

	DT Aims The national curriculum for design and technology aims to ensure that all pupils: • develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • critique, evaluate and test their ideas and products and the work of others • understand and apply the principles of nutrition and learn how to cook. •	
Year Group	National Curriculum	Fordbridge skills progression
EYFS	Manipulates materials to achieve a planned effect. Constructs with a purpose in mind, using a variety of resources. Uses simple tools and techniques competently and appropriately. Selects tools and techniques needed to shape, assemble and join materials they are using. Children use what they have learned about materials in original ways thinking about use and purpose. They represent their own ideas, thoughts and feelings through design technology.	
Key Stage 1	Cooking and nutrition • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from Design • design purposeful, functional, appealing products for themselves and other users based on design criteria • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Food Cut, peel or grate ingredients safely and hygienically. Measure or weigh using measuring cups or electronic scales. Assemble or cook healthy ingredients. Understand where food comes from.
		Textiles Shape textiles using templates. Join textiles using running stitch. Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).

	Make - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Evaluate - explore and evaluate a range of existing products evaluate their ideas and products against design criteria Technical knowledge - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Materials Cut materials safely using tools provided. Measure and mark. Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).
		Construction Improve structures by making them stronger, stiffer and more stable. Attached features using different materials. Select appropriate materials
		Mechanisms Investigate, plan, make and evaluate Cutting -Accurately and safely with scissors. Card- Fold, tear, roll. Create and use wheels, axis and sliders.
Key Stage 2	Cooking and 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.	Food Prepare ingredients hygienically using appropriate utensils. Measure ingredients to the nearest gram accurately. Follow a recipe. Assemble or cook healthy ingredients (controlling the temperature of the oven or hob, if cooking). Demonstrate a range of baking and cooking techniques. Create and refine recipes, including healthy seasonal ingredients, methods, cooking times and temperatures. Understand how a variety of ingredients are grown, reared, caught and processed.

	Design • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately • 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 Evaluate • 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 • understand how key events and individuals in design and technology have helped shape the world	Textiles Understand the need for a seam allowance. Join textiles with appropriate stitching. Select the most appropriate techniques to decorate textiles. 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). Materials Cut materials accurately and safely by selecting appropriate tools. Measure and mark out to the nearest CM. Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). Select appropriate joining techniques/ resources. Yr 5/6 to also include: Cut materials with precision and refine the finish with appropriate tools. Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.
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	Technical knowledge • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • 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.	Construction Strengthen, stiffen and reinforce) –to investigate, design, make and evaluate structures. Prototype and build a frame and shell structures, showing an awareness of how to reinforce. Describe how a product could be made better. Build a framework using a range of materials. Mechanisms Investigate, design, make and evaluate. Use pullies, leavers and linkages. Describe how a product could be made better. Select the most appropriate mechanism for a mechanical purpose.
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