

# Design Technology

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CURRICULUM FRAMEWORK FOR KEY STAGE 1 AND 2

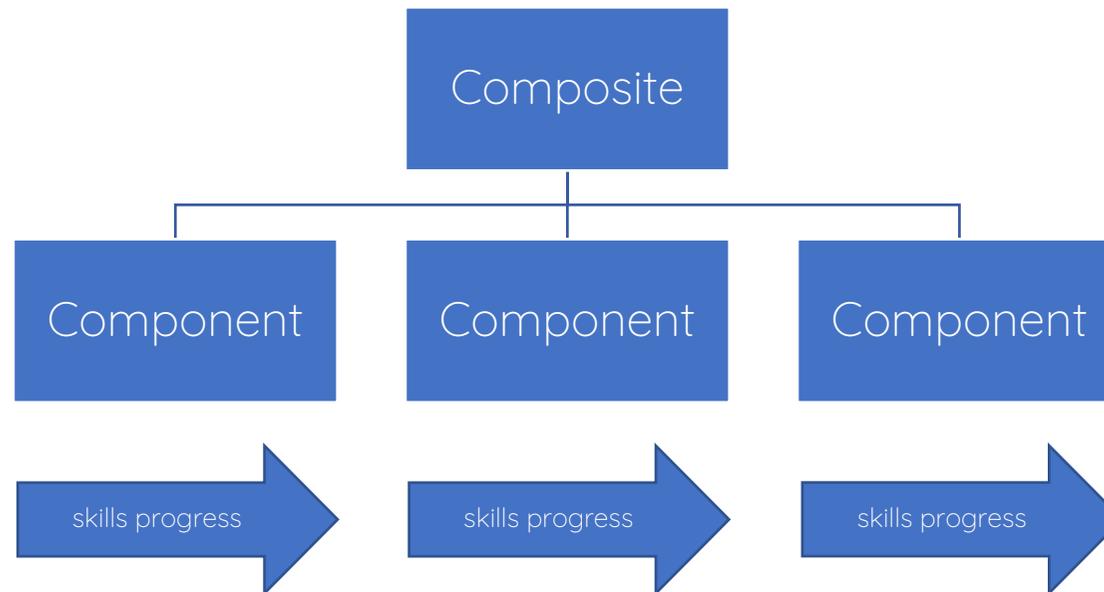
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Subject leaders need to ensure that there is clear progression through each year group towards the national curriculum requirements for their subject. This will ensure that there is a clear year-on-year acquisition of key knowledge as well as skills.

The National Curriculum is the top-level 'composite' outcomes but not the curricular components to get there – the intent. This document shows the subject progress through different components, highlighted in bold. Each component has a skill set that shows progress through each key stage.

The framework document also provides further planning opportunities for planning resources, texts, cross-curricular opportunities and cultural capital opportunities for your individual school.



Design Technology – Key Stage 1					
National Curriculum	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:
	<b>Design</b> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul>	<b>Make</b> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul>	<b>Evaluate</b> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul>	<b>Technical knowledge</b> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products</li> </ul>	<b>Cooking and nutrition</b> <ul style="list-style-type: none"> <li>use the basic principles of a healthy and varied diet to prepare dishes</li> <li>understand where food comes from</li> </ul>
	<b>Developing, planning and communicating ideas</b>		<b>Working with tools, equipment, materials and components to make quality products</b>		<b>Evaluating processes and products</b>
<b>Year 1</b>	<ul style="list-style-type: none"> <li>think of some ideas of their own</li> <li>explain what they want to do</li> <li>use pictures and words to create a plan</li> </ul>		<ul style="list-style-type: none"> <li>think of some ideas of their own</li> <li>explain what they want to do</li> </ul>		<ul style="list-style-type: none"> <li>describe how something works</li> <li>talk about their own work and things that other people have done</li> </ul>
<b>Year 2</b>	<ul style="list-style-type: none"> <li>think of ideas and plan what to do next</li> <li>choose the best tools and materials for a task</li> <li>give a reason why these are best tools and materials for a task</li> <li>describe their design by using pictures, diagrams, models and words</li> </ul>		<ul style="list-style-type: none"> <li>join materials and components together in different ways</li> </ul>		<ul style="list-style-type: none"> <li>explain what went well with their work</li> <li>suggest improvements that could be made if the project was repeated</li> </ul>

Design Technology – Key Stage 1				
	Year 1	Year 2		
Cooking and nutrition	<ul style="list-style-type: none"> <li>cut food safely</li> <li>describe the texture of foods</li> <li>wash their hands before handling food and make sure that surfaces are clean</li> <li>think of interesting ways of decorating food they have made, such as cakes</li> <li>explain where in the world different foods originate from</li> <li>understand that all food comes from plants or animals</li> </ul>	<ul style="list-style-type: none"> <li>describe the properties of the ingredients used</li> <li>explain what it means to be hygienic</li> <li>pupils are hygienic in the kitchen</li> <li>understand that food has to be farmed, grown elsewhere (eg. at home) or caught</li> <li>understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why</li> </ul>		
Textiles	<ul style="list-style-type: none"> <li>describe how different textiles feel</li> <li>make a product from textile(s) by gluing</li> </ul>	<ul style="list-style-type: none"> <li>measure textiles</li> <li>join textiles together to make something</li> <li>cut textiles</li> <li>explain why they chose a certain textile</li> <li>use a basic running stitch</li> </ul>		
Mechanisms	<ul style="list-style-type: none"> <li>make a product which moves</li> <li>cut materials using scissors</li> <li>describe the materials using different words</li> <li>say why they have chosen moving parts, such as levers, sliders and wheels</li> </ul>	<ul style="list-style-type: none"> <li>join materials together as part of a moving product</li> <li>add some kind of design to their product</li> </ul>		
Use of materials	<ul style="list-style-type: none"> <li>make a structure/model using different materials</li> <li>work tidily</li> <li>make their model stronger if it needs to be</li> </ul>	<ul style="list-style-type: none"> <li>measure materials to use in a model or structure</li> <li>join materials in different ways</li> <li>use joining, folding or rolling to make materials stronger</li> </ul>		
Construction	<ul style="list-style-type: none"> <li>talk with others about how they want to construct their product</li> <li>select appropriate resources and tools for their building projects</li> <li>make simple plans before making objects, eg. drawings, arranging pieces of construction before building</li> </ul>	<ul style="list-style-type: none"> <li>make sensible choices as to which material to use for their construction</li> <li>develop their own ideas from initial starting points</li> <li>incorporate some type of movement into models</li> <li>consider how to improve their construction</li> <li>exploring how models can be made stronger, stiffer and more stable</li> </ul>		

Design Technology – Key Stage 1					
Year 1	Design	Make	Evaluate	Technical knowledge	Cooking and nutrition
Software/websites/ texts					
Topic/Curriculum opportunities					
Cultural Capital opportunities					
SMSC	<p><b>Spiritual</b> DT supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk-taking in analysing, designing and manufacturing a range of products. It instils a sense of awe, wonder and mystery when studying the natural world or human achievement. Encouraging creativity allows pupils to express innermost thoughts and feelings and to reflect and learn from reflection, for example, asking ‘why?’, ‘how?’ and ‘where?’.</p>	<p><b>Moral</b> DT supports moral development by raising awareness of moral dilemmas by encouraging pupils to value the environment and its natural resources and to consider the environmental impact of everyday products. It educates pupils to become responsible consumers.</p>	<p><b>Social</b> DT supports social development by providing opportunities to work as a team, recognising others’ strengths and sharing equipment. Design Technology promotes equality of opportunity and provides an awareness of areas that have gender issues eg. encouraging girls to use equipment that has been traditionally male dominated.</p>	<p><b>Cultural</b> DT supports cultural development by encouraging children to reflect on ingenious products and inventions, the diversity of materials and ways in which design technology can improve the quality of life. It investigates how different cultures have contributed to technology and reflects on products and inventions, the diversity of materials and ways in which design can improve the quality of our lives.</p>	