

Design and Technology Curriculum Map



	0 – 3 Preschool	3 – 4 EYFS 1	Reception EYFS 2	Links to KS1 Curriculum
EYFS area of Learning	Expressive Arts & Design: exploring and using media and materials			
Fundamental Knowledge	<p>Uses 3D and 2D structures to explore materials and/or to express ideas.</p>	<p>Talks about their plans.</p> <p>Uses different materials, tools and techniques in a variety of ways to join and make structures.</p> <p>Talks about their ideas, solve problems and tries different ways of doing things.</p>	<p>Plans before they make.</p> <p>Chooses the most appropriate materials and tools for a task, manipulating materials and joining materials in different ways.</p> <p>Talks about their design, solves problems, makes changes and modifies their designs when necessary.</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).</p> <p>Select from and use a wide variety of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Explore and evaluate a range of existing products.</p>

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				<p>Evaluate their ideas and products against design criteria.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms (for example, levers, sliders, wheels and axles) in their products.</p>
<p>Early Learning Goal</p>	<p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</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>			

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	Autumn (1.1)	Spring (1.2)	Summer (1.3)
Year 1	Moving Pictures	Cooking and Nutrition	Stable Structures
Fundamental Knowledge	<p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].</p> <p>Explore and evaluate a range of existing products generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Evaluate their ideas and products against design criteria.</p>	<p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Explore and evaluate a range of existing products generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Evaluate their ideas and products against design criteria</p>
Interleaved Links	<p>In EYFS, the children experiment with colour, design and function. They will build upon this by designing and making a Christmas card, which uses a simple mechanism. The pivot mechanism will also be used in 2.3, when the children design and make windmills.</p>	<p>The children will learn about healthy choices in EYFS and in 2.2, the children will learn about a balanced diet when designing and making their own pizzas. They will explore pizza toppings and consider how they can make healthy choices.</p>	<p>In EYFS, the children use a variety of materials, tools and techniques and explain the process of making their creations. In 2.3, the children will transfer the skills from this unit to be able to design and make a windmill.</p>

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Learning Tasks	Christmas Cards	Fruit Salad	Toy Car Garage/Chair for a Toy
Entitlement Vocabulary	Design, make, evaluate, stable, nutrition, product, function, sketch, cutting, shaping, joining, finishing, levers, sliders.		

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	Autumn (2.1)	Spring (2.2)	Summer (2.3)
Year 2	Textiles – Sewing	Cooking and Nutrition	Structures
Fundamental Knowledge	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Explore and evaluate a range of existing products generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Evaluate their ideas and products against design criteria.</p>	<p>Design appealing products for a particular user based on simple design criteria.</p> <p>Generate initial ideas and design criteria through investigating a variety of fruit and vegetables.</p> <p>Communicate these ideas through talk and drawings.</p> <p>Use simple utensils and equipment to e.g., peel, cut, slice, squeeze, grate, and chop safely.</p> <p>Select from a range of fruit and vegetables according to their characteristics e.g., colour, texture, and taste to create a chosen product.</p> <p>Evaluate their ideas and finished product against design criteria.</p> <p>Understand where a range of fruit and vegetables come from e.g., farmed or grown at home.</p> <p>Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of the eatwell plate.</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Explore and evaluate a range of existing products generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p>

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Interleaved Links	Throughout EYFS, the children have opportunities to practise skills such as threading and weaving within their provision. The children will build upon these skills and extend their learning by using stitches to sew their felt hand puppets.	In 1.2, the children learnt about a healthy diet and prepared a fruit salad. This unit will build upon this when the children explore the different toppings they could add to their pizza and consider how healthy the different ingredients are.	In 1.3, the children built a toy car garage or a chair for a toy and explored how to make a structure stronger, stiffer and more stable. They will use this knowledge to be able to apply these skills when making their windmills.
Learning Tasks	Hand Puppets	Pizza	Fairground Wheels
Entitlement Vocabulary	Design, make, evaluate, stable, nutrition, product, function, sketch, cutting, shaping, joining, finishing.		

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	Autumn (3.1)	Spring (3.2)	Summer (3.3)
Year 3	Mechanical Systems	Cooking & Nutrition	Textiles – Sewing
Fundamental Knowledge	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>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>Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Investigate and analyse a range of existing products.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, prototypes and pattern pieces.</p> <p>Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing) accurately.</p> <p>Select fabrics and fastenings according to their functional characteristics (e.g. strength) and aesthetic qualities (e.g. pattern).</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>

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	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p> <p>Understand and use mechanical systems in their products (e.g. gears, pulleys, cams, levers and linkages).</p>		
Interleaved Links	In Key Stage 1, the children have designed, made and evaluated a variety of products and used a range of tools and equipment to cut, shape and join. This unit will build upon this as the children will be developing their own design criteria.	In 1.2 and 2.2, the children learnt about a healthy diet and prepared and made a fruit salad and a pizza. This unit will build upon this when the children explore seasonal foods and consider how healthy the different ingredients are.	In 2.1, the children made hand puppets. They joined materials together by sewing using an overstitch or a running stitch.
Learning Tasks	Pneumatic Toys	Seasonal Food	Egyptian Collars
Entitlement Vocabulary	Design, make, evaluate, prototype, aesthetics, accuracy, form, function, lever, mechanism, pneumatic system.		