

DT Coverage Year 1 – Milestone 1

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit.</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p>During Year 1 (Milestone 1)</p> <p>Design products that have a clear purpose and an intended user.</p> <p>Make products, refining the design as work progresses.</p> <p>Use software to design.</p> <p>Explore objects and designs to identify likes and dislikes of the designs.</p> <p>Suggest improvements to existing designs.</p> <p>Explore how products have been created.</p>	<p style="text-align: center;"><u>FOOD</u></p> <p>Cut, peel or grate ingredients safely and hygienically.</p> <p>Measure or weigh using measuring cups or electronic scales.</p> <p>Assemble or cook ingredients.</p>	<p style="text-align: center;"><u>TEXTILES</u></p> <p>Shape textiles using templates.</p> <p>Join textiles using running stitch.</p> <p>Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).</p>	<p><u>Materials & Construction</u></p> <p>Cut materials safely using tools provided.</p> <p>Measure and mark out to the nearest centimetre.</p> <p>Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>

DT Coverage Year 2 – Milestone 1

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit.</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p>During Year 2 (Milestone 1)</p> <p>Design products that have a clear purpose and an intended user.</p> <p>Make products, refining the design as work progresses.</p> <p>Use software to design.</p> <p>Explore objects and designs to identify likes and dislikes of the designs.</p> <p>Suggest improvements to existing designs.</p> <p>Explore how products have been created.</p>	<p style="text-align: center;"><u>FOOD</u></p> <p>Cut, peel or grate ingredients safely and hygienically.</p> <p>Measure or weigh using measuring cups or electronic scales.</p> <p>Assemble or cook ingredients.</p>	<p style="text-align: center;"><u>MECHANICS</u> <u>(Levers focus)</u></p> <p>Create products using levers, wheels and winding mechanisms</p>	<p><u>Materials & Construction</u></p> <p>Cut materials safely using tools provided.</p> <p>Measure and mark out to the nearest centimetre.</p> <p>Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>

DT Coverage Year 3 – Milestone 2

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit.</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p>During Year 3 (Milestone 2)</p> <p>Design with purpose by identifying opportunities to design.</p> <p>Make products by working efficiently (such as by carefully selecting materials).</p> <p>Refine work and techniques as work progresses, continually evaluating the product design.</p> <p>Use software to design and represent product designs.</p> <p>Improve upon existing designs, giving reasons for choices.</p> <p>Disassemble products to understand how they work.</p>	<p style="text-align: center;"><u>FOOD</u></p> <p>Prepare ingredients hygienically using appropriate utensils.</p> <p>Measure ingredients to the nearest gram accurately.</p> <p>Follow a recipe.</p> <p>Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).</p>	<p style="text-align: center;"><u>TEXTILES</u></p> <p>Understand the need for a seam allowance.</p> <p>Join textiles with appropriate stitching.</p> <p>Select the most appropriate techniques to decorate textiles.</p>	<p><u>Materials & Construction</u></p> <p>Cut materials accurately and safely by selecting appropriate tools.</p> <p>Measure and mark out to the nearest millimetre.</p> <p>Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</p> <p>Select appropriate joining techniques.</p> <p>Choose suitable techniques to construct products or to repair items.</p> <p>Strengthen materials using suitable techniques.</p>

DT Coverage Year 4 – Milestone 2

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit.</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p style="text-align: center;">During Year 4 (Milestone 2)</p> <p>Design with purpose by identifying opportunities to design.</p> <p>Make products by working efficiently (such as by carefully selecting materials).</p> <p>Refine work and techniques as work progresses, continually evaluating the product design.</p> <p>Use software to design and represent product designs.</p> <p>Improve upon existing designs, giving reasons for choices.</p> <p>Disassemble products to understand how they work.</p>	<p style="text-align: center;"><u>FOOD</u></p> <p>Prepare ingredients hygienically using appropriate utensils.</p> <p>Measure ingredients to the nearest gram accurately.</p> <p>Follow a recipe.</p> <p>Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).</p>	<p style="text-align: center;"><u>ELECTRICALS & ELECTRONICS</u></p> <p>Create series and parallel circuits</p>	<p style="text-align: center;"><u>MECHANICS (Pneumatics)</u></p> <p>Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as winding mechanisms, pneumatics, pulleys and gears)</p>

DT Coverage Year 5 – Milestone 3

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p style="text-align: center;">During Year 5 (Milestone 3)</p> <p>Design with the user in mind, motivated by the service a product will offer (rather than profit).</p> <p>Make products through stages of prototypes, making continual refinements.</p> <p>Ensure products have a high-quality finish, using art skills where appropriate.</p> <p>Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</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 style="text-align: center;"><u>FOOD</u></p> <p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</p> <p>Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</p> <p>Demonstrate a range of baking and cooking techniques.</p> <p>Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p>	<p style="text-align: center;"><u>TEXTILES</u></p> <p>Create objects that employ a seam allowance.</p> <p>Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).</p> <p>Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles.</p>	<p style="text-align: center;"><u>Materials & Construction</u></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> <p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.</p> <p>Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).</p>

DT Coverage Year 6– Milestone 3

<p>Design & Technology</p>	<p><u>Essential Learning Objectives within each unit</u></p> <ul style="list-style-type: none"> ✓ To master practical skills ✓ To design, make, evaluate and improve ✓ To take inspiration from design throughout history 		
<p style="text-align: center;">During Year 6 (Milestone 3)</p> <p>Design with the user in mind, motivated by the service a product will offer (rather than profit).</p> <p>Make products through stages of prototypes, making continual refinements.</p> <p>Ensure products have a high-quality finish, using art skills where appropriate.</p> <p>Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</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 style="text-align: center;"><u>FOOD</u></p> <p>Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</p> <p>Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</p> <p>Demonstrate a range of baking and cooking techniques.</p> <p>Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p>	<p style="text-align: center;"><u>ELECTRICALS & ELECTRONICS</u></p> <p>Create circuits using electronics that employ a number of components (such as LEDs, resistors, transistors and chips)</p>	<p style="text-align: center;"><u>MECHANICS (CAMS)</u></p> <p>Convert rotary motion to linear using cams.</p> <p>Use innovative combinations to create product designs.</p>