

Design & Technology

	Autumn	Spring	Summer
EYFS2	<p>Structures: Junk modelling In this unit, pupils explore and learn about various types of permanent and temporary join. They are encouraged to tinker using a combination of materials and joining techniques in the junk modelling area.</p> <p>Hibernation box Seasonal project</p>	<p>Cooking and nutrition: Soup In this unit, children explore the differences between fruits and vegetables using their senses (taste, texture, smell etc.). They listen to the story 'The best pumpkin soup' and discuss the key ingredients the characters used before developing a class-based vegetable soup recipe.</p> <p>Spring flower threading Seasonal project</p>	<p>Textiles: Bookmarks (WBD) Pupils develop and practise threading and weaving techniques using various materials and objects. They look at the history of the bookmark from Victorian times versus modern-day styles. The pupils apply their knowledge and skills to design and sew their own bookmarks.</p> <p>Making a rainbow salad Seasonal project</p>
Year 1	<p>Mechanisms: Making a moving story book Explore slider mechanisms and the movement they output, to design, make and evaluate a moving storybook from a range of templates.</p>	<p>Mechanisms: Wheels and axles Learn about the key parts of a wheeled vehicle, to develop an understanding of how wheels, axles and axle holders work. Design and make a moving vehicle.</p>	<p>Cooking and nutrition: Fruit and vegetables Learn to distinguish between fruit and vegetables and where they grow. Design a fruit and vegetable smoothie and accompanying packaging.</p>
Year 2	<p>Mechanisms: Moving monsters Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving monster.</p>	<p>Cooking & nutrition: Healthy wrap Learn about the importance of a balanced diet and use that knowledge to create a tasty wrap.</p>	<p>Mechanisms: Ferris wheel Design and create a functional Ferris wheel, learn how different components fit together so that the wheel rotates and the structure stands freely.</p>
Year 3	<p>Textiles: Cushions Learn and apply two new sewing techniques – cross-stitch and appliqué. Utilise these new skills to design and make a cushion or Egyptian collar.</p>	<p>Structures: Constructing an Iron Man Designing and making a recycled-material Iron Man (structure).</p>	<p>Cooking & nutrition: 'Eating Seasonally' Learn about various fruits and vegetables, and when, where and why they are grown in different seasons. Discover the relationship between colour and health benefits.</p>

<p>Year 4</p>	<p>Design and make a shaduf Link with History Ancient Egypt topic</p> <p>Electrical Systems: Torches Identify the difference between electrical and electronic products. Evaluate a range of existing torches and their features, then develop a new functional torch design.</p>	<p>Cooking & nutrition: Adapt a recipe Our refreshed Y4 cooking and nutrition unit including opportunities for children to learn a basic biscuits recipe and adapt it to suit a target audience.</p>	<p>Structure: Pavilions Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, decorated pavilion.</p>
<p>Year 5</p>	<p>Mechanical systems: Pop up books Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms.</p>	<p>Cooking and nutrition: What could be healthier Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe.</p>	<p>Textiles: Stuffed toys Design a stuffed toy and make decisions on materials, decorations and attachments (appendages), after learning how to sew a blanket stitch.</p>
<p>Year 6</p>	<p>Electric systems: Steady hand game Understand what is meant by fit for purpose design and form follows function. Design and develop a steady hand game using a series circuit, including housing and backboard.</p>	<p>Cooking and nutrition: Come dine with me (Greek themed) Develop a three-course menu focused on three key ingredients, as part of a paired challenge to develop the best class recipes. Explore each key ingredient's farm to fork process.</p>	<p>Mechanical systems: Automata toys Develop a functional automata window display, to meet the requirements in a design brief. Explore and create cam, follower and axle mechanisms to mimic different movements.</p>