



# Design & Technology Skills & Knowledge 4YR Overview

Year A			
Key Stage 2			
	Home Sweet Home	Go With the Flow	Save the Planet
	Food (& levers KB)	Structures	Food
<b>Design</b>	<ul style="list-style-type: none"> <li>▶ Think ahead about the order of their work and decide upon tools and materials. Y3</li> </ul>	<ul style="list-style-type: none"> <li>▶ Develop more than one design or adaptation of an initial design. Y3</li> <li>▶ Sketch and model alternative ideas. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Record the plan by drawing using annotated sketches.</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>▶ Produce detailed lists of ingredients / components / materials and tools. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use tools with accuracy. Y3</li> <li>▶ Cut accurately and safely to a marked line. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use researched information to inform decisions. Y6</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>▶ Investigate key events and individuals in design and technology (Brunel) y3</li> </ul>	<ul style="list-style-type: none"> <li>▶ Consider and explain how the finished product could be improved. Y3</li> <li>▶ Report using correct technical vocabulary. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Discuss how well the finished product meets the user's design criteria. Y3</li> <li>▶ Consider and explain how the finished product could be improved y4</li> </ul>
<b>Technical Knowledge (Select as appropriate to the focus of the design and technology focuses in the year group)</b>	<ul style="list-style-type: none"> <li>▶ Use linkages to make movement larger or more varied. Y3</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use an increasingly appropriate technical vocabulary for tools, materials and their purpose. Y3</li> </ul>	<ul style="list-style-type: none"> <li>▶ Prototype a product. Y3/4</li> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y3/4</li> </ul>
<b>Cooking &amp; Nutrition</b>	<ul style="list-style-type: none"> <li>▶ Follow instructions / recipes. (y3)</li> <li>▶ Join and combine a range of ingredients. Y3</li> <li>▶ Know where and how ingredients are reared and caught. Y4</li> </ul>	n/a	<ul style="list-style-type: none"> <li>▶ Begin to understand the food groups on the Eatwell Plate. Y3</li> <li>▶ Make healthy eating choices – use the <i>Eatwell plate</i>. Y4</li> </ul>
Year B			
Key Stage 2			
	History of Britain	Out of Africa	Going for Gold
	Structures	Textiles	Food
<b>Design</b>	<ul style="list-style-type: none"> <li>▶ Propose realistic suggestions as to how they can achieve their design ideas. Y3</li> <li>▶ Use exploded diagrams and cross-sectional diagrams to communicate ideas. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Plan a sequence of actions to make a product. Y3</li> <li>▶ Consider aesthetic qualities of materials chosen. Y4</li> </ul>	<ul style="list-style-type: none"> <li>▶ Devise step by step plans which can be read / followed by someone else. Y6</li> <li>▶</li> </ul>

<b>Make</b>	<ul style="list-style-type: none"> <li>▶ Select from and use a wide range of materials. Y5</li> <li>▶ Make prototypes. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Prepare pattern pieces as templates for their design. Y4</li> </ul>	<ul style="list-style-type: none"> <li>▶ Develop one idea in depth. Y5</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>▶ Investigate key events and individuals in design and technology. Y4</li> <li>▶ Identify the strengths and weaknesses of their design ideas. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Draw / sketch existing products in order to analyse and understand how products are made. Y4</li> <li>▶ Consider user and purpose. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Investigate similar products to the one to be made to give starting points for a design. Y3</li> </ul>
<b>Technical Knowledge (Select as appropriate to the focus of the design and technology focuses in the year group)</b>	<ul style="list-style-type: none"> <li>▶ Strengthen frames with diagonal struts. Y3/4</li> <li>▶ Measure and mark square section, strip and dowel accurately to 1cm. Y3/4</li> <li>▶ Cut strip wood, dowel, square section wood accurately to 1mm. Y5/6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Sew on buttons and make loops Y3/4</li> <li>▶ Understand seam allowance. Y3/4</li> <li>▶ Prototype a product. Y4</li> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y4</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y3/4</li> </ul>
<b>Cooking &amp; Nutrition</b>	n/a	<ul style="list-style-type: none"> <li>▶ Join and combine a widening range of ingredients. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Prepare and cook using different cooking techniques. Y4</li> <li>▶ Understand and apply the principles of a healthy and varied diet. Y6</li> <li>▶ Select and prepare foods for a particular purpose. Y5</li> </ul>

**Year C Key Stage 2**

	<b>All Roads lead to Rome</b>	<b>Survival</b>	<b>Out of this world</b>
	<b>Food</b>	<b>Textiles</b>	<b>Mechanical and electrical systems (ICT)</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>▶ Plan the sequence of work. Y6</li> <li>▶</li> </ul>	<ul style="list-style-type: none"> <li>▶ Decide which design idea to develop. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use CAD where appropriate. Y4</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>▶ Use appropriate finishing techniques. Y3</li> </ul>	<ul style="list-style-type: none"> <li>▶ Refine their product – review and rework / improve. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Select from materials according to their functional properties. Y3</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>▶ Decide which design idea to develop. Y3</li> <li>▶ Research and evaluate existing products. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Investigate key events and individuals in design and technology. Y6</li> <li>▶ Understand how key people have influenced design in a variety of contexts. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Identify the strengths and weaknesses of their design ideas in relation to purpose / user. Y4</li> </ul>

<b>Technical Knowledge</b> <b>(Select as appropriate to the focus of the design and technology focuses in the year group)</b>	<ul style="list-style-type: none"> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y4</li> </ul>	<ul style="list-style-type: none"> <li>▶ Join materials using appropriate methods. Y5/6</li> <li>▶ Create 3-D textile products using pattern pieces. Y5/6</li> <li>▶ Understand pattern layout with textiles. Y5/6</li> <li>▶ Use the correct vocabulary appropriate to the project. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Incorporate a circuit into a model. Y3/4</li> <li>▶ Use electrical systems such as switches bulbs and buzzers. Y3/4</li> <li>▶ Use ICT to control products. Y3/4</li> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y4</li> </ul>
<b>Cooking &amp; Nutrition</b>	<ul style="list-style-type: none"> <li>▶ Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques. Y6</li> <li>▶ Understand seasonality. Y4</li> </ul>	n/a	n/a

Year D		Key Stage 2	
	The Great Plague	The Art of Food	Rock and Roll
	Mechanical & Electrical Systems	Food	Structures
<b>Design</b>	<ul style="list-style-type: none"> <li>▶ Record ideas using annotated diagrams. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use prototypes to develop and share ideas. Y4</li> <li>▶</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use models, kits and drawings to help formulate design ideas. Y5</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>▶ Select from and use a wide range of tools. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Select from techniques for different parts of the process. Y4</li> </ul>	<ul style="list-style-type: none"> <li>▶ Select from a range of tools for cutting, shaping, joining and finishing. Y3</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>▶ Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Investigate key events and individuals in design and technology. Y5</li> </ul>	<ul style="list-style-type: none"> <li>▶ Consider and explain how the finished product could be improved related to design criteria. Y5</li> </ul>

<b>Technical Knowledge</b> <b>(Select as appropriate to the focus of the design and technology focuses in the year group)</b>	<ul style="list-style-type: none"> <li>▶ Use mechanical systems such as cams, pulleys and gears. Y5/6</li> <li>▶ Use electrical systems such as motors and switches. Y5/6</li> <li>▶ Program, monitor and control using ICT. Y5/6</li> <li>▶ Use the correct vocabulary appropriate to the project. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use the correct vocabulary appropriate to the project. Y6</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. Y3/4</li> <li>▶ Build frameworks to support mechanisms. Y5/6</li> <li>▶ Stiffen and reinforce complex structures. Y5/6</li> <li>▶</li> </ul>
<b>Cooking &amp; Nutrition</b>	n/a	<ul style="list-style-type: none"> <li>▶ Know where and how ingredients are grown and processed.Y5</li> <li>▶ Choose ingredients to support healthy eating choices when designing their food products. Y6</li> </ul>	n/a