Progression of Skills and Knowledge
Design Technology

Design	Make	Evaluate		

Year Group	Skills	Knowledge
Year 3	Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. Use annotated sketches, prototypes, final product sketches and pattern pieces; communication technology, such as web-based recipes, to develop and communicate ideas.	**Vocabulary:** user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing **Food and Nutrition** **Structures** **Textiles** **Mechanisms and Mechanical Systems** **Programming and Electronics** **Architecture**
	Plan the main stages of making. Select from and use a range of appropriate utensils, tools and equipment with some accuracy related to their product. Select from and use finishing techniques suitable for the product they are creating.	
	Investigate a range of 3-D textile products, ingredients and lever and linkage products relevant to their project. 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.	

Year 4	Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. 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.	**Vocabulary:** evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations **Food and Nutrition** **Structures** **Textiles** **Mechanisms and Mechanical Systems** **Programming and Electronics** **Architecture**
	Order the main stages of making. Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. Explain their choice of materials according to functional properties and aesthetic qualities. Select from and use materials and components, including ingredients, construction and electrical components according to their function and properties.	
	Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used. Test and evaluate their own products against design criteria and the intended user and purpose.	

	Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	
Year 5	Generate innovative ideas through research including surveys, interviews and questionnaires and carry out discussions with peers to develop a design brief and criteria for a design specification. Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. and, where appropriate, computer-aided design	**Vocabulary:** design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype **Food and Nutrition** **Structures** **Textiles** **Mechanisms and Mechanical Systems** **Programming and Electronics** **Architecture**
	Produce detailed lists of equipment and fabrics relevant to their tasks Write a step-by-step plan, including a list of resources required. Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources.	
	Investigate and analyse products linked to their final product. Compare the final product to the original design specification and record the evaluations. Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.	

	Consider the views of others to improve their work	
Year 6	Use research using surveys, interviews, questionnaires and web-based resources to develop a design specification for a range of functional products. Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. Generate and develop innovative ideas and share and clarify these through discussion. Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.	**Vocabulary:** function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype **Food and Nutrition** **Structures** **Textiles** **Mechanisms and Mechanical Systems** **Programming and Electronics** **Architecture**
	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 a	

	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. Test the system to demonstrate its effectiveness for the intended user and purpose.	