

	Autumn	Spring	Summer
Year 1	<p><b>Structures –Houses</b> Design, make and evaluate their own model house.</p> <ul style="list-style-type: none"> <li>• Use own ideas to design and make something and describe how their own ideas work.</li> <li>• Explain what works well and not so well in a structure they have made.</li> <li>• Make their own structure stronger and more stable.</li> </ul>	<p><b>Mechanisms – Moving Dragons</b> Design, make and evaluate a moving dragon.</p> <ul style="list-style-type: none"> <li>• Design and make a product that moves.</li> <li>• Choose appropriate materials, resources and tools.</li> <li>• Explain to someone else how they want to make their product and plan.</li> <li>• Describe how something works.</li> <li>• Use levers, pivots and sliding mechanisms.</li> </ul>	<p><b>Food – Seaside Snacks</b> Taste, explore and think about a range of foods before designing their own seaside picnic.</p> <ul style="list-style-type: none"> <li>• Design and prepare a picnic based on the principles of a varied and healthy diet.</li> <li>• Choose appropriate tools.</li> <li>• Cut food safely</li> </ul>
Year 2	<p><b>Textiles – Baubles</b> Design, make and evaluate a fabric bauble.</p> <ul style="list-style-type: none"> <li>• Join materials and components in different ways.</li> <li>• Explain why they have used specific textiles.</li> <li>• Explain what went well with their work.</li> </ul>	<p><b>Mechanisms - Emergency Vehicles</b> Design, make and evaluate a moving emergency vehicle.</p> <ul style="list-style-type: none"> <li>• Think of an idea and plan what to do next.</li> <li>• Choose tools and materials and explain why they have chosen them.</li> <li>• Measure materials to use in a model.</li> <li>• Make a model stronger and more stable.</li> <li>• Use wheels and axles.</li> </ul>	<p><b>Food – Picnic Foods</b> Explore a variety of picnic foods and where they come from before designing, making and evaluating their own picnic foods.</p> <ul style="list-style-type: none"> <li>• Choose appropriate tools</li> <li>• Weigh ingredients to use in a recipe</li> <li>• Describe the ingredients used.</li> </ul>
Year 3  Food – lessons with NW (see separate plan)	<p><b>Owl Sewing</b> <b>Seasonal Stocking (PlanBee)</b> Textiles Owl sewing kits on TTS Owl weaving</p>	<p><b>Making Mini Greenhouses</b> apply their understanding of how to strengthen, stiffen and reinforce more complex structures <b>Skill:</b> strengthening 3D shapes</p>	<p><b>Ancient Egyptian Pop-Up Books</b> PlanBee – story books understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p>

	<p>Colour and sew Woodland cross stitch (Baker Ross) <b>Technical skills:</b> using a range of stitches (running stitch, back stitch, over stitch, zig-zag stitch) to join material choosing materials</p>	<p>:materials (offer stability for the frame and transparent for the windows) <b>Designers:</b> Hartley Botanic Based in Greenfield. Eden Project · Architect: Nicholas Grimshaw Crystal Palace: Joseph Paxton</p>	<p><b>Design Skill:</b> annotated diagram : create prototype <b>Technical Skill:</b> make and use gluing tabs : metal ruler, craft knife and cutting mat <b>Designer:</b> Jan Pienkowski</p>
<p>Year 4  Food – lessons with NW (see separate plan)</p>	<p><b>Roman Trebuchets (Progression Year 3)</b> apply their understanding of how to strengthen, stiffen and reinforce more complex structures <b>Design Skill:</b> annotated diagram : create prototype <b>Technical skills:</b> woodwork including vice, metal ruler, hacksaw, glue gun</p>	<p><b>Lighthouse</b> understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] <b>Design Skill:</b> cross sectional diagram <b>Technical skills:</b> light bulb and switch <b>Designer:</b> Robert Stevenson 1772-1850</p>	<p><b>Greeks myths – Moving Monsters (Progression from Year 3)</b> understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] <b>Design Skill:</b> exploded diagram <b>Technical skill:</b> pneumatic mechanisms/gears</p>
<p>Year 5  Food – lessons with NW (see separate plan)</p>	<p><b>Bridges (Progression from Year 4)</b> PlanBee apply their understanding of how to strengthen, stiffen and reinforce more complex structures Thomas Telford Isombard Kingdom Brunel</p>	<p><b>Lego We Do</b> apply their understanding of computing to program, monitor and control their products.</p>	<p><b>Textiles (progression from Year 3)</b> Cushions – PlanBB Sewing Skills Elephant cushion sewing kit – Baker Ross <b>Skills:</b> using fasteners: zips, Velcro, hook &amp; eye, buttons, press-stud <b>Designers</b> Terrance Conran Laura Ashley William Morris Cath Kidston</p>

<p>Year 6</p> <p>Food – lessons with NW (see separate plan)</p>	<p><b>Lego We Do (Progression from Year 5)</b>          apply their understanding of computing to program, monitor and control their products.</p>	<p><b>Moving Toys (Progression from Year 4)</b>          Animal Automaton  <b>(TTS Moving Toys kits)</b>          understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]  <b>Skill:</b> annotated diagram          : hacksaw          : glue gun          : drill</p>	<p><b>Fairgrounds (Progression from Year 4)</b>          understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]  <b>Skills</b> – light, motor and switch  <b>Designers:</b> Tomas Bradshaw, Fredrick Savage.</p>
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Design ☐ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ☐ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make ☐ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ☐ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate ☐ investigate and analyse a range of existing products ☐ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ☐ understand how key events and individuals in design and technology have helped shape the world