



Design and Technology Progression of Skills



	EYFS	KS1	KS2
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<p>National Curriculum / Early Learning Goals</p>	<p>Expressive Arts and Design Creating with Materials</p> <ul style="list-style-type: none"> • safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function • share their creations, explaining the process they have used • make use of props and materials when role playing characters in narratives and stories <p>Physical Development Fine Motor Skills</p> <ul style="list-style-type: none"> • hold a pencil effectively in preparation for fluent writing – using the tripod grip for almost all cases • use a range of small tools, including scissors, paintbrushes and 	<p>Design:</p> <ul style="list-style-type: none"> • design purposeful, functional, appealing products for themselves and other users based on design criteria. • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make</p> <ul style="list-style-type: none"> • select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p>Evaluate</p> <ul style="list-style-type: none"> • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> • 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>Design</p> <ul style="list-style-type: none"> • 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 • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make</p> <ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities <p>Evaluate</p> <ul style="list-style-type: none"> • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world <p>Technical knowledge</p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products. <p>Cooking and nutrition</p> <ul style="list-style-type: none"> • understand and apply the principles of a healthy and varied diet
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	cutlery • begin to show accuracy and care when drawing	Cooking and nutrition • use the basic principles of a healthy and varied diet to prepare dishes <input type="checkbox"/> understand where food comes from.	• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
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		Expressive Arts and Design: Pupils should be taught to: • share their creations, explaining the process they have used	Design Pupils should be taught to: <ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria; generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. 	Design Pupils should be taught to: <ul style="list-style-type: none"> 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; generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	
	S	EYFS	KS1	LKS2	UKS2



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		<ul style="list-style-type: none"> • Participate in small group, class and one-to-one discussions to share their ideas and ask relevant questions • Explore a range of products with opportunities to express their ideas, feelings and experiences. • Attempt to use introduced vocabulary. • Set and work towards simple goals. 	<ul style="list-style-type: none"> • Children engage in the process of designing through a range of creative and practical activities. • Work within a range of contexts that are meaningful. • Design purposeful, functional and products for use by an intender user. • Generate, develop, model and share their ideas through talking and drawings. Explain how their product will look and work through talking and simple annotated designs. • Use knowledge of existing ideas to help generate their ideas. • Follow simple design criteria. 	<ul style="list-style-type: none"> • Children participate in the process of designing through a range of creative and practical activities. • Work within an expanding range of contexts that are meaningful. • Research existing products and apply their findings to design functional and appealing products for use by a specific user. • Generate, develop, model and share their ideas through discussion, annotated sketches, cross-sectional/exploded diagrams, prototypes, pattern pieces and computer-aided design where appropriate. • Use existing knowledge and product research to explain how specific parts of their product work. • Explain their design choices, including materials, aesthetics and functionality. • Test ideas through the use of prototypes. 	<ul style="list-style-type: none"> • Children participate in and lead (where appropriate) the process of designing through a range of creative and practical activities. • Work within and expanding range of contexts that are meaningful. • Use research and knowledge of existing materials to develop detailed design criteria for a product fit for purpose aimed at a target market. • Use these design criteria to design functional and appealing product for use by their intended user. • Generate, develop, model and share their ideas through discussion, annotated sketches, cross-sectional/exploded diagrams, prototypes, pattern pieces and computer-aided design where appropriate. • Explain their design choices, including materials, aesthetics, functionality and cost to produce.
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1	2	EYFS	KS1	KS2
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Skills Progression	<ul style="list-style-type: none"> • safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function • hold a pencil effectively in preparation for fluent writing – using the tripod grip for almost all cases • use a range of small tools, including scissors, paintbrushes and cutlery • begin to show accuracy and care when drawing • make use of props and materials when role playing characters in narratives and stories 				<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; • select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. 		<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately; • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. 	
	EYFS	KS1		LKS2		UKS2		
	<ul style="list-style-type: none"> • Develop fine motor skills to work competently and accurately when using a range of simple hand tools (scissors, glue, cutlery). • Create collaboratively, sharing ideas, resources and skills. • Safely use and explore a range of materials and techniques, 	<ul style="list-style-type: none"> • Children engage in the process of making through a range of creative and practical activities. • Select from and use a range of tools and equipment for practical tasks (cutting, shaping, and joining). • Select from and use a range of materials considering their characteristics (e.g. construction materials, textiles and ingredients). • With support, follow a simple plan or recipe. • Practise using hand tools safely and appropriately (e.g. scissors, safe knives, graters) Cut, shape, score, 		<ul style="list-style-type: none"> • Children participate in the process of making through a range of creative and practical activities. • Select from and use an expanding range of tools and equipment for practical tasks (cutting, shaping, joining, and components). Explain their choices considering aesthetic qualities. • Use a wider range of materials and components (e.g. construction materials and kits, textiles, electrical components). • With developing independence, follow a simple plan or recipe. • With developing independence, choose and use a range of hand tools safely and explain their choices considering effectiveness of 		<ul style="list-style-type: none"> • Children participate in and lead (where appropriate) the process of designing through a range of creative and practical activities. • Select from and use an expanding range of tools and equipment for practical tasks. Explain their choices considering cost of materials, aesthetic qualities and functionality. • Select from and use a wider range of materials and components (e.g. construction materials, ingredients, textiles) considering their functionality and aesthetic qualities. • Independently follow a plan and make suggestions of what to do next. 		



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		<p>experimenting with colour, design, texture and functions.</p>	<p>assemble, join materials or ingredients with support.</p> <ul style="list-style-type: none"> • Begin to use simple finishing techniques to improve the appearance of products. 	<p>tool. Explain some aspects of safety considerations.</p> <ul style="list-style-type: none"> • Begin to demonstrate how to measure, mark, cut and join different materials with some degree of accuracy. • Begin to select and use different and appropriate finishing techniques to improve the appearance of products. 	<ul style="list-style-type: none"> • With developing confidence, choose from and use a range of tools safely and appropriately, considering safety equipment/measures where necessary. • Confidently demonstrate how to measure, mark, cut, shape, join, assemble and combine accurately. • Refine use of finishing techniques to improve the appearance of the product.
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Evaluate	S k National Curriculum	EYFS	KS1	KS2	
		<p>Evaluate</p> <ul style="list-style-type: none"> • share their creations, explaining the process they have used 	<p>Evaluate</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • explore and evaluate a range of existing products; • evaluate their ideas and products against design criteria. 	<p>Evaluate</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • investigate and analyse a range of existing products; • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; • understand how key events and individuals in design and technology have helped shape the world. 	
		EYFS	KS1	LKS2	UKS2



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		<ul style="list-style-type: none"> • Share their creations, explaining the processes they have used. • Begin to explain materials they have used. • Say what they like and do not like, attempt to explain why. 	<ul style="list-style-type: none"> • Explore and evaluate existing products through discussions, comparing products and sharing likes/dislikes. • Explore and discuss the materials products are made from. • As they design/make, discuss their design strengths and any potential changes they may need to make. • Evaluate their final product against the simple design criteria. • Begin to understand that the design and make processes sometimes involve changing and/or repeating part of the process. 	<ul style="list-style-type: none"> • Explore, analyse and evaluate existing products through discussions, comparing products and sharing likes, dislikes and ideas around functionality of the product. • Begin to understand how key events and individuals have helped to shape the world. • As they design/make, consider their design criteria and consider the view of others (e.g. peer review). • Evaluate their final product against the original design criteria. 	<ul style="list-style-type: none"> • Explore, analyse and evaluate a range of existing product through discussions, comparing products and sharing likes, dislikes and ideas around functionality and cost of the product. • Analyse existing competitors to their own products (where appropriate) and consider improvements to their own design criteria. • Develop understanding of how key events and individuals have helped to shape the world. • As they design/make, consider their own design criteria, view of others and intended consumer. Make changes where necessary. • Evaluate their final product against their own original design criteria, considering purpose, functionality, cost of materials and competitor products where appropriate.
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Skills Progression		<p>Technical Knowledge</p> <ul style="list-style-type: none"> • safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function • use a range of small tools, including scissors, paintbrushes and cutlery • begin to show accuracy and care when drawing 	<p>Technical Knowledge</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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>Technical Knowledge</p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures; • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]; • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]; • apply their understanding of computing to program, monitor and control their products. 	
		EYFS	KS1	LKS2	UKS2
	<ul style="list-style-type: none"> • Begin to understand a range of technical vocabulary and explore their meaning (texture, colour, form, function, design). • Confidently name a range of small tools 	<ul style="list-style-type: none"> • Build simple structures and explore how they can be made stronger and more stable using a range of materials. • Discuss and begin to understand characteristics of materials and components within a range of contexts using 	<ul style="list-style-type: none"> • Develop independence when building increasingly complex structures and explore how they can be made stronger and more stable using a range of materials. • Understand, discuss and begin to demonstrate the characteristics of 	<ul style="list-style-type: none"> • Independently and confidently, build increasingly complex structures considering the strength and stability in the design process. • Understand, discuss and begin to demonstrate the characteristics of materials and components in relation to useful products. • Understand how mechanical 	



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		<ul style="list-style-type: none"> Develop accuracy when drawing designs. 	<p>an increasing range of vocabulary.</p> <ul style="list-style-type: none"> Explore and create products using mechanisms (e.g. levels, sliders, wheels). 	<p>materials and components in relation to useful products using an increasing range of vocabulary.</p> <ul style="list-style-type: none"> Understand, discuss and demonstrate the use of simple electrical circuits to create functional products. 	<p>systems (e.g. cams) create movements in products.</p> <ul style="list-style-type: none"> Apply their understanding of computing to program and monitor a product. Apply their knowledge of technical vocabulary to a range of contexts and products.
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Cooking & Nutrition	National Curriculum	EYFS	KS1	KS2	
		<p>Cooking and Nutrition</p> <ul style="list-style-type: none"> safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function share their creations, explaining the process they have used use a range of small tools, including scissors, paintbrushes and cutlery 	<p>Cooking and Nutrition</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes; understand where food comes from. 	<p>Cooking and Nutrition</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> understand and apply the principles of a healthy and varied diet; prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 	
Sk		EYFS	KS1	LKS2	UKS2



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		<ul style="list-style-type: none">• With support, manage own basic hygiene and begin to consider the importance of healthy food.• Begin to develop a food vocabulary using their sense to taste, smell, touch, feel and see.• Explore familiar food products and their uses.• Begin to measure and weigh food items (spoons, cups)	<ul style="list-style-type: none">• Explain where different foods originate from around the world.• Understand that all food comes from plants or animals and that this must be farmed or caught.• Understand that everyone should eat at least five portions of fruit and vegetables every day.• Reference the Eatwell Guide when choosing ingredients for dishes.	<ul style="list-style-type: none">• Develop knowledge of when, where and how food is grown both in the UK and the world.• Explore preparing and cooking a variety of predominantly savoury dishes considering safety and hygiene.• With support, use a heat source to cook ingredients showing awareness of safety aspects and control of heat.• With support, prepare ingredients using appropriate cooking utensils and considering safety and hygiene.• With support, measure, weigh (to the nearest gram and millilitre) and mix ingredients considering safety and hygiene.• Begin to follow a recipe with increasing independence and accuracy.• Consider current healthy diet advice and reference the Eatwell Guide when researching and choosing ingredients for dishes. Understand that a healthy diet is made up of lots of different foods and drinks. Understand that to be healthy we must be active and provide our bodies with energy.	<ul style="list-style-type: none">• Know, explain and give examples of food that is grown (fruit, potatoes), food that is reared (cattle, poultry) and food that is caught (fish) in the UK and the world.• Understand seasonality and how this can affect food availability.• Independently prepare ingredients using appropriate cooking utensils. Explain choices of utensil and safety considerations.• Independently measure, weigh and mix ingredients. Explain choices of ingredient/method and safety considerations.• Independently follow a recipe with accuracy.• Begin to adapt and refine recipes considering the consumer, appearance, taste, texture and aroma of the final product.• Explain that different foods contain different nutrition substances (e.g. protein) and consider the Eatwell Guide when planning dishes.
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