

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas.	 Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make Model their ideas in card and paper Develop their design ideas applying findings from their earlier research 	 Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify a purpose for what they intend to design and make Identify simple design criteria Make simple drawings and label parts 	 Generate ideas for an item, considering its purpose and the user/s Identify a purpose and establish criteria for a successful product. Plan the order of their work before starting Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing 	 Generate ideas, considering the purposes for which they are designing Make labelled drawings from different views showing specific features Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail Evaluate products and identify criteria that can be used for their own designs 	 Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas 	 Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways
Working with tools, equipment, materials and components to make quality products (incfood)	 Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools eg scissors and a hole punch safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Select and use appropriate fruit and vegetables, processes and tools Use basic food handling, hygienic practices and personal hygiene Use simple finishing techniques to improve the appearance of their product 	 Begin to select tools and materials; use vocab' to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Cut, shape and join fabric to make a simple garment. Use basic sewing techniques Follow safe procedures for food safety and hygiene Choose and use appropriate finishing techniques 	 Select tools and techniques for making their product Measure, mark out, cut, score and assemble components with more accuracy Work safely and accurately with a range of simple tools Think about their ideas as they make progress and be willing change things if this helps them improve their work Measure, tape or pin, cut and join fabric with some accuracy Demonstrate hygienic food preparation and storage Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT 	for making their product	 Select appropriate materials, tools and techniques Measure and mark out accurately Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices <i>e.g. hazards relating to the use of ovens</i> Cut and join with accuracy to ensure a good-quality finish to the product 	 Construct products using permanent joining techniques Make modifications as they go along Pin, sew and stitch materials together create a product Achieve a quality product
Evaluating processes and products	 Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it 	 Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them 	 Evaluate their product against original design criteria <i>e.g. how well it meets its</i> <i>intended purpose</i> Disassemble and evaluate familiar products 	 Evaluate their work both during and at the end of the assignment Evaluate their products carrying out appropriate tests 	 Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others 	 Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests Record their evaluations using drawings with labels Evaluate against their original criteria and suggest ways that their product could be improved
Cooking and nutrition	 Cut food safely Describe the texture of food Wash their hands and make sure they are clean Think of interesting ways of decorating food they have made 	 Describe the properties of the ingredients they are using Explain what it means to be hygienic 	 Choose the right ingredients for a product Use equipment safely Grow plants such as herbs and cress from seed with the intention of using them for their food product 	 Know what to do to be hygienic and safe Thinks carefully about presenting a product in an interesting way 	 Describe what they do to be both hygienic and safe Present their product well 	 Explain how their product should be stored with reasons Set out to grow their own products with a view of making something, taking account of time required to grow different foods
Textiles	Describe how different textiles feel	 Measure textiles Join textiles together to make something 	• Join textiles of different types in different ways	Thinks about what the user would want when choosing textiles	Think what the user would want when choosing textiles	• Thought about how their product could be sold



	 Make a product from textiles by gluing 	Cut textiles Explain why they have chosen certain ones	 Choose textiles both for their appearance and also qualities 	 Thinks about how to make a product stronger Explain how to join things in a different way 	 Made their product attractive and strong Makes up a prototype first Use a range of joining techniques 	Give consideration to what would improve their product even more
Mechanisms Electrical and mechanical components (3- 6)	 Make a product that moves Cut materials using scissors Describe the materials using different words Say why they have chosen moving parts 	Join materials together as part of a moving product Add some kind of design to their product	 Select the most appropriate tools and techniques to use for a given task Make a product which uses both electrical and mechanical components Use a simple circuit Use a number of components 	 Add things to their circuit Confident about trying out new and different ideas 	 Can incorporate a switch into their product Can refine their product after testing it Can incorporate hydraulics and pneumatics 	 Use different kinds of circuits in their product Think of ways in which adding a circuit would improve their product
Use of materials Stiff and flexible sheet materials (3-6)	 Make a structure/ model using different materials Make their model stronger • 	Measure materials to use in a model or structure Join materials in different ways Use joining, folding or rolling to make things stronger	 Use the most appropriate materials Work accurately to make cuts and holes Join materials 	 Measure carefully so as to make sure they have not made mistakes Have attempted to make their product strong 	 Their measurements are accurate enough to ensure that everything is precise Ensured that their product is strong and fit for purpose 	 Justify why they have selected specific materials Ensured that their work is precise and accurate Hide joints so as to improve the look of their product
Construction Mouldable materials (3-6)	 Talk to others about how they want to construct their product Select appropriate resources and tolls for their building project Make simple plans before making 	Make sensible choices as to which material to use for their constructions Develop their own ideas from an initial starting point Incorporate some type of movement into models Consider how to improve their constructions	 Select the most appropriate materials Use a range of techniques to shape and mould Use finishing techniques 	 Use a range of advanced techniques to shape and mould Use finishing techniques showing an awareness of audience 	 Are motivated enough to refine and further improve their product using mouldable materials 	 Justify why the chosen material was the best for the task Justify in relation to the audience