

Design and Technology UKS2

Design, make, evaluate and improve (For all topics below)	Use research to design with the user in mind, motivated by the service a product will offer	
	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	
	Make products through stages of prototypes, making continual refinements	
	Ensure products have a high quality finish, using art skills where appropriate	
	Use prototypes, cross-sectional diagrams and computer aided designs to represent designs	
	Investigate and analyse a range of existing products	
	Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	
Take inspiration from design throughout history	Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices	
	Create innovative designs that improve upon existing products	
	Evaluate the design of products so as to suggest improvements to the user experience	
Food	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	
	Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms)	
	Measure accurately and calculate ratios of ingredients to scale up or down from a recipe	
	Demonstrate a range of baking and cooking techniques	
	Create and refine recipes, including ingredients, methods, cooking times and temperatures	
Materials	Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape)	
	Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper)	
Textiles	Create objects (such as a cushion) that employ a seam allowance	
	Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration)	
	Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion)	
Electricals and electronics	Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)	
Computing	Write code to control and monitor models or products	
Construction	Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding)	
Mechanics	Convert rotary motion to linear using cams	
	Use innovative combinations of electronics (or computing) and mechanics in product designs	