



Kingsway Primary School

Design & Technology Progression Framework

DESIGN

N.C. Outcome		Year	Knowledge and skills
Upper KS2	<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 	6	<ul style="list-style-type: none"> Communicate their ideas through detailed labelled drawings Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways Plan the order of their work, choosing appropriate materials, tools and techniques
		5	<ul style="list-style-type: none"> Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design 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 Use results of investigations, information sources, including ICT when developing design ideas
Lower KS2	<ul style="list-style-type: none"> generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	4	<ul style="list-style-type: none"> Generate ideas, considering the purposes for which they are designing Make labelled drawings from different views showing specific features 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 Evaluate products and identify criteria that can be used for their own designs
		3	<ul style="list-style-type: none"> Generate ideas for an item, considering its purpose and the user/s Identify a purpose and establish criteria for a successful product. Plan the order of their work before starting Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing
KS1	<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 	2	<ul style="list-style-type: none"> Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify a purpose for what they intend to design and make Identify simple design criteria Make simple drawings and label parts
		1	

			<ul style="list-style-type: none"> • Draw on their own experience to help generate ideas • Suggest ideas and explain what they are going to do • Identify a target group for what they intend to design and make • Model their ideas in card and paper • Develop their design ideas applying findings from their earlier research
	<p>ELG Expressive Art and Design Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>	EYFS	<ul style="list-style-type: none"> • Provide opportunities to work together to develop and realise creative ideas. • Provide children with a range of materials for children to construct with. • Encourage them to think about and discuss what they want to make. • Discuss problems and how they might be solved as they arise. • Encourage children to notice features in the natural world. • Help them to define colours, shapes, texture and smells in their own words. • Discuss children's responses to what they see. <p>Characteristics of Learning- <u>Playing and exploring</u> – Investigate and experience things 'Have a Go' <u>Active learning</u> – concentrate and keep on trying if they encounter difficulties, enjoy achievements <u>Creating and thinking critically</u> children have and develop their own ideas, making links between ideas.</p>

MAKE

N.C. Outcome		Year	Knowledge and skills
Upper KS2	<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 	6	<ul style="list-style-type: none"> Select appropriate tools, materials, components and techniques Assemble components make working models Use tools safely and accurately Construct products using permanent joining techniques Make modifications as they go along Pin, sew and stitch materials together create a product Achieve a quality product
		5	<ul style="list-style-type: none"> Select appropriate materials, tools and techniques Measure and mark out accurately Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices <i>e.g. hazards relating to the use of ovens</i> Cut and join with accuracy to ensure a good-quality finish to the product
Lower KS2	<ul style="list-style-type: none"> 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 	4	<ul style="list-style-type: none"> Select appropriate tools and techniques for making their product Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques Join and combine materials and components accurately in temporary and permanent ways Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy Use simple graphical communication techniques
		3	

			<ul style="list-style-type: none"> • Select tools and techniques for making their product • Measure, mark out, cut, score and assemble components with more accuracy • Work safely and accurately with a range of simple tools • Think about their ideas as they make progress and be willing change things if this helps them improve their work • Measure, tape or pin, cut and join fabric with some accuracy • Demonstrate hygienic food preparation and storage • Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT
KS1	<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 	2	<ul style="list-style-type: none"> • Begin to select tools and materials; use vocab' to name and describe them • Measure, cut and score with some accuracy • Use hand tools safely and appropriately • Assemble, join and combine materials in order to make a product • Cut, shape and join fabric to make a simple garment. Use basic sewing techniques • Follow safe procedures for food safety and hygiene • Choose and use appropriate finishing techniques
		1	<ul style="list-style-type: none"> • Make their design using appropriate techniques • With help measure, mark out, cut and shape a range of materials • Use tools <i>eg scissors and a hole punch</i> safely • Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape • Select and use appropriate fruit and vegetables, processes and tools • Use basic food handling, hygienic practices and personal hygiene • Use simple finishing techniques to improve the appearance of their product
	<p>ELG Expressive Art and Design Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <ul style="list-style-type: none"> • Make use of props and materials when role playing characters in narratives and stories. Being Imaginative and Expressive 	EYFS	<ul style="list-style-type: none"> • Provide children with a range of materials for children to construct with. • Encourage them to think about and discuss what they want to make. • Discuss problems and how they might be solved as they arise. • Teach children different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. • Provide a range of materials and tools and teach children to use them with care and precision. Promote independence, taking care not to introduce too many new things at once. <p>Characteristics of Learning- <u>Playing and exploring</u> – Investigate and experience things ‘Have a Go’ <u>Active learning</u> – concentrate and keep on trying if they encounter difficulties, enjoy achievements</p>

Creating and thinking critically children have and develop their own ideas, making links between ideas.

EVALUATE

N.C. Outcome		Year	Knowledge and skills
Upper KS2	<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 	6	<ul style="list-style-type: none"> Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests Record their evaluations using drawings with labels Evaluate against their original criteria and suggest ways that their product could be improved
		5	<ul style="list-style-type: none"> Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others
Lower KS2		4	<ul style="list-style-type: none"> Evaluate their work both during and at the end of the assignment Evaluate their products carrying out appropriate tests
		3	<ul style="list-style-type: none"> Evaluate their product against original design criteria <i>e.g. how well it meets its intended purpose</i> Disassemble and evaluate familiar products
KS1		2	<ul style="list-style-type: none"> Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them
	1	<ul style="list-style-type: none"> Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it 	

	<p>ELG Expressive Art and Design Creating with Materials</p> <ul style="list-style-type: none"> • Share their creations, explaining the process they have used. 	EYFS	<ul style="list-style-type: none"> • Reflect with children on how they have achieved their aims. • Encourage children to notice features in the natural world. • Help them to define colours, shapes, texture and smells in their own words. • Discuss children's responses to what they see. <p><u>Characteristics of Learning-</u></p> <p><u>Active learning</u> – concentrate and keep on trying if they encounter difficulties, enjoy achievements</p> <p><u>Creating and thinking critically</u> children have and develop their own ideas, making links between ideas.</p>