



Design Technology

Year A Spring Term 3

Years 1&2 Milestone 1	Years 3&4 Milestone 2	Years 5&6 Milestone 3
<p><u>Textiles</u></p> <ul style="list-style-type: none"> • Shape textiles using templates. • Join textiles using running stitch. • Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing). 	<p><u>Textiles</u></p> <ul style="list-style-type: none"> • Understand the need for a seam allowance. • Join textiles with appropriate stitching. • Select the most appropriate techniques to decorate textiles. 	<p><u>Textiles</u></p> <ul style="list-style-type: none"> • Create objects (such as a cushion) that employ a seam allowance. • Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). • Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).

Year A Summer Term 5

<p><u>Materials</u></p> <ul style="list-style-type: none"> • Cut materials safely using tools provided. • Measure and mark out to the nearest centimetre. • Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). • Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen). <p><u>To design, make, evaluate and improve</u></p> <ul style="list-style-type: none"> • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. 	<p><u>Materials</u></p> <ul style="list-style-type: none"> • Cut materials accurately and safely by selecting appropriate tools. • Measure and mark out to the nearest millimetre. • Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). • Select appropriate joining techniques. <p><u>To design, make, evaluate and improve</u></p> <ul style="list-style-type: none"> • Design with purpose by identifying opportunities to design. • Make products by working efficiently (such as by carefully selecting materials). • Refine work and techniques as work progresses, continually evaluating 	<p><u>Materials</u></p> <ul style="list-style-type: none"> • 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). • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper) <p><u>To design, make, evaluate and improve</u></p> <ul style="list-style-type: none"> • Design with purpose by identifying opportunities to design. • Make products by working efficiently (such as by carefully selecting materials). • Refine work and techniques as work progresses, continually
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<ul style="list-style-type: none"> • Use software to design. 	<p>the product design.</p> <ul style="list-style-type: none"> • Use software to design and represent product designs. 	<p>evaluating the product design.</p> <ul style="list-style-type: none"> • Use software to design and represent product designs.
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Year B Autumn Term 1

Years 1&2 Milestone 1	Years 3&4 Milestone 2	Years 5&6 Milestone 3
<p>Computing</p> <ul style="list-style-type: none"> • Model designs using software <p>Milestones – <u>To take inspiration from design throughout history</u></p> <ul style="list-style-type: none"> • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created. 	<p>Computing</p> <ul style="list-style-type: none"> • Control and monitor models using software designed for this purpose. <p>Milestones – <u>To take inspiration from design throughout history</u></p> <ul style="list-style-type: none"> • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work 	<p>Milestones – Computing</p> <ul style="list-style-type: none"> • Write code to control and monitor models or products. <p>Milestones – <u>To take inspiration from design throughout history</u></p> <ul style="list-style-type: none"> • Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. • Create innovative designs that improve upon existing products. • Evaluate the design of products so as to suggest improvements to the user experience.

Year B Autumn Term 2

Years 1&2 Milestone 1	Years 3&4 Milestone 2	Years 5&6 Milestone 3
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<p><u>Construction</u></p> <ul style="list-style-type: none"> • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. <p><u>Mechanics</u></p> <ul style="list-style-type: none"> • Create products using levers, wheels and winding mechanisms 	<p><u>Construction</u></p> <ul style="list-style-type: none"> • Choose suitable techniques to construct products or to repair items. • Strengthen materials using suitable techniques. <p><u>Mechanics</u></p> <ul style="list-style-type: none"> • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears). 	<p><u>Construction</u></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 fabric may require sharper scissors than would be used to cut paper) <p><u>Mechanics</u></p> <ul style="list-style-type: none"> • Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and mechanics in product designs
<p><u>Electricals and electronics</u></p> <ul style="list-style-type: none"> • Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage) 	<p><u>Electricals and electronics</u></p> <ul style="list-style-type: none"> • Create series and parallel circuits 	<p><u>Electricals and electronics</u></p> <ul style="list-style-type: none"> • Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).
<p>Year B: Summer Term 5</p>		
<p>Years 1&2 Milestone 1</p>	<p>Years 3&4 Milestone 2</p>	<p>Years 5&6 Milestone 3</p>
<p><u>Food</u></p> <ul style="list-style-type: none"> • Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups or electronic scales. • Assemble or cook ingredients. 	<p><u>Food</u></p> <ul style="list-style-type: none"> • Prepare ingredients hygienically using appropriate utensils. • Measure ingredients to the nearest gram accurately. • Follow a recipe. • Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). 	<p><u>Food</u></p> <ul style="list-style-type: none"> • Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). • 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.