year 5 children should: • agree procedures for safety and hygiene • measure, mark	Year 6 children should • develop procedures for safety and hygiene • accurately

	<ul style="list-style-type: none"> <li>• use a range of materials and components with support.</li> <li>• assemble, join and combine materials.</li> <li>• use simple finishing techniques, including those from art and design</li> </ul>	<p>materials and components, including construction materials and kits, textiles, food ingredients and mechanical components</p> <ul style="list-style-type: none"> <li>• assemble, join and combine materials and components</li> <li>• begin to measure, mark out, cut and shape materials and components</li> <li>• begin to use finishing techniques, including those from art and design</li> </ul>	<p>out, cut and shape materials and components with some accuracy</p> <ul style="list-style-type: none"> <li>• assemble, join and combine materials and components with some accuracy</li> <li>• apply a range of finishing techniques, including those from art and design, with some accuracy</li> </ul>	<p>of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</p>	<p>out, cut and shape materials and components with increasing accuracy</p> <ul style="list-style-type: none"> <li>• assemble, join and combine materials and components with increasing accuracy</li> <li>• apply a range of finishing techniques, including those from art and design with increasing accuracy</li> </ul>	<p>measure, mark out, cut and shape materials and components</p> <ul style="list-style-type: none"> <li>• accurately assemble, join and combine materials and components</li> <li>• accurately apply a range of finishing techniques, including those from art and design</li> <li>• use techniques that involve a number of steps</li> <li>• demonstrate resourcefulness when tackling practical problems</li> </ul>
<b>Evaluating</b>						
<b>Own ideas and products</b>	<p><b>Year 1 children should:</b></p> <ul style="list-style-type: none"> <li>• talk about their design ideas and what they are making</li> <li>• say what they like/dislike about their final product.</li> </ul>	<p>Year 2 children should:</p> <ul style="list-style-type: none"> <li>• make simple judgements about their products and ideas against design criteria</li> <li>• suggest how their products could be improved</li> </ul>	<p>Year 3 children should:</p> <ul style="list-style-type: none"> <li>• identify the strengths and areas for development in their ideas and products</li> </ul>	<p>Year 4 children should:</p> <ul style="list-style-type: none"> <li>• refer to their design criteria as they design and make</li> <li>• use their design criteria to evaluate their completed products</li> </ul>	<p>Year 5 children should:</p> <ul style="list-style-type: none"> <li>• consider the views of others, including intended users, to improve their work</li> <li>• evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</li> </ul>	<p>Year 6 children should:</p> <ul style="list-style-type: none"> <li>• critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</li> <li>• evaluate their ideas and products against their original design specification</li> </ul>
<b>Existing products</b>	<p>To explore with guidance:</p> <ul style="list-style-type: none"> <li>• what products are</li> <li>• who products are</li> </ul>	<p>To explore:</p> <ul style="list-style-type: none"> <li>• what products are</li> <li>• who products are for</li> </ul>	<p>To investigate and analyse:</p> <ul style="list-style-type: none"> <li>• why materials have been chosen</li> </ul>	<p>To investigate and analyse:</p> <ul style="list-style-type: none"> <li>• who designed and made the products</li> </ul>	<p>To investigate and analyse:</p> <ul style="list-style-type: none"> <li>• how well products have been designed</li> </ul>	<p>To investigate and analyse:</p> <ul style="list-style-type: none"> <li>• how much products cost to</li> </ul>

	<ul style="list-style-type: none"> <li>for</li> <li>• what they like and dislike about products</li> </ul>	<ul style="list-style-type: none"> <li>• how products work</li> <li>• how products are used</li> <li>• where products might be used</li> <li>• what materials products are made from</li> <li>• what they like and dislike about products</li> </ul>	<ul style="list-style-type: none"> <li>• what methods of construction have been used</li> <li>• how and why products work</li> <li>• if products achieve their purposes</li> </ul>	<ul style="list-style-type: none"> <li>• where products were designed and made</li> <li>• when products were designed and made</li> <li>• whether products can be recycled or reused</li> </ul>	<ul style="list-style-type: none"> <li>• how well products have been made</li> <li>• how well products meet user needs and wants</li> </ul>	<ul style="list-style-type: none"> <li>make</li> <li>• how innovative products are</li> <li>• how sustainable the materials in products are</li> <li>• what impact products have beyond their intended purpose</li> </ul>
<b>Key events and individuals</b>	<b>Not a requirement in KS1</b>		<b>To learn</b> about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.			
<b>Technical Knowledge</b>						
<b>Making products work</b>	<p>Year 1 children should know: about the simple working characteristics of materials and components</p> <ul style="list-style-type: none"> <li>• about the movement of simple mechanisms such as levers, sliders, wheels and axles</li> <li>• how freestanding structures can be made stronger.</li> <li>• that food ingredients can be combined</li> <li>• the correct technical vocabulary for the projects they are undertaking</li> </ul>	<p>Year 2 children should know: about the working characteristics of common materials and components</p> <ul style="list-style-type: none"> <li>• about the movement of mechanisms such as levers, sliders, wheels and axles</li> <li>• how freestanding structures can be made stronger, stiffer and more stable</li> <li>that a 3-D textiles product can be assembled from two identical fabric shapes</li> <li>• that food ingredients should</li> </ul>	<p>Year 3 children should know: how mechanical systems such as levers and linkages create movement</p> <ul style="list-style-type: none"> <li>• how simple electrical circuits and components can be used to create functional products</li> <li>• how to make strong shell structures</li> <li>• the correct technical vocabulary for the projects they are undertaking</li> <li>• that a single fabric shape can be used to make a 3D textiles product</li> </ul>	<p>Year 4 children should know: how mechanical systems such as levers and linkages or pneumatic systems create movement</p> <ul style="list-style-type: none"> <li>• how electrical circuits and components can be used to create functional products</li> <li>• how to make strong, stiff shell structures</li> <li>• that a single fabric shape can be used to make a 3D textiles product</li> <li>• that food ingredients can be fresh, pre-cooked</li> </ul>	<p>Year 5 children should know: how mechanical systems such as cams and pulleys create movement.</p> <ul style="list-style-type: none"> <li>• that materials can be combined and mixed to create more useful characteristics</li> <li>• that mechanical and electrical systems have an input, process and output</li> <li>• how to program a computer to control their products</li> <li>• that a 3D textiles product can be made from a combination of</li> </ul>	<p>Year 6 children should know: that materials have both functional properties and aesthetic qualities</p> <ul style="list-style-type: none"> <li>how mechanical systems such as cams or pulleys or gears create movement</li> <li>• how more complex electrical circuits and components can be used to create functional products</li> <li>• how to program a computer to monitor changes in the environment and control their products</li> </ul>

		be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking	• that ingredients can be fresh or pre-cooked.	and processed	fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients	• how to reinforce and strengthen a 3D framework • that a 3D textiles product can be made from a combination of fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients
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**Cooking and Nutrition**

<b>Where food comes from</b>	Year 1 children should know: • that all food comes from plants or animals	Year 2 children should know: • that food has to be farmed, grown elsewhere (e.g. home) or caught	Year 3 children should know: • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish)	Year 4 children should 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	Year 5 children should know: • how food is processed into ingredients that can be eaten or used in cooking	Year 6 children should know: • that seasons may affect the food available
<b>Food preparation, cooking and nutrition</b>	Year 1 children should know: • how to use techniques such as cutting, spreading and peeling. • that everyone should eat at least five portions of fruit and vegetables every day • begin to prepare	Year 2 children should know: • select to use techniques such as cutting, peeling and grating • how to prepare simple dishes safely and hygienically, without using a heat source • how to name and	Year 3 children should know: • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading. • that to be active and healthy, food and drink are needed to provide	Year 4 children should know: • select and use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading. • that a healthy diet is made up from a variety and balance of different food and	Year 5 children should know: • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • that different food	Year 6 children should know: • to select the correct techniques to prepare and cook a variety of predominantly healthy savoury dishes safely and hygienically including, where appropriate, the use

	simple dishes safely and hygienically, without using a heat source	sort foods into the five groups in the Eatwell Guide	energy for the body	drink, as depicted in the Eatwell Guide	and drink contain different substances – nutrients, water and fibre – that are needed for health	of a heat source • that recipes can be adapted to change the appearance, taste, texture and aroma
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