

## Design Technology LTP



### KEY STAGE 1

Year	Autumn	Spring	Summer
EYFS	<ul style="list-style-type: none"> <li>• <b>Exploration:</b> Children explore the natural world around them, using their senses to gather information and understand how things work.</li> <li>• <b>Communication:</b> They express their ideas and thoughts in well-formed sentences, using vocabulary specific to tools and materials.</li> <li>• <b>Manipulation:</b> Children develop manipulation and control skills, using a range of appropriate resources to build independency.</li> <li>• <b>Expression:</b> They use their core muscle strength to achieve good posture and use their creativity to express themselves through art and design.</li> <li>• <b>Technology Knowledge:</b> They learn about the properties of materials and how to use them effectively, including sorting and storing materials based on their properties.</li> </ul>		
1	<p>Moving Pictures <b>Mechanisms: Sliders &amp; Levers</b></p> <p>♣ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p>Lunchboxes <b>Structure</b></p> <p>♣ build structures, exploring how they can be made stronger, stiffer and more stable</p>	<p>Playground Equipment <b>Frame structure</b></p> <p>♣ build structures, exploring how they can be made stronger, stiffer and more stable</p>
2	<p>Moving vehicles <b>Mechanisms: Wheels and axles</b></p> <p>♣ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p>Salads <b>Cooking &amp; nutrition</b></p> <p>♣ use the basic principles of a healthy and varied diet to prepare dishes ♣ understand where food comes from.</p>	<p>Sewing purses <b>Textiles: Joining techniques</b></p> <p>♣ 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</p>

## KEY STAGE 2

Year	Autumn	Spring	Summer
3	<p>Packaging <b>Shell structure</b></p> <p>♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Pneumatic moving toys <b>Mechanisms – pneumatic toys</b></p> <p>♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p>	<p>Savoury Cooking <b>Cooking &amp; Nutrition</b></p> <p>♣ understand and apply the principles of a healthy and varied diet ♣ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ♣ understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
4	<p>Bridges <b>Structure</b></p> <p>♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Simple programming and control: data loggers <b>Electrical systems</b></p> <p>♣ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p>	<p>Interactive Books <b>Mechanisms -Levers &amp; Linkages</b></p> <p>♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p>
5	<p>Sewing Christmas decorations <b>Textiles: Joining techniques</b></p> <p>♣ select from and use a wider range of materials and components, including</p>	<p>Moving toys <b>Mechanisms: Cams</b></p>	<p>CAD structures – railway <b>Digital World</b></p>

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	construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	♣ apply their understanding of computing to program, monitor and control their products.
6	<p>Anderson Shelters  <b>Structure</b></p> <p>♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Pulleys &amp; Gears: electrical vehicles  <b>Mechanisms: Pulleys &amp; gears</b></p> <p>♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p>	<p>Systems and Control: sensory alarms  <b>Electrical systems</b></p> <p>♣ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p>