

Moredon Primary and Nursery School
Subject Overviews, Long term planning 2020 – 2021



Subject area: DT

Whole School Intent: At Moredon Primary and Nursery School we have a text based, knowledge led curriculum. Children have the opportunity to learn new skills deepened by a wide ranging curriculum enrichment offer. When children leave Moredon Primary and Nursery School we have set them on the path to being life-long learners, ready for the next stage with high aspirations for their future.

DT Intent: By the end of their time at Moredon Primary and Nursery School, we want to stimulate the children’s curiosity and to ask thought provoking questions which will support the pupils’ in their learning journey and instil a breadth of knowledge, skills and understanding to take them to new horizons.

Cross curricular writing links - English

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	<p><i>Throughout the Reception year, the children will be exposed to a range of materials and media with suggested activities to complete from staff.</i></p> <p>Expected -</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>To master practical skills</p> <p><u>Food</u></p> <ul style="list-style-type: none"> • Cut, peel or grate ingredients safely and hygienically. 	<p><u>Materials</u></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 for drilling, screwing, gluing and nailing</p>	<p><u>Textiles</u></p> <p>Understand the need for a seam allowance.</p> <p>Join textiles with appropriate stitching.</p>	<p><u>To design, make, evaluate and improve</u></p> <p>Design generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><u>Electricals and electronics</u></p>	<p><u>To master practical skills</u></p> <p>Food</p> <p>Demonstrate a range of baking and cooking techniques- both.</p>	<p><u>Electricals and electronics</u></p> <p>Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p> <p><u>Computing</u></p> <p>Write code to control and monitor models or products</p>

	<p>Share their creations, explaining the process they have used;</p> <p>- Make use of props and materials when role playing characters in narratives and stories.</p>		<p>materials to make and strengthen products.</p>		<p>Create series and parallel circuits <u>Computing</u></p> <p>Control and monitor models using software designed for this purpose.</p>		
Term 2		<p><u>To master practical skills</u></p> <p><u>Food</u></p> <p>Cooking Assemble or cook ingredients</p>	<p><u>To master practical skills</u></p> <p><u>Food</u></p> <p>Measure or weigh using measuring cups or electronic scales.</p>	<p><u>Construction</u></p> <p>Choose suitable techniques to construct products or to repair items.</p>	<p><u>Materials</u></p> <p>Measure and mark out to the nearest millimetre. Select appropriate joining techniques.</p>	<p><u>To take inspiration from design throughout history</u> Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</p>	<p><u>To design, make, evaluate and improve</u> Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).</p>
Term 3		<p><u>Construction</u> Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>	<p><u>Mechanics</u> Create products using levers, wheels and winding mechanisms</p> <p><u>Materials</u> Measure and mark out to the nearest centimetre. Demonstrate a range of cutting and shaping techniques (such as</p>	<p><u>To design, make, evaluate and improve</u> Design with purpose by identifying opportunities to design. Make products by working efficiently (such as by carefully selecting materials).</p>	<p><u>Construction</u> Strengthen materials using suitable techniques.</p> <p><u>Mechanics</u> Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding</p>	<p><u>Materials</u> 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><u>To master practical skills</u></p> <p><u>Food</u> Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). Measure accurately and calculate ratios of ingredients to</p>

			<p>tearing, cutting, folding and curling). Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p>		<p>mechanisms, pulleys and gears).</p>	<p><u>To design, make, evaluate and improve</u> Make products through stages of prototypes, making continual refinements. Ensure products have a high quality finish, using art skills where appropriate.</p>	<p>scale up or down from a recipe. • Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p>
Term 4		<p><u>Textiles</u> Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).</p>	<p><u>Textiles</u> Shape textiles using templates. Join textiles using running stitch. Suggest improvements to existing designs. Explore how products have been created.</p>	<p><u>Materials</u> Cut materials accurately and safely by selecting appropriate tools. Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</p>	<p><u>To design, make, evaluate and improve</u> Refine work and techniques as work progresses, continually evaluating the product design. • Use software to design and represent product designs. <u>To take inspiration from design throughout history</u> Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work.</p>	<p><u>Textiles</u> 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).</p>	<p><u>Materials</u> 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>

Term 5		<u>Electricals and electronics</u> Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).	<u>To take inspiration from design throughout history</u> Explore objects and designs to identify likes and dislikes of the designs. Suggest improvements to existing designs. Explore how products have been created.	<u>To master practical skills</u> Food Prepare ingredients hygienically using appropriate utensils. Follow a recipe.	<u>To master practical skills</u> <u>Food</u> Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). Measure ingredients to the nearest gram accurately.	<u>Mechanics</u> Convert rotary motion to linear using cams. Use innovative combinations of electronics (or computing) and mechanics in product designs.	<u>Textiles</u> Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as soft decoration for comfort on a cushion).
Term 6		<u>To design, make, evaluate and improve</u> Design products that have a clear purpose and an intended user Use software to design.	<u>Electricals and electronics</u> Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage). Model designs using software. Make products, refining the design as work progresses. Use software to design.	<u>To take inspiration from design throughout history</u> Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.	<u>Textiles</u> Select the most appropriate techniques to decorate textiles	<u>Construction</u> Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).	<u>To take inspiration from design throughout history</u> Create innovative designs that improve upon existing products. • Evaluate the design of products so as to suggest improvements to the user experience.