

Design and Technology overview – Class 4

<p>Year A –</p> <p>introduction fortnight</p> <p>Our School</p>	<p>Autumn</p> <p>World War one and two</p> <p>Mechanics (Science forces)</p> <p>Convert rotary motion to linear using cams.</p> <ul style="list-style-type: none"> • Use innovative combinations of electronics (or computing) and mechanics in product designs <p>Textiles</p> <p>Create objects (such as a cushion) that employ a seam allowance.</p> <ul style="list-style-type: none"> • Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). 	<p>Spring</p> <p>Damaging the World</p> <p>Take inspiration from design throughout history</p> <p>Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</p> <p>Create innovative designs that improve upon existing products.</p> <p>Evaluate the design of products so as to suggest improvements to the user experience.</p> <p>Computing</p> <p>Write code to control and monitor models or products</p> <p>Construction (Forest School)</p> <p>Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).</p> <p>Food (forest schools)</p>	<p>Summer</p> <p>Ancient Greece</p> <p>Electrics and electronics</p> <p>Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p>
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		<p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</p> <ul style="list-style-type: none"> • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. • Demonstrate a range of baking and cooking techniques. • Create and refine recipes, including ingredients, methods, cooking times and temperatures. 	
<p>Year B</p> <p>introduction fortnight</p> <p>Our School</p>	<p>Autumn</p> <p>Rainforest</p> <p>Food (forest schools)</p> <p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</p> <ul style="list-style-type: none"> • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. • Demonstrate a range of baking and cooking techniques. 	<p>Spring</p> <p>Victorians</p> <p>Materials</p> <p>Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p> <ul style="list-style-type: none"> • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of 	<p>Summer</p> <p>Japan/Olympics</p> <p>Computing</p> <p>Write code to control and monitor models or products</p> <p>Design, make, evaluate and improve</p> <p>Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).</p>

	<ul style="list-style-type: none"> • Create and refine recipes, including ingredients, methods, cooking times and temperatures. <p>Construction</p> <p>Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).</p>	<p>fabric may require sharper scissors than would be used to cut paper).</p>	<ul style="list-style-type: none"> • Make products through stages of prototypes, making continual refinements. • Ensure products have a high quality finish, using art skills where appropriate. • Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
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