

Key Learning in Design and Technology – Upper Key Stage 2

Design	Make	Evaluate
List tools needed before starting the activity	Make prototypes	Research and evaluate existing products
Plan the sequence of work (Use a storyboard)	Develop one idea in depth	Consider user and purpose
Record ideas using annotated diagrams	Use researched information to inform decisions	Identify the strengths and weaknesses of their design ideas
Use exploded diagrams and cross-sectional diagrams to communicate ideas (Year 6)	Produce lists of ingredients/components/materials and tools (Year 6 must provide these in great detail)	Give a report using correct technical vocabulary (Year 6 – written)
Use models, kits and drawings to help formulate design ideas	Use a computer to model ideas	Consider and explain how the finished product could be improved, related to design criteria
Combine modelling and drawing to refine ideas	Select from and use a wide range of tools	Discuss how well the finished product meets the design criteria of the user. Test on the user!
Devise step by step plans, which can be read/followed by someone else	Cut accurately and safely to a marked line	Understand how key people have influenced design
Sketch and model alternative ideas	Select from and use a wide range of materials	
Decide which design idea to develop	Use appropriate finishing techniques for the project	
	Refine their product – review and rework/improve	

Key Learning in Design and Technology – UKS2

Cooking and Nutrition (Year 5)	Cooking and Nutrition (Year 6)	Structures (Cycle B Only)	Mechanical and Electrical Systems and ICT (Cycle A Only)
<p>Prepare food products, with greater independence, showing some understanding of the properties of the ingredients.</p> <p>Weigh and measure using scales</p> <p>Select and prepare foods for a particular purpose</p> <p>Work safely and hygienically</p> <p>Continue to show an awareness of a healthy diet</p> <p>Use simple cooking techniques</p> <p>Know where and how the ingredients they are using are grown and processed</p>	<p>Prepare food products taking into account the properties of ingredients and sensory characteristics</p> <p>Weigh and measure using scales</p> <p>Select and prepare foods for a particular purpose</p> <p>Work safely and hygienically</p> <p>Show an awareness of a healthy diet</p> <p>Use a range of cooking techniques</p> <p>Know where and how ingredients are grown and processed</p> <p>Consider the influence of chefs</p> <p>-Jamie Oliver and school meals</p> <p>-Hugh Fearnley Whittingstall and sustainable fishing</p>	<p>Use the correct terminology for tools, materials and processes</p> <p>Join materials using appropriate methods</p> <p>Build frameworks to support mechanisms</p> <p>Stiffen and reinforce complex structures</p> <p>Cut strip wood, dowel and square section wood accurately to 1mm</p> <p><i>Use a bradawl to mark hole positions</i></p> <p><i>Use a hand drill to drill tight and loose fit holes</i></p> <p><i>(Where resources and supervision allow)</i></p>	<p>Develop a technical vocabulary appropriate to the project</p> <p><i>Use electrical systems such as motors</i></p> <p>Use mechanical systems such as pulleys and gears</p> <p><i>Program, monitor and control using ICT</i></p>
		Textiles (Cycle A Only)	Mechanical and Electrical Systems and ICT (Cycle B Only)
		<p>Use the correct vocabulary appropriate to the project</p> <p>Create 3D products using pattern pieces and seam allowance</p> <p>Understand pattern layout</p> <p>Decorate textiles appropriately (often before joining components)</p> <p>Pin and tack fabric pieces together</p> <p>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (close supervision)</p> <p>Combine fabrics to create more useful properties</p> <p>Make quality products</p>	<p>Develop a technical vocabulary appropriate to the project</p> <p><i>Use electrical systems such as motors</i></p> <p><i>Use mechanical systems such as cams</i></p> <p><i>Program, monitor and control using ICT</i></p> <p><i>This will depend on task chosen.</i></p>