

Designing	Making	Evaluating	Technical Knowledge	Food Technology
<ul style="list-style-type: none"> Think of what I want to make with a given set of resources Begin to be aware that the resources I have will limit what I can make Make decisions about how to approach a task before starting 	<ul style="list-style-type: none"> Handle equipment safely Explore a variety of materials, tools and techniques Show increasing levels of independence in the making stage 	<ul style="list-style-type: none"> Be prepared to stop to check how well my product is developing Changing strategy as needed when I know my product is not turning out the way I wanted Be able to explain to others how I made my product and be able to offer a simple explanation as to how I would improve on it 	<ul style="list-style-type: none"> Begin to appreciate that glue does not work on all materials Begin to use a wider range of tools carefully and skilfully Begin to understand which materials are suitable for certain tasks. 	<ul style="list-style-type: none"> Know why it is important to wash my hands before handling food Follow steps in a simple recipe Begin to handle tools safely during food preparation
<ul style="list-style-type: none"> Begin to research existing products before designing my own When researching, find out how products work and which materials have been used. Use own ideas to design something Design a product which moves Explain to someone else how I want to make my product 	<ul style="list-style-type: none"> Assemble and join materials Begin to build structures, exploring how they can be made stronger, stiffer and more stable. Explore the use of different mechanisms in my products. With help, measure, mark out and cut a range of materials. Use tools safely Begin to assemble, join and combine 	<ul style="list-style-type: none"> Explain what works well and not so well in the model I have made Begin to evaluate my products as they are developed, identifying strengths and possible changes I might make. 	<ul style="list-style-type: none"> Make my own model stronger Make a product that has at least one moving part 	<ul style="list-style-type: none"> Cut food safely Know that all food comes from either plants or animals. Use basic food handling, hygiene practices and personal hygiene Know how to prepare simple dishes safely and hygienically without using a heat source. Know how to use techniques: cutting, peeling and grating.

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<ul style="list-style-type: none"> • Make a simple plan before making • Begin to develop my own ideas through drawings, and where appropriate, make templates or mock ups of my initial ideas using ICT. 	<ul style="list-style-type: none"> • materials and components together • Begin to use simple finishing techniques to improve the appearance of my products. 			
<ul style="list-style-type: none"> • Begin to develop my design ideas using research and discussion with peers and adults. • Understand the purpose of my product • Order the main stages of making a product, continually referring to purpose and establish criteria for a successful product • Think of an idea and plan what to do next • Explain why I have chosen specific textiles or materials • Draw a simple design and label the parts of my product • Develop my own ideas through 	<ul style="list-style-type: none"> • Choose tools and materials and explain why I have chosen them • Join materials and components in different ways, including glue, sellotape and masking tape. • Can identify and name a simple selection of hand tools and equipment: Craft knife, Needle, Thread, Screwdriver, Screw, Glue gun, Hack saw • Use simple sewing techniques including cutting, shaping and joining fabric to make a simple product. 	<ul style="list-style-type: none"> • Look at a range of existing products and what I like and dislike about products and why. • Evaluate my work against my design criteria. • Start to evaluate my products as they are developed, identifying strengths and possible changes I might make. • With confidence talk about my ideas, saying what I like and dislike about my product. 	<ul style="list-style-type: none"> • Make a model stronger and more stable • Use wheels and axles 	<ul style="list-style-type: none"> • Know that everyone should eat at least five portions of fruit and vegetables each day. • Demonstrate how to prepare simple dishes safely and hygienically without using a heat source. • Demonstrate how to use techniques: cutting, peeling and grating. • Weigh ingredients to use in a recipe • Describe the ingredients used when making a dish or cake • Can talk about which food is healthy and which is not

<p>drawings, and where appropriate, make templates or mock ups of my initial ideas using ICT</p> <ul style="list-style-type: none"> Design a product and make sure that it meets the design criteria 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. With help, measure, cut and score with some accuracy. Start to assemble, join and combine materials in order to make a product. Start to choose and use appropriate finishing techniques based on my own ideas. 			<ul style="list-style-type: none"> Follow safe procedures for food safety and hygiene.
<ul style="list-style-type: none"> Research independently and generate some ideas before thinking about resources. Consider the purpose and audience for my product Prove that a design meets the specification Design a product and make sure that it meets the design criteria including looking attractive/desirable 	<ul style="list-style-type: none"> Follow a step-by-step plan, choosing the right equipment and materials Select the most appropriate tools and techniques for a given task: Drill, Dowel, Cotton, Long nose pliers, Spanner Work accurately to measure, mark out, make cuts, score, make holes and assemble components with more accuracy. 	<ul style="list-style-type: none"> Explain how to improve a finished model Know why a model has or has not been successful Evaluate my product against my original design criteria Begin to disassemble and evaluate familiar products and consider the views of others to improve them 	<ul style="list-style-type: none"> Use a simple IT program within the design Create a product that incorporates a pulley mechanism. 	<ul style="list-style-type: none"> Describe how food ingredients come together Weigh out ingredients and follow a given recipe to create a dish Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of heat source.

<ul style="list-style-type: none"> • Draw annotated designs with labels that detail my material choices and suitability of the given materials • Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products; Mary Berry, Archimedes, Anni Albers, David Brewster, David Misell • When planning, explain my choices of materials and components, including function. • Develop my own ideas through drawings, making templates or mock ups of my initial ideas using ICT 	<ul style="list-style-type: none"> • Start to work safely and accurately with a range of simple tools. • Choose finishing techniques to improve the appearance of my products using a range of equipment including ICT • Start to understand that mechanical systems create movement. • Start to think about my ideas as I make my product and be willing to change things if they help to improve my work. • Know which material is likely to give the best outcome based on its properties • Mark, measure and cut accurately a range of materials using appropriate tools, equipment and techniques. • Start to join and combine materials and components accurately in 	<ul style="list-style-type: none"> • Know why a model has or has not been successful • Evaluate and suggest improvements for designs • Evaluate products for both their purpose and appearance • Evaluate my product, carrying out appropriate tests. • Present a product in an interesting way 		<ul style="list-style-type: none"> • Begin to understand how to use a range of techniques: peeling, chopping, slicing, gracing, mixing, spreading, kneading and baking. • Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.
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	<p>temporary and permanent ways.</p> <ul style="list-style-type: none"> Show high levels of perseverance when things do not go as I would wish in the first instance. Know how simple electrical circuit and components can be used to create functional products. 			
<ul style="list-style-type: none"> Research before considering designing a product. Confidently make labelled drawings from different views, showing specific features. Produce a plan and explain the use of materials, equipment and processes If the first attempt fails, identify strengths and future areas for development. Communicate ideas through annotated sketches that show different viewpoints of the product 	<ul style="list-style-type: none"> Work accurately to measure, mark out, make cuts, score, make holes and assemble components with more accuracy. Know which tools to use for a particular task and show knowledge of handling the tool accurately and safely: Drill, Dowel, Cotton, Long nose pliers, Spanner Know which material is likely to give the best outcome based on its properties Mark, measure and cut accurately a range of materials 	<ul style="list-style-type: none"> Evaluate my own and others work Evaluate my product both during and at the end of the assignment. Evaluate products for both their purpose and appearance Evaluate my product, carrying out appropriate tests. Be able to disassemble and evaluate familiar products and consider the views of others to improve them. Present a product in an interesting way 	<ul style="list-style-type: none"> Create a product that incorporates at least one lever. Use appropriate sewing techniques. Know how to strengthen a product by stiffening a given part or reinforce a part of the structure 	<ul style="list-style-type: none"> Bring a creative element to the food product being designed Know which season various foods are available for harvesting Recognise safe practices in the kitchen and can identify hazards Know how to use a range of techniques: peeling, chopping, slicing, gracing, mixing, spreading, kneading and baking Know that to be active and healthy, food and drink are needed to provide energy for the body.

<ul style="list-style-type: none"> • Draw annotated designs with labels that detail their material choices and suitability of the given materials • Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products: Lady Bedford, Archimedes, Coubertin • Design a product and make sure that it meets the design criteria including looking attractive/desirable • Order the main stages of making a product, continually referring to purpose and establish criteria for a successful product. 	<p>using appropriate tools, equipment and techniques.</p> <ul style="list-style-type: none"> • Start to join and combine materials and components accurately in temporary and permanent ways. • Show high levels of perseverance when things do not go as they would wish in the first instance. • Know how mechanical systems create movement. • Understand how to reinforce and strengthen a 3D framework. • Begin to use finishing techniques to strengthen and improve their appearance of their product using a range of equipment. • Sew, weave or knit using a range of stitches 			
<ul style="list-style-type: none"> • Competently research products similar to the one I am intending to design 	<ul style="list-style-type: none"> • Name and use a range of tools and equipment competently. 	<ul style="list-style-type: none"> • Evaluate a product against original design specifications. 	<ul style="list-style-type: none"> • Use a range of sewing techniques, including applique and stitching. 	<ul style="list-style-type: none"> • Be both hygienic and safe in the kitchen

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<p>and evaluate strengths and weakness to be incorporated into my own design.</p> <ul style="list-style-type: none"> • Research and use ICT • Design, with a range of initial ideas, after collecting information from investigating existing products • Produce a detailed, step-by-step plan • Explain how a product will appeal to a specific audience and how it meets the purpose • Create annotated 3D designs of my design on isometric or squared paper from a range of viewpoints. • Apply a range of finishing techniques including those from art and design. • Start to appreciate how much the product costs to make. 	<p>Syringe, Hammer, Tac, Cog, Soldering iron, LED lights, Component board</p> <ul style="list-style-type: none"> • Select appropriate materials, tools and technique 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. • Incorporate mechanical systems to create movement in my products. • Use finishing techniques to strengthen and improve the appearance of my products using a range of equipment including ICT. • Make a prototype before making a final version 	<p>and by carrying out tests.</p> <ul style="list-style-type: none"> • Suggest alternative plans; outlining the positive features and drawbacks • Evaluate appearance and function against original criteria • Begin to evaluate my product personally and seek evaluation from others. 	<ul style="list-style-type: none"> • Use a gear system within the watermill produced. 	<ul style="list-style-type: none"> • Know how to prepare a meal by collecting the ingredients • Weigh and measure accurately • Begin to understand that seasons may affect the food available. • Understand how food is processed into ingredients that can be eaten or used in cooking. • Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically, including where appropriate, the use of a heat source. • Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.
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	<ul style="list-style-type: none"> Carry out finishing techniques to enhance the appearance and function of my product Make modifications as they go along and explain reasons. 			
<ul style="list-style-type: none"> When researching, be competent in discriminating as to what would be and would not be helpful for my intended product. Use market research of existing products to inform my design Produce a detailed, step-by-step plan Follow and refine original plans, justifying it in a convincing way Draw detailed 3D designs using exploded diagrams or cross sectional drawing where appropriate to display finer details Show that culture and society is 	<ul style="list-style-type: none"> Confidently select appropriate tools, materials, components and techniques and use them efficiently. Know how to use any tool correctly and safely Know what each tool is used for Explain why a specific tool is best for a specific action: Syringe, Hammer, Tac, Cog, Soldering iron, LED lights, Component board Make modifications as I go along and explain my reasons. Construct products using permanent joining techniques. 	<ul style="list-style-type: none"> Test and evaluate designed products with specified audience where possible Evaluate products against clear criteria Evaluate my work both during and at the end of the assignment. Record my evaluations using drawing with labels/graphs 	<ul style="list-style-type: none"> Know which IT product would further enhance a specific product Use knowledge to improve a made product by strengthening, stiffening or reinforcing Use electrical systems correctly and accurately to enhance a given product Use a pneumatics to create movement in a simple model Use a range of sewing techniques to improve the product made 	<ul style="list-style-type: none"> Explain how food ingredients should be stored and give reasons Work within a budget to create a meal Understand the difference between a savoury and sweet dish Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically, including where appropriate, the use of a heat source. Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

<p>considered in plans and design specification</p> <ul style="list-style-type: none">• Know how much products cost and make choices accordingly.	<ul style="list-style-type: none">• Use mechanical systems to create movement in my products.• Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control my products.• Pin, sew and stitch materials together to create a product• Make a prototype before making a final version• Carry out finishing techniques to enhance the appearance and function of my product			
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