

### Progression of Skills

**Subject:** Design and Technology

	<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Food</b>		<p>Measure or weigh using measuring cups or electronic scales</p> <p>Cut ,peel or grate ingredients safely and hygienically</p>	<p>Measure or weigh using measuring cups or electronic scales</p> <p>Assemble or cook ingredients.</p>	<p>Follow recipes</p> <p>Assemble ingredients.</p> <p>Prepare ingredients hygienically using appropriate utensils.</p>	<p>Follow recipes</p> <p>Assemble ingredients.</p> <p>Measure ingredients to the nearest gram accurately.</p> <p>Cook ingredients (controlling the temperature of the oven or hob, if cooking)</p>	<p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms)</p> <p>Demonstrate a range of baking and cooking techniques.</p> <p>Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</p>	<p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms)</p> <p>Demonstrate a range of baking and cooking techniques.</p> <p>Create and refine recipes, including ingredients, methods, cooking times and temperatures</p>
<b>Materials</b>	<p>Manipulate materials to achieve a planned effect.</p> <p>Select tools and techniques needed to shape, assemble and join materials.</p>	<p>Cut materials safely using tools provided.</p> <p>Demonstrate a range of cutting and shaping techniques ( such as tearing, cutting, folding and curling)</p>	<p>Cut materials safely using tools provided.</p> <p>Demonstrate a range of cutting and shaping techniques ( such as tearing, cutting, folding and curling)</p> <p>Measure and mark out to the nearest centimetre.</p> <p>Demonstrate a range of joining techniques ( such as gluing, hinges or combining materials to strengthen)</p>	<p>Cut materials accurately and safely by selecting appropriate tools.</p> <p>Select appropriate joining techniques.</p> <p>Measure and mark out to the nearest millimetre.</p>	<p>Cut materials accurately and safely by selecting appropriate tools.</p> <p>Select appropriate joining techniques.</p> <p>Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs)</p>	<p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature fabric may require sharper scissors than would be used to cut paper).</p>	<p>Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape)</p>
<b>Textiles</b>		<p>Colour and decorate textiles using a number of techniques ( such as dyeing, adding sequins or printing)</p>	<p>Colour and decorate textiles using a number of techniques ( such as dyeing, adding sequins or printing)</p> <p>Shape textiles using template.</p>	<p>Join textiles with appropriate stitching.</p> <p>Understand the need for a seam allowance.</p>	<p>Join textiles with appropriate stitching.</p> <p>Select the most appropriate technique to decorate textiles.</p>	<p>Create objects (such as a cushion) that employ a seam allowance.</p> <p>Join textiles with a combination of stitching techniques ( such as back stitch for seams and</p>	<p>Create objects (such as a cushion) that employ a seam allowance.</p> <p>Join textiles with a combination of stitching techniques ( such as back stitch for seams and</p>

			Join textiles using running stitch.			running stitch to attach decoration)	running stitch to attach decoration)  Use qualities of materials to create suitable visual and tactile effects in the decoration of textiles ( such as a soft decoration for comfort on a cushion)
<b>Electrics and Electronics</b>			Diagnose faults in battery operated devices ( such as low battery, water damage or battery terminal damage)		Create a series and parallel circuits.	Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)	Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)
<b>Construction</b>	Construct with purpose in mind, using a variety of resources.  Use simple tools and techniques competently and appropriately.	Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.	Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.	Choose suitable techniques to construct products or to repair items.  Strengthen materials using suitable techniques.	Choose suitable techniques to construct products or to repair items.  Strengthen materials using suitable techniques.	Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding)	Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding)
<b>Mechanics</b>			Create products using levers, wheels and winding mechanisms.	Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanism, pulleys and gears)	Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanism, pulleys and gears)	Use innovative combinations of electronics (or computing) and mechanics in product design	Use innovative combinations of electronics (or computing) and mechanics in product design  Convert rotary motion to linear using cams.
<b>Computing</b>		Model designs using software.	Model designs using software.	Control and monitor models using software designed for this purpose.	Control and monitor models using software designed for this purpose.	Write code to control and monitor models or products.	Write code to control and monitor models or products.
<b>Design, Make, Evaluate and Improve</b>	Select appropriate resources and adapt work where necessary.  Make simple representations of events, people and objects.  Safely uses and explores a variety of materials, tools and techniques experimenting with	Design products that have a clear purpose and an intended user.  Use software to design.	Design products that have a clear purpose and an intended user.  Use software to design. Make products, refining the design as work progresses.	Make products by working efficiently (such as by carefully selecting materials)  Use software to design and represent product designs.  Design with purpose by identifying opportunities to design	Make products by working efficiently (such as by carefully selecting materials)  Use software to design and represent product designs.  Refine work and techniques as work progresses continually evaluating the product design	Make products through stages of prototypes, making continual refinements.  Ensure products have a high quality finish, using art skills where appropriate.  Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.	Make products through stages of prototypes, making continual refinements.  Ensure products have a high quality finish, using art skills where appropriate.  Design with the user in mind, motivated by the service a product will offer (rather than simply for profit)

	colour, design, texture, form and function.						
<b>Take Inspiration from Design Throughout History</b>		Explore how products have been created.	<p>Explore how products have been created.</p> <p>Explore objects and designs to identify likes and dislikes of the designs.</p> <p>Suggest improvements to existing designs.</p>	<p>Improve upon existing designs, giving reasons for choices.</p> <p>Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</p>	<p>Improve upon existing designs, giving reasons for choices.</p> <p>Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</p> <p>Disassemble products to understand how they work.</p>	<p>Combine elements of design from a range of inspirational designers. Evaluate the designs of products to suggest improvements to the user experience.</p> <p>Create innovative designs that improve upon existing products.</p>	<p>Combine elements of design from a range of inspirational designers. Evaluate the designs of products to suggest improvements to the user experience.</p> <p>Create innovative designs that improve upon existing products.</p>