



Design and Technology Curriculum Overview

Year Group	Term					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS - Nursery	<p>Making marks on a variety of papers. Handle, feel and manipulate malleable materials.</p> <p>Artist: Henri Matisse- Repetition of shapes throughout a space</p>	<p>Using primary colours and different tools to make marks with paint. Investigating block areas and construction kits.</p> <p>Artist: Jackson Pollock- Splatter painting- linking to fireworks</p>	<p>Use materials for a purpose. Self portraits. Simple collage. Simple printing techniques such as marble rolling, bubbles and cars.</p> <p>Artist: Eric Carle- collage</p>	<p>Growing food to eat. Using tools to cook and bake. Join materials for a purpose.</p> <p>Artist: Wassily Kandinsky- express feelings through colours and shapes</p>	<p>Colour mixing investigation. Junk materials- simple joining techniques. Explore a variety of painting techniques.</p> <p>Artist: Piet Mondrian- using lines to create squares and rectangles</p>	<p>Use mark making tools to make very simple representational drawings. Self service paint station- children mix their own powder paint. Tinkering table- disassemble and construct</p> <p>Artist: Pattie Jones- Huff and Puff</p>
EYFS - Reception	Marvellous Me!	Terrific Tales!	Amazing Animals!	What Can Grow?	Ticket to Ride	Beach Combing
	<p>Junk Materials - simple joining techniques (continues throughout the year) Playdough/modelling</p> <p>Cooking - measure using cupfuls and spoons</p>	<p>Cooking using simple tools Mix using a spoon and bowl. Knead dough</p> <p>Playdough/modelling</p>	<p>Constructing with a purpose Clay Playdough/modelling Lego League</p> <p>Cooking - Use knives to spread and cut soft food</p>	<p>Growing food to eat Using tools to cook & bake. Use the bridge technique to cut.</p> <p>Playdough/modelling Lego League</p>	<p>Using tools to effect change - introduction to workbench tools Making & Tasting food we have grown Playdough/modelling Lego League</p> <p>Cooking - cut hard food using a knife. Use a grater and a peeler.</p>	<p>Using shapes to construct models Tinkering Table - disassemble and construct Clay Paper sculpture Playdough/modelling Lego League</p>

<p>One</p>		<p><u>Seaside Creatures</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Talk about the product they are designing. • Talk about why they are making their product. • Talk about how their product will work. • Introduce simple design criteria to help develop their ideas. • Use their design to help them to create the product. • Choose from a small selection of tools or equipment. • Choose from a small range of materials and begin to explain the reasoning behind their choice. • Begin to use appropriate technical vocabulary relevant to the chosen topic <p>Context: Grace Darling- seaside creature - weaving</p> <p>Designer: Kate Durdy</p>	<p><u>Food from around the world</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Know that all foods come from animals and plants • Refer to the EatWell Plate and introduce the 5 main food groups • Begin to prepare simple dishes with teacher support e.g. peeling/ grating/ cutting <p>Context: Flat Stanley</p> <p>Chef: Nadiya Hussain</p>			<p><u>Transport: Cars</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Learn how to talk about what went well. • Learn how to talk about what did not go so well. • Suggest simple improvements to what they have made. • Share an opinion about an existing product. • Suggest what materials might be used for existing products. • Begin to understand how to make structures more stable • Learn about making structures move by using levers and sliders • Begin to experiment with textiles by attaching two pieces of material • Begin to use appropriate technical vocabulary relevant to the chosen topic <p>Context: Wheels and</p>
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						<p>axles to design and build a car.</p> <p>Designer/ Career: Engineer</p>
Two		<p><u>Christmas Decorations</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Share the audience and purpose of their product. • Think of an idea and talk about how they will put this idea into practice. • Understand and follow a simple design criteria. • Create two identical fabric shapes and attach them to make a 3D textile product • Build upon their use of technical vocabulary and begin to identify words that are specific to a topic e.g. stitch for textiles 		<p><u>Castles</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Think of an idea and talk about how they will put this idea into practice. • Understand and follow a simple design criteria. • Explore materials in a variety of contexts e.g. construction kits, making templates. • Choose from a range of tools and equipment and explain the reasoning behind their choice. • Choose from a range of materials according to their characteristics. 		<p><u>Wallpaper & Stamps</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • Share the audience and purpose of their product. • Understand and follow a simple design criteria. • Explore materials in a variety of contexts e.g. construction kits, making templates. • Choose from a range of tools and equipment and explain the reasoning behind their choice. • Choose from a range of materials according to their characteristics.

		<p>Context: Christmas cards and decorations.</p> <p>Artist: John Callcott Horsley</p>		<ul style="list-style-type: none"> • Learn how to measure materials. • Suggest how their products can be improved Gain further knowledge of how to make structures more stable and strong, experimenting with techniques • Learn about making structures move by using levers and sliders, wheels and axles <p>Context: Using different materials to build a castle.</p> <p>Architect: John Dobson</p>		<ul style="list-style-type: none"> • Learn how to measure materials. • Further explore existing products: What/ who are they for? How do they work? What materials are they made from? What do you like/ dislike about the product? <p>(Art Skills Link) Skill:</p> <ul style="list-style-type: none"> • Create a print using different skills including: rubbing, rolling, stamping • Respond to artwork by creating a piece in a similar style or in response. • Discuss the use of colour and pattern. <p>Context: William Morris wallpaper</p> <p>Artist: William Morris</p>
Three	<p><u>Handkerchiefs</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • begin to develop their own design criteria as a 	<p><u>Christmas Cards</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • explore how mechanical systems work e.g. levers and linkages 		<p><u>Anglo Saxon Houses</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • know how to make strong, stiff structures building on 		<p><u>Cooking</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • gather information about the needs and

	<p>class and use these to inform their ideas</p> <ul style="list-style-type: none"> • generate ideas focusing on what the user requires • begin to think about what resources are available • discuss and share ideas • select tools and equipment from a small range suitable for the task • talk about why they have chosen a particular tool or piece of equipment • select from a given set of materials and components suitable for the task • explain their choice of materials and components according to how they will work or look <p>Context: Designing a handkerchief from the Titanic</p> <p>Designer: Paul Poiret</p>			<p>knowledge in KS1</p> <ul style="list-style-type: none"> • Refer to the given design criteria throughout the making process. • Use given criteria to evaluate their own design and product. • Introduce a small selection of inventors, designers, engineers, chefs and manufacturers who have developed new, innovative products • select tools and equipment from a small range suitable for the task • talk about why they have chosen a particular tool or piece of equipment • select from a given set of materials and components suitable for the task • explain their choice of materials and components according to 		<p>wants of particular individuals and groups using given questions</p> <ul style="list-style-type: none"> • begin to develop their own design criteria as a class and use these to inform their ideas • generate ideas focusing on what the user requires • begin to think about what resources are available • continue to use the EatWell plate to know about a varied, balanced diet of different foods and drinks • know that food and drink are needed in order to maintain and fuel a healthy, active lifestyle • learn how to use Computer-Aided-Design (CAD) to create an idea <p>Context: Healthy eating</p>
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				<p>how they will work or look</p> <ul style="list-style-type: none">• order a given set of instructions for the making process of a product• follow these instructions during the making process• know some simple rules about hygiene• learn and follow rules when using tools and equipment• develop accuracy in measuring, marking out and cutting and shaping materials• develop accuracy in assembling and joining materials• apply a range of finishing techniques, including those from art and design, with some accuracy e.g. painting, smoothing, mark making <p>Context: Anglo Saxon Settlements</p> <p>Designer: Richard Norman Shaw</p>		<p>Chef/ Designer: Jamie Oliver</p>
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<p>Four</p>	<p><u>(Computing Link)</u></p> <ul style="list-style-type: none"> Practice using CAD to develop a design <p><u>(Art Link)</u></p> <ul style="list-style-type: none"> Link digital imagery to artwork to link them together. 	<p><u>Roman Sandals</u></p> <p>Skill:</p> <ul style="list-style-type: none"> begin to develop questions to gather information about the needs and wants of particular individuals or groups develop their own design criteria individually and use these to inform their ideas use the design criteria and user information to generate ideas Discuss and share ideas using prototypes and annotated sketches to model Select tools and equipment from a small range suitable for the task talk about why they have chosen a particular tool 		<p><u>Viking Shields</u></p> <p>Skill:</p> <ul style="list-style-type: none"> develop their own design criteria individually and use these to inform their ideas use the design criteria and user information to generate ideas consider the availability of resources in the design process Discuss and share ideas using prototypes and annotated sketches to model Discuss and share ideas using prototypes and annotated sketches to model create shell structures that are strong and secure 		<p><u>Mayan Weaving</u></p> <p>Skill:</p> <ul style="list-style-type: none"> who designed and made the products where products were designed and made when products were designed and made whether products can be recycled or reused use the design criteria and user information to generate ideas consider the availability of resources in the design process continue to build upon their stitching skills to create a 3D textiles product <p>Context: The Ancient Mayans</p> <p>Designer: Nick Cave</p>
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		<p>or piece of equipment</p> <ul style="list-style-type: none">• select from a given set of materials and components suitable for the task• explain their choice of materials and components according to how they will work or look• develop accuracy in measuring, marking out and cutting and shaping materials• develop accuracy in assembling and joining materials• apply a range of finishing techniques, including those from art and design, with some accuracy e.g. painting, smoothing, mark making• know how levers and linkages work to create movement <p>Context: The Romans (clothing and fashion)</p>		<p>Context: The Vikings</p> <p>Designer:</p>		
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		<p>Designer: Look at a range of Italian Shoemakers</p> <p>(Science Link) Skill:</p> <ul style="list-style-type: none"> know how simple electrical circuits and components can be used to create functional products <p>Context: Paper circuit Christmas Cards</p>				
Five		<p>African masks</p> <ul style="list-style-type: none"> Work as a small group to develop a simple design specification to guide their thinking Begin to create 3D products using a variety of materials and shapes apply their understanding of how to strengthen, stiffen and reinforce more complex structures Begin to understand how they can 		<p><u>Make Do and Mend</u></p> <p>Skill:</p> <ul style="list-style-type: none"> begin to create 3D textile products using a variety of materials and shapes understand that materials they choose should have functional and aesthetic benefits begin to understand how they can group materials together to have the biggest impact on the final design 		<p><u>Cooking</u></p> <p>Skill:</p> <ul style="list-style-type: none"> begin to understand how to adapt recipes to change the appearance, taste, texture etc. continue to use the EatWell plate and introduce the properties of different foods and how we can benefit from them e.g. water, fibre, carbohydrate s etc. <p>Context: Ancient Greece, Greek food</p> <p>Chef: Nikolaos</p>

		<p>group materials together to have the biggest impact on the final design and product functionality</p> <ul style="list-style-type: none"> • Develop their critical evaluation skills for each stage of the design and make of the product: design, manufacture, fit for purpose • generate, develop, model and communicate their ideas through discussion, research, annotated sketches, diagrams, and prototypes <p>LEGO link</p> <p>To recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a great effect</p>		<p>and product functionality</p> <ul style="list-style-type: none"> • how much materials and products might cost • the sustainability of materials used • the long term impact of their products e.g. recyclability • explain their choice of materials and components according to functional properties and aesthetic qualities • begin to produce appropriate lists of tools, equipment and materials that they need using their design to support • formulate step-by-step plans as a guide to making e.g. instructions <p>Science link</p> <p>To recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a great effect (NUSTEM lesson).</p>		Tselementes
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				Context: Wartime information posters, WW2 Artist: J Howard Miller		
Six	<p><u>(Computing link)</u></p> <p>Skill:</p> <ul style="list-style-type: none"> continue to create computer code that can adapt to changes in the environment e.g. when X happens, do X <p><u>(Science Link)</u></p> <p>Skill:</p> <ul style="list-style-type: none"> assemble electrical circuits and components to create functional products 	<p><u>Printing</u></p> <p>Skill:</p> <ul style="list-style-type: none"> how much materials and products might cost the sustainability of materials used select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties and aesthetic qualities Develop confidence in carrying out research, using: Surveys, interviews, 		<p><u>Phone Cases</u></p> <p>Skill:</p> <ul style="list-style-type: none"> model their ideas using all of the examples learnt previously introduce the idea of an exploded diagram Use their own design criteria to evaluate their final product Develop their critical evaluation skills for each stage of the design and make of the product: design, manufacture, fit for purpose Know at least 1 designer, engineer, chef and manufacturer that they have been inspired by the long term impact of their products e.g. recyclability create a textile product using all of the stitches learnt 		<p><u>Bridges</u></p> <p>Skill:</p> <ul style="list-style-type: none"> develop a simple design specification to guide their thinking model their ideas using all of the examples learnt previously introduce the idea of an exploded diagram explain their choice of materials and components according to functional properties and aesthetic qualities begin to produce appropriate lists of tools, equipment and materials that they need using their design to support know and follow the rules for tools and equipment they intend to use

		<p>questionnaires, web-based resources</p> <ul style="list-style-type: none"> • Share and clarify ideas through discussion • identify the needs, wants of particular individuals and groups • take into consideration the preferences and values of particular individuals and groups • develop a simple design specification to guide their thinking <p>Context: Victorian Art and Culture, repeating patterns and wallpaper</p> <p>Class text - Street Child</p> <p>Artist: William Morris</p> <p><u>Lego League</u></p> <p>Skill:</p> <ul style="list-style-type: none"> • continue to create computer code that can adapt to changes in the environment e.g. when X happens, do X • how much materials and products might cost 		<p>previously, knowing which materials are best to attach together in a variety of shapes</p> <p>Context: Battle of Britain (Make do and Mend) Make a face covering</p> <p>Class text - My Story, Noor Un Nissa</p> <p>Designer: Coco Chanel</p>		<ul style="list-style-type: none"> • accurately measure, mark out, cut and shape materials and components • accurately assemble, join and combine materials and components • discuss and find solution to practical problems they encounter • create mechanical systems such as cams or pulleys or gears to create movement <p>Designer/ Architect: Keith Brownlie</p>
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		<ul style="list-style-type: none">• the sustainability of materials used• the long term impact of their products e.g. recyclability• Use their own design criteria to evaluate their final product• Develop their critical evaluation skills for each stage of the design and make of the product: design, manufacture, fit for purpose				
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To include Enrichment opportunities / Visits out and Visitors In