

# Key Skills Acquisition Lists

Adopt, Adapt, Create...



## D&T Key Skills Acquisition Lists

### Example Key Skills Acquisition D&T KS1

NC D&T – pupils should be taught to:		Y1	Y2
DESIGN	design purposeful, functional, appealing products for themselves and other users based on design criteria	<ul style="list-style-type: none"> <li>• Draw on their own experience to help generate ideas</li> <li>• Suggest ideas and explain what they are going to do</li> <li>• Identify a target group for what they intend to design and make</li> <li>• Model their ideas in card and paper</li> <li>• Develop their design ideas applying findings from their earlier research</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas by drawing on their own and other people's experiences</li> <li>• Develop their design ideas through discussion, observation, drawing and modelling</li> <li>• Identify a purpose for what they intend to design and make</li> <li>• Identify simple design criteria</li> <li>• Make simple drawings and label parts</li> </ul>
	generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology		
MAKE (including food)	select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	<ul style="list-style-type: none"> <li>• Make their design using appropriate techniques</li> <li>• With help measure, mark out, cut and shape a range of materials</li> <li>• Use tools e.g. scissors and a hole punch safely</li> <li>• Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape</li> <li>• Select and use appropriate fruit and vegetables, processes and tools</li> <li>• Use basic food handling, hygienic practices and personal hygiene</li> <li>• Use simple finishing techniques to improve the appearance of their product</li> </ul>	<ul style="list-style-type: none"> <li>• Begin to select tools and materials; use vocab' to name and describe them</li> <li>• Measure, cut and score with some accuracy</li> <li>• Use hand tools safely and appropriately</li> <li>• Assemble, join and combine materials in order to make a product</li> <li>• Cut, shape and join fabric to make a simple garment. Use basic sewing techniques</li> <li>• Follow safe procedures for food safety and hygiene</li> <li>• Choose and use appropriate finishing techniques</li> </ul>
	select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics		

<b>EVALUATE</b>	explore and evaluate a range of existing products	<ul style="list-style-type: none"> <li>• Evaluate their product by discussing how well it works in relation to the purpose</li> <li>• Evaluate their products as they are developed, identifying strengths and possible changes they might make</li> <li>• Evaluate their product by asking questions about what they have made and how they have gone about it</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate against their design criteria</li> <li>• Evaluate their products as they are developed, identifying strengths and possible changes they might make</li> <li>• Talk about their ideas, saying what they like and dislike about them</li> </ul>
	evaluate their ideas and products against design criteria		
<b>TECHNICAL KNOWLEDGE</b>	build structures, exploring how they can be made stronger, stiffer and more stable	See School Curriculum Map via the portal for knowledge and understanding content by year group	
	explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		
<b>COOKING &amp; NUTRITION</b>	use the basic principles of a healthy and varied diet to prepare dishes		
	understand where food comes from		

## Example Key Skills Acquisition D&T KS2

NC D&T – pupils should be taught to:		Y3	Y4	Y5	Y6
<b>DESIGN</b>	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	<ul style="list-style-type: none"> <li>• Generate ideas for an item, considering its purpose and the user/s</li> <li>• Identify a purpose and establish criteria for a successful product.</li> <li>• Plan the order of their work before starting</li> <li>• Explore, develop and communicate design proposals by modelling ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas, considering the purposes for which they are designing</li> <li>• Make labelled drawings from different views showing specific features</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas through brainstorming and identify a purpose for their product</li> <li>• Draw up a specification for their design</li> <li>• 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</li> <li>• Use results of investigations, information sources, including ICT when developing design ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate their ideas through detailed labelled drawings</li> <li>• Develop a design specification</li> <li>• Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</li> <li>• Plan the order of their work, choosing appropriate materials, tools and techniques</li> </ul>
	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"> <li>• Make drawings with labels when designing</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate products and identify criteria that can be used for their own designs</li> </ul>		

<b>MAKE (including food)</b>	select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	<ul style="list-style-type: none"> <li>• Make their design using appropriate techniques</li> <li>• With help measure, mark out, cut and shape a range of materials</li> <li>• Use tools eg scissors and a hole punch safely</li> <li>• Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape</li> <li>• Select and use appropriate fruit and vegetables, processes and tools</li> </ul>	<ul style="list-style-type: none"> <li>• Begin to select tools and materials; use vocab' to name and describe them</li> <li>• Measure, cut and score with some accuracy</li> <li>• Use hand tools safely and appropriately</li> <li>• Assemble, join and combine materials in order to make a product</li> <li>• Cut, shape and join fabric to make a simple garment. Use basic sewing techniques</li> <li>• Follow safe procedures for food safety and hygiene</li> <li>• Choose and use appropriate finishing techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Select appropriate materials, tools and techniques</li> <li>• Measure and mark out accurately</li> <li>• Use skills in using different tools and equipment safely and accurately</li> <li>• Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens</li> <li>• Cut and join with accuracy to ensure a good-quality finish to the product</li> </ul>	<ul style="list-style-type: none"> <li>• Select appropriate tools, materials, components and techniques</li> <li>• Assemble components make working models</li> <li>• Use tools safely and accurately</li> <li>• Construct products using permanent joining techniques</li> <li>• Make modifications as they go along</li> <li>• Pin, sew and stitch materials together create a product</li> <li>• Achieve a quality product</li> </ul>
	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"> <li>• Use basic food handling, hygienic practices and personal hygiene</li> <li>• Use simple finishing techniques to improve the appearance of their product</li> </ul>			

EVALUATE	investigate and analyse a range of existing products	<ul style="list-style-type: none"> <li>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</li> <li>Disassemble and evaluate familiar products</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate their work both during and at the end of the assignment</li> <li>Evaluate their products carrying out appropriate tests</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate a product against the original design specification</li> <li>Evaluate it personally and seek evaluation from others</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests</li> <li>Record their evaluations using drawings with labels</li> <li>Evaluate against their original criteria and suggest ways that their product could be improved</li> </ul>
	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 design and technology have helped shape the world				
TECHNICAL KNOWLEDGE	apply their understanding of how to strengthen, stiffen and reinforce more complex structures	See School Curriculum Map for knowledge and understanding content by year group			
	understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]				
	understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]				

	apply their understanding of computing to program, monitor and control their products	
COOKING & NUTRITION	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.	