

Design Technology Long Term Sequence

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Substantive concepts KS1/KS2:		Disciplinary knowledge:	
<ul style="list-style-type: none"> - Generating ideas - Developing knowledge of materials and techniques: <i>Textiles, Mechanisms, Structures, Food and nutrition, Understanding Materials, Electrical systems</i> - Evaluating products and processes 		<ul style="list-style-type: none"> - Design - Make - Evaluate - Apply 	
	Autumn	Spring (Units are typically taught in the spring term but can be taught in the summer depending on the placement of Easter in the academic year)	Summer
Nursery	Explore different materials freely to develop their ideas about how to use them and what to make	Explore different joining techniques	Can talk about what they are going to make Manipulates basic tools e.g. play dough tools with increasing dexterity
Reception	Choose appropriate tools and use them safely Reflects on a product, saying what they like	Use simple techniques to join materials Explains what they are happy with in a product and how they will tweak the design to improve it	(ELG) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function Share their creations, explaining the process they have used
Year 1	<p>Block A – Mechanisms <i>Exploring sliders. Designing and making a slider product.</i></p> <p>Block B - Structures <i>Build structures that are freestanding using a range of different materials.</i></p>	<p>Block C – Food and nutrition <i>Peel, chop and grate a selection of vegetables Modify food to suit their food senses.</i></p> <p>Block D – Understanding Materials <i>Identify, sort and select materials that can be used in construction. Combine materials.</i></p>	<p>Block E– Textiles <i>Create a running stitch. Select tools for sewing.</i></p> <p>Block F – Food and nutrition <i>Peel, grate, season and breadcrumb a range of vegetables.</i></p>
Year 2	<p>Block A – Textiles <i>Use a template to transfer a pattern. Cut out and join fabric shapes using a template. Use basic sewing skills to create a simple patchwork.</i></p> <p>Block B - Food and Nutrition</p>	<p>Block C – Mechanisms <i>Create a simple wheel and axel mechanism. Use wheel mechanisms to propel a simple vehicle.</i></p> <p>Block D – Understanding Materials</p>	<p>Block E– Food and Nutrition <i>Use a range of culinary techniques. Shape and form ingredients.</i></p> <p>Block F – Structures</p>

	<i>Use culinary skills and techniques to prepare a range of salad vegetables. Shape and season a bread snack.</i>	<i>Make paper waterproof (Understanding absorption or resistance). Transform flat paper by folding and creasing to form a hat.</i>	<i>Fold paper to increase strength and stability. Test and record how much weight paper can hold.</i>
Year 3	<p>Block A – Textiles <i>Select and apply solutions to stiffen fabric. Make a box using stiffened fabric.</i></p> <p>Block B - Food and Nutrition <i>Exploring the sensory qualities of food. Explicit teaching of culinary skills and techniques. Evaluating outcomes.</i></p>	<p>Block C – Mechanisms <i>Design and make simplistic lever and linkage products. Evaluate the success of their outcomes and recommend improvements.</i></p> <p>Block D – Food and Nutrition <i>Peel and grate a range of vegetables. Add flavour and texture to foods.</i></p>	<p>Block E– Systems <i>Identify how things are powered. Suggest appropriate energy sources for design problems.</i></p> <p>Block F – Structures <i>Design and build a beam bridge, understanding and exploring strength and stability. Identify and name parts of a bridge.</i></p>
Year 4	<p>Block A – Food and Nutrition <i>Explore the difference between freshly made food and mass-produced food. Explicit teaching of culinary skills and techniques. Modify and improve.</i></p> <p>Block B – Mechanisms <i>Make a variety of model hinges. Make and evaluate hinged products using modelling materials.</i></p>	<p>Block C – Textiles <i>Select appropriate fastenings and attach them to fabric. Make a shank for a button.</i></p> <p>Block D – Structures <i>Make triangles to form and join trusses. Identify the forces that affect structures.</i></p>	<p>Block E– Electrical Systems <i>Incorporate different types of switches into circuits to perform a function.</i></p> <p>Block F – Food and Nutrition <i>Peel, grate and chop vegetables to make economical, tasty and healthy food.</i></p>