

# Design Technology Curriculum Overview Map



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Reception</b>	<b>Me &amp; My Community</b>	<b>Traditions</b>	<b>Fantastic Planet</b>	<b>Nature Detectives</b>	<b>Animal Safari</b>	<b>Let's Explore</b>
	<b>Structures</b> Simple structures and models	<b>Cooking and Nutrition</b> Following simple recipes	<b>Mechanisms</b> Simple construction with wheels and axels	<b>Materials</b> constructing and making.	<b>Structures</b> Simple structures and models	<b>Mechanisms</b> Simple construction with wheels and axels
<b>Year 1</b>	Autumn		Spring		Summer	
	<b>Childhood</b>		<b>Our Wonderful World</b>		<b>School Days</b>	
	<p><b>Shade &amp; Shelter</b> - Structures (design &amp; build a Playden) Purpose of shelters and their materials, make shelter prototypes. Design and make a den. Experiment with simple structures to make a lighthouse. Use reflective materials for the lamp</p> <p><b>Structures</b> Freestanding Structures</p>		<p>Sea creature finger puppets: Textiles – (see <b>funny faces</b> cornerstones unit for K &amp; S) Simple stitches, such as running stitch to join fabric. Decorating using materials and small objects, such as buttons and sequins by gluing, stapling or tying.</p>		<p><b>Chop, Slice &amp; Mash</b> (GROWTH) Preparatory skills of peeling, tearing, slicing, chopping, mashing and grating.</p> <p><b>Cooking and Nutrition</b> Preparing fruit and vegetables</p> <p><b>Taxi</b> - Mechanisms – wheels and axels Wheels, axles and chassis and how they work together to make a vehicle move. Make a simple moving model</p> <p><b>Mechanisms</b> Wheels and Axels</p>	
<b>Year 2</b>	Autumn		Spring		Summer	
	<b>Bright Lights, Big City</b>		<b>Let's explore the World</b>		<b>Movers &amp; Shakers</b>	
	<p><b>Push and Pull:</b> Mechanism Sliders, levers and linkages moving picture (winter greetings card)</p> <p><b>Mechanisms</b> Sliders &amp; Levers</p>		<p><b>Beach Hut:</b> (adapted) Free standing structures Making and strengthening structures, including different ways of joining materials Design and build an African hut</p> <p><b>Structures</b> Freestanding Structures</p>		<p><b>Cut stitch and join:</b> Textiles – (Cath Kidston) Sewing patterns, using a running stitch, embellishments to create a simple sewn bag tag.</p> <p><b>Materials: Textiles</b> Templates &amp; Joining</p> <p><b>Remarkable recipes</b> (GROWTH) Sources of food and tools used for food preparation. Following a simple recipe Which foods need to be cooked and which don't</p> <p><b>Cooking and Nutrition</b> Preparing fruit and vegetables</p>	
<b>Year 3</b>	Autumn		Spring		Summer	
	<b>Through the Ages</b>		<b>Rocks, Relics &amp; Rumbles</b>		<b>Emperors &amp; Empires</b>	
	<p><b>Cook Well, Eat well:</b> Food groups and healthy cooking Food groups and the Eatwell guide. Methods of cooking The children choose and make a taco filling/pizza according to specific design criteria and evaluate the finished product.</p> <p><b>Cooking and Nutrition</b> Healthy and varied diet</p>		<p><b>Making it move:</b> Mechanisms – cams Experiment with different shaped cams before designing, making and evaluating a child's automaton toy.</p> <p><b>Mechanical Systems</b> Cams</p>		<p><b>Greenhouses:</b> Structures and frameworks (Roman legacy) Purpose, structure and design features of greenhouses. Compare the work of two significant greenhouse designers. Techniques to strengthen structures and use tools safely. Design and construct a mini greenhouse.</p> <p><b>Structures</b> Framework &amp; Shell Structures</p>	

	Autumn	Spring	Summer
Year 4	<p align="center"><b><u>Ancient Civilisations</u></b></p> <p><i>Tomb builders: Mechanisms – Wheels, axels, pulleys and levers, exploring how they helped ancient builders to lift and move heavy loads. Design a prototype to help the Egyptian tomb builders</i></p> <p align="center"><b>Mechanical Systems</b> Pulleys, Gears, Cams</p>	<p align="center"><b><u>Misty Mountain, Winding River, Ancient Rainforests</u></b></p> <p><i>Functional &amp; Fancy Fabrics: Textiles – Repurposing fabric and other materials to make a landscape scene. Sewing a simple hem, embroidered embellishment and joining fabric to create a layered piece</i></p> <p align="center"><b>Materials: Textiles</b> Combining different fabric shapes</p>	<p align="center"><b><u>Achievers &amp; Inventors</u></b></p> <p><i>Fresh food, good food: Cooking and Nutrition Food decay and preservation. key inventions in food preservation and packaging, then make examples. Prepare, package and evaluate a healthy snack.</i></p> <p align="center"><b>Cooking and Nutrition</b> Healthy and varied diet</p> <p>Electrical systems: (linked to science project) Simple circuits and switches to design and make a nightlight</p> <p align="center"><b>Electrical Systems</b> Simple Circuits and Switches</p>
	<p align="center">Autumn</p> <p align="center"><b><u>Invasion</u></b></p> <p><i>Moving mechanisms: pneumatics Pneumatic systems. Designing, making and evaluating a pneumatic machine that performs a useful function.</i></p> <p align="center"><b>Mechanical Systems</b> Pneumatics, levers, axles, cams, gears and pulleys</p>	<p align="center">Spring</p> <p align="center"><b><u>Waste not, Want not!</u></b></p> <p><i>Eat the seasons: Cooking &amp; nutrition (GROWTH) Meaning and benefits of seasonal eating, including food preparation and cooking techniques.</i></p> <p align="center"><b>Cooking and Nutrition</b> Celebrating Culture and Seasonality</p>	<p align="center">Summer</p> <p align="center"><b><u>Ground-breaking Greeks</u></b></p> <p><i>Architecture: Structures - Greek buildings How architectural style and technology has developed over time and then use this knowledge to design a building with specific features</i></p> <p align="center"><b>Structures</b> Shell &amp; framework structures</p> <p><i>Mixed media: Textiles -Combine stitches and fabrics with imagination to create a mixed media collage.</i></p> <p align="center"><b>Materials: Textiles</b> Combining different fabric shapes</p>
Year 5	<p align="center">Autumn</p> <p align="center"><b><u>Britain at War</u></b></p> <p><i>Make do and mend: Textiles Simple sewing stitches, including ways of recycling and repurposing old clothes and materials</i></p> <p align="center"><b>Materials: Textiles</b> Combining different fabric shapes</p> <p><i>Food for life: Healthy food choices (GROWTH) Processed food and healthy food choices. They make bread and pasta sauces They plan and make meals as part of a healthy daily menu and evaluate their completed products.</i></p> <p>Cooking &amp; nutrition: WW11 ration recipes</p> <p align="center"><b>Cooking and Nutrition</b> Celebrating Culture and Seasonality</p>	<p align="center">Spring</p> <p align="center"><b><u>This is our World!</u></b></p> <p><i>Environmental artists: 3D sculpture Collaborative project to create artwork with an environmental message</i></p> <p align="center"><b>Structures</b> Freestanding &amp; Shell Structures</p>	<p align="center">Summer</p> <p align="center"><b><u>We are all equal</u></b></p> <p><i>Engineer: Structures– making bridges Remarkable engineers and significant bridges. Learning to identify features, such as beams, arches and trusses. They complete a bridge-building engineering challenge to create a bridge prototype.</i></p> <p align="center"><b>Structures &amp; Mechanisms</b> Framework Structures and pulleys</p>
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\*Lesson objectives, key knowledge and skills for each unit can be found within the Cornerstones projects