



Progression of skills in Design Technology

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning & communicating ideas (Designing)	<p>Learn how everyday objects work by dismantling things.</p> <p>Begin to use the language of designing and making, e.g. join, build and shape.</p> <ul style="list-style-type: none"> • Learn about planning and adapting initial ideas to make them better. • Use and explore various construction materials and other resources to construct with a purpose in mind. • Adapt work where necessary. 	<p>Generate ideas based on simple design criteria and their own experiences, explaining what they could make.</p> <p>Generate initial ideas and design criteria through investigating a variety of different fruits.</p> <p>Develop, model and communicate their ideas through talking, drawings and mock-ups with card and paper.</p> <p>Plan by suggesting what to do next.</p>	<p>Generate initial ideas and simple design criteria through talking and using their own and other people's experiences.</p> <p>Develop and communicate ideas through drawings and mock-ups, and label parts.</p> <p>Design appealing products for a particular user based on simple design criteria.</p> <p>Generate initial ideas and design criteria through investigating a variety of fruit and vegetables.</p> <p>Communicate these ideas through talk and drawings.</p>	<p>Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the functional and aesthetic purposes of the product.</p> <p>Develop ideas through the analysis of existing shell structures and use computer-aided design to model and communicate ideas.</p> <p>Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose.</p> <p>Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p>	<p>Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.</p> <p>Produce annotated sketches, prototypes, final product sketches and pattern pieces.</p> <p>Gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.</p> <p>Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing</p>	<p>Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources.</p> <p>Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.</p> <p>Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.</p> <p>Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification.</p> <p>Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose.</p> <p>Use words, annotated sketches and information and communication technology as</p>	<p>Generate innovative ideas by carrying out research including surveys, interviews and questionnaires.</p> <p>Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design.</p> <p>Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</p> <p>Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources.</p> <p>Develop a simple design specification to guide their thinking.</p> <p>Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.</p>

					<p>product for a particular user and purpose.</p> <p>Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p>	<p>appropriate to develop and communicate ideas.</p> <p>Use research to develop a design specification for a functional product that responds automatically to changes in the environment. Take account of constraints including time, resources and cost.</p> <p>Generate and develop innovative ideas and share and clarify these through discussion.</p> <p>Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.</p>	<p>Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification.</p> <p>Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose.</p> <p>Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas.</p>
<p>Working with tools, equipment, materials & components to make quality products including food (Making)</p>	<p>Learn to construct with a purpose in mind.</p> <ul style="list-style-type: none"> • Select tools and techniques needed to shape, assemble and join materials. • Represent their own ideas, thoughts and feelings through Design and Technology. • Learn how to handle a range of tools and equipment effectively, e.g. scissors, hole punch, stapler, woodworking tools, 	<ul style="list-style-type: none"> • Use tools safely e.g. to cut, shape and join paper or card. . • Select new and reclaimed materials and construction kits to build their structures. <p>Use simple utensils and equipment to e.g. peel and cut safely.</p> <ul style="list-style-type: none"> • Select from a range of fruit according to their characteristics e.g. colour, texture and taste to create a chosen product. • Use simple finishing techniques suitable for 	<p>Begin to select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.</p> <ul style="list-style-type: none"> • Select from and use a range of materials and components such as paper, card, plastic, textiles and wood according to their characteristics. <p>Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.</p>	<p>Plan the order of the main stages of making.</p> <ul style="list-style-type: none"> • Select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. • Use (<i>computer-generated</i>) finishing techniques suitable for the product they are creating. <p>Plan the main stages of a recipe, listing</p>	<p>Plan the main stages of making.</p> <ul style="list-style-type: none"> • Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. • Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. • Order the main stages of making. • Select from and use tools and equipment to cut, shape, join and finish with some accuracy. 	<ul style="list-style-type: none"> • Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used. • Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. • Use finishing and decorative techniques suitable for the product they are designing and making. • Write a step-by-step recipe, including a list 	<p>Produce detailed lists of equipment and fabrics relevant to their tasks.</p> <ul style="list-style-type: none"> • Formulate step-by-step plans and, if appropriate, allocate tasks within a team. • Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. <p>Work within the constraints of time, resources and cost.</p> <ul style="list-style-type: none"> • Produce detailed lists of tools, equipment and materials. <p>Formulate step-by-step</p>

	<p>rolling pins, pastry cutters...</p> <p>Begin to understand some of the tools, techniques and processes involved in food preparation.</p> <ul style="list-style-type: none"> • Describe the taste and textures of some foods. • Suggest some foods that are healthy. • Have basic hygiene awareness. 	<p>the product they are creating.</p>	<ul style="list-style-type: none"> • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. 	<p>ingredients, utensils and equipment.</p> <ul style="list-style-type: none"> • Select and use appropriate utensils and equipment to prepare and combine ingredients. • Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics. <p>Order the main stages of making.</p> <ul style="list-style-type: none"> • Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. • Select from and use finishing techniques suitable for the product they are creating. 	<ul style="list-style-type: none"> • Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities. <p>Plan the main stages of a recipe, listing ingredients, utensils and equipment.</p> <ul style="list-style-type: none"> • Select and use appropriate utensils and equipment to prepare and combine ingredients. • Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics. 	<p>of ingredients, equipment and utensils</p> <ul style="list-style-type: none"> • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Make, decorate and present the food product appropriately for the intended user and purpose. <p>Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.</p> <ul style="list-style-type: none"> • Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. • Create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment. 	<p>plans and, if appropriate, allocate tasks within a team.</p> <ul style="list-style-type: none"> • Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. <p>Work within the constraints of time, resources and cost.</p> <p>Write a step-by-step recipe, including a list of ingredients, equipment and utensils</p> <ul style="list-style-type: none"> • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Make, decorate and present the food product appropriately for the intended user and purpose.
<p>Evaluating processes & products (Evaluating)</p>	<p>Begin to talk about changes made during the making process, e.g. making a decision to use a different joining method.</p> <ul style="list-style-type: none"> • Talk about existing products and begin to suggest why some 	<p>Explore a range of existing books and everyday products that use simple sliders and levers.</p> <p>Explore a range of existing freestanding structures in the school and local</p>	<p>Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences.</p> <p>Explore and evaluate a range of existing textile products relevant to</p>	<p>Investigate and evaluate a range of shell structures including the materials, components and techniques that have been used.</p> <ul style="list-style-type: none"> • Test and evaluate their own products 	<p>Investigate a range of 3-D textile products relevant to the project.</p> <ul style="list-style-type: none"> • Test their product against the original design criteria and with the intended user. • Take into account others' views. 	<p>Investigate and evaluate a range of existing frame structures.</p> <ul style="list-style-type: none"> • Critically evaluate their products against their design specification, intended user and purpose, 	<p>Investigate and analyse textile products linked to their final product.</p> <ul style="list-style-type: none"> • Compare the final product to the original design specification. • Test products with intended user and critically evaluate the

	<p>materials or features could have been used.</p>	<p>environment e.g. everyday products and buildings.</p> <ul style="list-style-type: none"> • Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria. <p>Taste and evaluate a range of fruit to determine the intended user's preferences.</p> <ul style="list-style-type: none"> • Evaluate ideas and finished products against design criteria, including intended user and purpose. 	<p>the project being undertaken</p> <ul style="list-style-type: none"> • Evaluate ideas and finished products against design criteria, including intended user and purpose. 	<p>against design criteria and the intended user and purpose.</p> <p>Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs.</p> <ul style="list-style-type: none"> • Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. <p>Investigate and analyse books and, where available, other products with lever and linkage mechanisms.</p> <ul style="list-style-type: none"> • Evaluate their own products and ideas against criteria and user needs, as they design and make 	<ul style="list-style-type: none"> • Understand how a key event/individual has influenced the development of the chosen product and/or fabric. <p>Investigate and analyse a range of existing battery-powered products.</p> <ul style="list-style-type: none"> • Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. <p>Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs.</p> <ul style="list-style-type: none"> • Evaluate the ongoing work and the final product with reference to the design criteria and the views of others <p>Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams.</p> <ul style="list-style-type: none"> • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when 	<p>identifying strengths and areas for development, and carrying out appropriate tests.</p> <ul style="list-style-type: none"> • Research key events and individuals relevant to frame structures. <p>Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams.</p> <ul style="list-style-type: none"> • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. • Understand how key chefs have influenced eating habits to promote varied and healthy diets. <p>Continually evaluate and modify the working features of the product to match the initial design specification.</p> <ul style="list-style-type: none"> • Test the system to demonstrate its effectiveness for the intended user and purpose. • Investigate famous inventors who developed ground- 	<p>quality of the design, manufacture, functionality and fitness for purpose.</p> <ul style="list-style-type: none"> • Consider the views of others to improve their work. <p>Compare the final product to the original design specification.</p> <ul style="list-style-type: none"> • 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. • Investigate famous manufacturing and engineering companies relevant to the project.
--	--	---	--	---	---	--	--

					identifying improvements. • Understand how key chefs have influenced eating habits to promote varied and healthy diets.	breaking electrical systems and components.	
--	--	--	--	--	--	---	--