

Year 1 expected				
Design	Make	Evaluate	Technical Knowledge	Food technology
 Design appealing products for themselves based on simple design criteria. Generate initial ideas and design criteria through own experiences. Develop and communicate ideas through talk making a simple plan. 	 Select and use simple utensils, tools and equipment to perform a job e.g. peel, cut, slice, squeeze, grate and chop safely; marking out, cutting, joining and finishing; cut, shape and join paper and card. Select from a range of ingredients and materials according to their characteristics to create a chosen product. Make a product that moves Make a model stronger 	 Taste, explore and evaluate a range of products to determine the intended user's preferences for the product. Evaluate their ideas throughout and finished products against design criteria. 	Begin to explore and use mechanisms like sliders, levers, wheels and axels. Understand that different mechanisms produce different types of movement. Know and use technical vocabulary relevant to the project. Describe how something works	 Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Know and use technical and sensory vocabulary relevant to the project. Cut food safely (softer foods)
		Year 1 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Design appealing products for other users based on simple design criteria. Develop and communicate ideas through drawings and mock ups where relevant. 	 Understand how simple 3-D textile products are made, using a template to create two identical shapes. Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. 	Evaluate their ideas throughout and finished products including intended user and purpose.	 Use mechanisms (sliders, leavers, wheels and axels) Describe how something works using technical vocabulary 	 Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The eatwell plate. Begin to handle a knife to cut harder foods safely



		Year 2 expected		
Design	Make	Evaluate	Technical Knowledge	Food technology
Generate ideas based on simple design criteria and their own experiences, explaining what they could make After independently thinking of an idea, plan what to do next.	 Select and use tools, equipment, skills and techniques to perform practical tasks, explaining their choices. Select new and old materials, components, reclaimed materials and construction kits to build and create their products. Measure materials to use in a model or structure. Join materials and components in different ways. 	Explore a range of existing products related to their design criteria. Evaluate their product an explain what went well with their work Explain why specific textiles were chosen	 Explore and use sliders, leavers, wheels, axles and axle holders. Distinguish between fixed and freely moving axles. Know how to make freestanding structures stronger, stiffer and more stable. Know and use technical vocabulary relevant to the project. 	 Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The eatwell plate. Know and use technical and sensory vocabulary relevant to the project. Describe the ingredients being used
		Year 2 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
Develop, model and communicate their ideas through talking, mock-ups and drawings.	Use simple finishing techniques suitable for the products they are creating including different finishing techniques for textiles	Evaluate product in more detail by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria	 Use mechanisms (sliders, leavers, wheels and axels) in their own products Make moving structures Be able to build structures, exploring how they can be made stronger, stiffer and more stable. Build wooden structures 	Be able to chop most foods confidently with a knife



		Year 3 expected		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. Prove that their plan meets a specific criteria Design a product and make sure it looks attractive 	 Follow a step by step plan, choosing the right equipment and material. Choose the most appropriate tools and techniques for a given task Select from and use finishing techniques suitable for the product they are creating. Choose a textile for both its suitability and appearance. Make a product with both electrical and mechanical components. Work accurately to measure, make cuts and make holes 	 Test their product against the original design criteria and with the intended user. Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. 	Understand and use lever and linkage mechanisms. Know and use technical vocabulary relevant to the project.	 Know how to use appropriate equipment and utensils to prepare and combine food. Describe how food ingredients come together. Know and use relevant technical and sensory vocabulary appropriately.
		Year 3 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
Use annotated sketches, prototypes, final product sketches and pattern pieces; communication technology, such as web-based recipes, to develop and communicate ideas.	 Know how to strengthen, stiffen and reinforce existing fabrics. Begin to use electrical systems and computing programmes in their products and to control the products. 	• Investigate a range of 3-D textile products, ingredients and lever and linkage products relevant to their project.	 Develop and use knowledge of how to construct strong, stiff shell structures and begin to use knowledge of 3D shapes. Distinguish between fixed and loose pivots. 	Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.



		Year 4 expected		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Generate ideas through discussion with others to develop design criteria to inform the design of products Produce a plan and explain it. 	 Present a product in an interesting way Demonstrate ability to preserve and adapt work when original ideas do not work Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy. Explain their choice of materials according to functional properties and aesthetic qualities. 	 Test and evaluate their own products against design criteria, intended user, purpose and appearance. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. Explain how the original design was improved 	 Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. 	 Know how to use appropriate equipment and utensils to prepare and combine food. Know how to be both hygienic and safe when using food. Know and use relevant technical and sensory vocabulary appropriately.
		Year 4 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. 	 Understand how to securely join two pieces of fabric together. Understand and use electrical systems in their products linked to science coverage. Apply their understanding of computing to program and control their products. 	Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used.	Select from and use materials and components, including ingredients, construction and electrical components according to their function and properties.	Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.



		Year 5 expected		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Generate innovative ideas by collecting information from different sources (e.g. surveys, interviews and questionnaires and discussion with peers) Produce a detailed, step by step plan Design purposeful, functional, appealing products for the intended user that are fit for purpose and explain how the product will appeal to the audience 	 Produce detailed lists of equipment and fabrics relevant to their tasks Select from and use competently, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. Make a prototype before making a final version 	 Compare the final products appearance and function to the original design criteria and record the evaluations. Consider the views of others to improve their work Suggest alternative plans, outlining the positive features and draw backs 	 Understand that mechanical and electrical systems have an input, process and an output. Know and use technical vocabulary relevant to the project. 	 Show how to be both hygienic and safe in the kitchen. Know how to use utensils and equipment including some heat sources to prepare and cook food, with supervision. Know and use relevant technical and sensory vocabulary.
		Year 5 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. and, where appropriate, computer-aided design	• Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics.	 Investigate and analyse products linked to their final product. Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. 	 Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Begin to understand how to strengthen 3-D frameworks. 	Understand about seasonality in relation to food products and the source of different food products.



Year 6 expected				
Design	Make	Evaluate	Technical Knowledge	Food technology
 Use market research using surveys, interviews, questionnaires and web-based resources to inform plans and ideas and create a design specification. Generate and develop innovative ideas and share and clarify these through discussion. Follow and refine their plans Justify their plans in a convincing way Demonstrate that they consider culture and society in plans and designs Work within a budget 	 Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products. Use finishing and decorative techniques suitable for the product they are designing and making. 	 Continually evaluate and modify the working features of the product to match the initial design specification. Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. 	 Explain how products should be stored and give reasons Understand and use electrical systems in their products linked to science coverage. Apply their understanding of computing to program, monitor and control their products Know and use technical vocabulary relevant to the project. 	 Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products and the source of different food products. Know and use relevant technical and sensory vocabulary.
		Year 6 challenging		
Design	Make	Evaluate	Technical Knowledge	Food technology
 Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams. 	Understand how fabrics can be strengthened, stiffened and reinforced where appropriate. Understand and use a range of gears and pulleys and demonstrate how they can be used to speed up, slow down or change the direction of movement.	Test the system to demonstrate its effectiveness for the intended user and purpose.	Understand how to strengthen, stiffen and reinforce 3-D frameworks.	 Know how to create a simple meal Follow simple instructions for a recipe independently