



Design & Technology Progression

Designing		Making	Evaluating	Technical Knowledge	Food Technology
<p><i>Design - purposeful, functional, appealing products for themselves and other users based on design criteria.</i></p> <p><i>Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</i></p>		<p><i>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</i></p> <p><i>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</i></p>	<p><i>Explore and evaluate a range of existing products.</i></p> <p><i>Evaluate their ideas and products against design criteria.</i></p>	<p><i>Build structures, exploring how they can be made stronger, stiffer and more stable.</i></p> <p><i>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i></p>	<p><i>Use the basic principles of a healthy and varied diet to prepare dishes.</i></p> <p><i>Understand where food comes from.</i></p>
Early Years	<ul style="list-style-type: none"> • Draw and label a design of their own home • Design a home for one of the Three Little Pigs • ELG: Show accuracy and care when drawing and copying • ELG: Draw and paint using a range of materials, tools and techniques, experimenting with colour, design, texture form and function 	<ul style="list-style-type: none"> • Use various construction materials, manipulate and join them together to build and balance • Realise tools can be used for a purpose- glue to stick, scissors to cut • Select and use tools and techniques needed to shape and join materials • Construct with a purpose in mind, using a variety of resources- recyclable materials, building blocks. • Make a replica of their own home using recyclable materials • Make a home for one of the Three Little Pigs using a variety of materials and resources • ELG: Use a range of small tools, including scissors and paint brushes 	<ul style="list-style-type: none"> • Share their work with their peers- what do you like? What would you change? • Evaluate their own design and strength of materials used when building homes for the Three Little Pigs through discussion- what material was the strongest? Were the tall or short buildings stronger? • ELG: Share their creations. Explaining the process they have used 	<ul style="list-style-type: none"> • Select appropriate resources and adapt work where necessary • Experiment with the strength of materials used when building homes for the Three Little Pigs- test the strength of their home with a hairdryer 	<ul style="list-style-type: none"> • Experiment with different textures of food • Explore the different tools used when cooking and discuss their purpose- sieve, rolling pin etc. • Chop vegetables safely, observe the process of blending and taste vegetable soup • Visit a shop, purchase the ingredients needed to make bread, weigh them out, mix them and taste the final product • Taste foods from different cultures- Chinese noodles, Diwali sweets • Design a healthy and unhealthy plate- Take knowledge from class discussion and sort food items

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
Year 1	<ul style="list-style-type: none"> • use own ideas to design something and describe how their own idea works • design a product which moves • explain to someone else how they want to make their product and make a simple plan before making 	<ul style="list-style-type: none"> • use own ideas to make something • make a product which moves • choose appropriate resources and tools • explain what they like and do not like about existing products • find ways to make stable, freestanding structures • decorate textiles • roll, tear, fold and cut paper and card • cut along straight and curved lines, and shapes marked out as a template 	<ul style="list-style-type: none"> • describe how something works • explain what works well and not so well in the model they have made 	<ul style="list-style-type: none"> • make their own model stronger 	<ul style="list-style-type: none"> • cut food safely • know how to use tools to peel, grate and chop • know that food comes from plants and animals • know what a balance diet is
Year 2	<ul style="list-style-type: none"> • think of an idea and plan what to do next • make a drawing, template or mock-up of design and discuss it • explain why they have chosen specific textiles • use IT to explore ideas 	<ul style="list-style-type: none"> • choose tools and materials and explain why they have chosen them including cutting wood/doweling • join materials and components in different ways including textiles • measure materials to use in a model or structure • use simple mechanics in a product • create temporary joins, fixed and moving joins 	<ul style="list-style-type: none"> • explain what went well with their work 	<ul style="list-style-type: none"> • make a model stronger and more stable • use wheels and axles, when appropriate to do so 	<ul style="list-style-type: none"> • weigh ingredients to use in a recipe • describe the ingredients used when making a dish or cake

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular 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.</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p>	<p>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.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].</p> <p>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].</p> <p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
Year 3	<ul style="list-style-type: none"> • prove that a design meets a set criteria. • design a product and make sure that it looks attractive • choose a material for both its suitability and its appearance • generate and develop ideas through discussion • explain strengths and weaknesses of existing products 	<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 • make a product which uses both electrical and mechanical components • work accurately to measure, make cuts and make holes 	<ul style="list-style-type: none"> • explain how to improve a finished model • know why a model has, or has not, been successful 	<ul style="list-style-type: none"> • know how to strengthen a product by stiffening a given part or reinforce a part of the structure • use a simple IT program within the design 	<ul style="list-style-type: none"> • describe how food ingredients come together • weigh out ingredients and follow a given recipe to create a dish • talk about which food is healthy and which food is not • know when food is ready for harvesting
Year 4	<ul style="list-style-type: none"> • use ideas from other people when designing • produce a plan and explain it • persevere and adapt work when original ideas do not work • communicate ideas in a range of ways, including by sketches and drawings which are annotated 	<ul style="list-style-type: none"> • know which tools to use for a particular task and show knowledge of handling the tool • know which material is likely to give the best outcome • measure accurately • create simple joins with wood • use a computer program to create a repeating pattern • use a range of stitches to join fabrics and select the most appropriate 	<ul style="list-style-type: none"> • evaluate and suggest improvements for design • evaluate products for both their purpose and appearance • explain how the original design has been improved • present a product in an interesting way 	<ul style="list-style-type: none"> • links scientific knowledge by using lights, switches or buzzers • use electrical systems to enhance the quality of the product • use IT, where appropriate, to add to the quality of the product 	<ul style="list-style-type: none"> • know how to be both hygienic and safe when using food • bring a creative element to the food product being designed • use the right tools to slice, mix, spread, bake and knead

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p>	<p>Investigate and analyse a range of existing product. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].</p> <p>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].</p> <p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
Year 5	<ul style="list-style-type: none"> • come up with a range of ideas after collecting information from different sources • produce a detailed, step-by-step plan • explain how a product will appeal to a specific audience • design a product that requires pulleys or gears • evaluate existing products in relation to their purpose 	<ul style="list-style-type: none"> • use a range of tools and equipment competently including a glue gun, saw, drill • make a prototype before making a final version • make a product that relies on pulleys or gears • use applique to decorate by gluing and stitching • cut and measure doweling, strip wood and square sections accurately 	<ul style="list-style-type: none"> • suggest alternative plans; outlining the positive features and draw backs • evaluate appearance and function against original criteria 	<ul style="list-style-type: none"> • links scientific knowledge to design by using pulleys or gears • uses more complex IT program to help enhance the quality of the product produced • select the most appropriate way to join and secure materials • build frameworks using a range of materials 	<ul style="list-style-type: none"> • be both hygienic and safe in the kitchen • know how to prepare a meal by collecting the ingredients in the first place • know which season various foods are available for harvesting • understand how food types affect our bodies
Year 6	<ul style="list-style-type: none"> • use market research to inform plans and ideas. • follow and refine original plans • justify planning in a convincing way • show that culture and society is considered in plans and designs 	<ul style="list-style-type: none"> • know which tool to use for a specific practical task • know how to use any tool correctly and safely • know what each tool is for • explain why a specific tool is best for a specific action • cut internal shapes • create own simple sewing pattern or printing block to use in design 	<ul style="list-style-type: none"> • know how to test and evaluate designed products • explain how products should be stored and give reasons • evaluate product against clear criteria 	<ul style="list-style-type: none"> • use electrical systems correctly and accurately to enhance a given product • know which IT product would further enhance a specific product • use knowledge to improve a made product by strengthening, stiffening or reinforcing 	<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 • select the appropriate tools to follow a recipe to make a savoury dish