

Disciplinary Knowledge Progression for Design Technology							
Mixed aged classes	EYFS	KS1 – Year 1 and 2		LKS2 – Year 3 and 4		UKS2 – Year 5 and 6	
Single form entry or above	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Developing, planning and communicating ideas.</b>	Show an interest in technological toys with knobs or pulleys, real objects such as cameras, and touchscreen devices such as mobile phones and tablets	draw on their own experience to help generate ideas	generate ideas by drawing on their own and other people's experiences	generate ideas for an item, considering its purpose and user/s	how to generate ideas, considering the purposes for which they are designing	generate ideas through brainstorming and identify a purpose for their product	communicate their ideas through detailed labelled drawings
		suggest ideas and explain what they are going to do	develop their design ideas through discussion, observation, drawing and modelling	identify a purpose and establish criteria for a successful product.	make labelled drawings from different views showing specific features	draw up a specification for their design	develop a design specification
	Play with a range of materials to learn cause and effect, for example, make a string puppet using dowels and string to suspend the puppet	identify a target group for what they intend to design and make	identify a purpose for what they intend to design and make	plan the order of their work before starting	develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail	develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail	explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways including in ICT
		model their ideas in card and paper	identify simple design criteria	explore, develop and communicate design proposals by modelling ideas	explore, develop and communicate design proposals by modelling ideas and creating prototypes	plan the order of their work, choosing appropriate materials, tools and techniques	plan the order of their work completing sequence diagrams noting the correct materials, tools and techniques
	Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images	develop their design ideas applying findings from their earlier research	make simple drawings and label parts	make drawings with labels when designing	evaluate products and identify criteria that can be used for their own designs	use results of investigations, information sources, including ICT when developing design ideas	create detailed isometric and exploded diagrams of their product
<b>Working with tools, equipment, materials and components to make quality products</b>	Explore interests and enquiries and develop thinking through increasing knowledge and understanding of tools and materials.	make their design using appropriate techniques	begin to select tools and materials; use vocab' to name and describe them	select tools and techniques for making their product	select appropriate tools and techniques for making their product	select appropriate materials, tools and techniques	select appropriate tools, materials, components and techniques
		With help measure, mark out, cut and shape a range of materials	measure, cut and score with some accuracy	measure, mark out, cut, score and assemble components with more accuracy	measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	measure and mark out accurately	assemble components to make working models
	Develop own ideas through experimentation with diverse materials, e.g. light, projected image, loose parts, to express and communicate their discoveries and understanding.	how to use tools <i>eg scissors and a hole punch</i> safely	use hand tools safely and appropriately	work safely and accurately with a range of simple tools	join and combine materials and components accurately in temporary and permanent ways	use skills in using different tools and equipment safely and accurately	use a wide range of tools safely and accurately
		assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape	assemble, join and combine materials in order to make a product	think about their ideas as they make progress and be willing to change things if this helps them to improve their work	sew using a range of different stitches, to weave and knit	weigh and measure accurately (time, dry ingredients, liquids)	construct products using permanent joining techniques
	Use various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces	select and use appropriate fruit and vegetables, processes and tools	cut, shape and join fabric to make a simple garment. Use basic sewing techniques	measure, tape or pin, cut and join fabric with some accuracy	measure, tape or pin, cut and join fabric with some accuracy	apply the rules for basic food hygiene and other safe practices <i>e.g. hazards relating to the use of ovens</i>	make modifications as they go along
		basic food handling, hygienic practices and personal hygiene	follow safe procedures for food safety and hygiene	demonstrate hygienic food preparation and storage			pin, sew and stitch materials together to create a product
	Use simple finishing techniques to improve the appearance of their product	use simple finishing techniques to improve the appearance of their product	choose and use appropriate finishing techniques	use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT	use simple graphical communication techniques	cut and join with accuracy to ensure a good-quality finish to the product	achieve a quality product
<b>Evaluating processes and products</b>	Expresses and communicates working	evaluate their product by discussing how well it works in relation to the purpose	evaluate against their design criteria	evaluate their product against original design criteria <i>e.g. how well it meets its intended purpose</i>	evaluate their work both during and at the end of the assignment	evaluate a product against the original design specification	evaluate their products, identifying strengths and areas for

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	theories, and understanding						development, and carrying out appropriate tests
		evaluate their products as they are developed, identifying strengths and possible changes they might make	evaluate their products as they are developed, identifying strengths and possible changes they might make	disassemble and evaluate familiar products	evaluate their products carrying out appropriate tests	evaluate it personally and seek evaluation from others	record their evaluations using drawings with labels
		evaluate their product by asking questions about what they have made and how they have gone about it	talk about their ideas, saying what they like and dislike about them				evaluate against their original criteria and suggest ways that their product could be improved