

Whole School Design Technology Curriculum Plan 2020/21

EYFS Expressive Arts + Design							
ELG 16 = Exploring and using Media and Materials		Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.					
ELG 17 = Being Imaginative		Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.					
		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS Coverage	Knowledge:	T= All about me Moulding facial features with playdough SA= scissor skills SA= deconstructed role play	T= Festival and celebrations Making Christmas decorations	T= Toys Design and make our own toys	T= People who help us Design our own emergency vehicles Create training assault course for emergency workers.	T= Minibeasts Mixing colours to create a new shade for own Minibeasts. Panting caterpillars and butterflies with fruit.	T= The Seaside
	Skills:	Handles malleable materials with increasing control. Using onehanded tools and equipment safely	Use simple tools to effect changes to materials	Explore a variety of materials, tools and techniques Represent our own ideas	Understand importance of good health	Experiment with colour and texture.	
KS1 NC Objectives:		When designing and making, pupils should be taught to: Design					

		<p>1. 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> <p>Make</p> <p>2. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>3. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>Evaluate</p> <p>4. Explore and evaluate a range of existing products</p> <p>5. Evaluate their ideas and products against design criteria</p> <p>Technical knowledge</p> <p>6. Build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>7. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>Cooking and Nutrition</p> <p>8. Use the basic principles of a healthy and varied diet to prepare dishes</p> <p>9. Understand where food comes from.</p>					
		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 Coverage	Knowledge:	T – The big build Shelter building 1,2,3,4,5,6	T- The Arctic design, make and test an Inuit-style boat.			T – brilliant bodies Work collaboratively to create a large 3D sculpture of a mini beast	T – To be confirmed
	Skills:	1,2,3,4,5,6	1,2,3,4,5,6			1,2,3,4,5,6	
Year 2 Coverage	Knowledge:	T = Nurturing Nurses (healthy meal) 8 – (linked to science) 9	T = Marvellous Materials Moving Christmas Cards				
	Skills:	1 8 9 3- ingredients	1 2 3 5 7				

KS2 NC Objectives:		<p>When designing and making, pupils should be taught to:</p> <p>Design</p> <ol style="list-style-type: none"> 1. 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 2. 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> <ol style="list-style-type: none"> 3. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 4. 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> <ol style="list-style-type: none"> 5. Investigate and analyse a range of existing products 6. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 7. Understand how key events and individuals in design and technology have helped shape the world <p>Technical knowledge</p> <ol style="list-style-type: none"> 8. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures 9. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 10. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 11. Apply their understanding of computing to program, monitor and control their products. <p>Cooking and Nutrition</p> <ol style="list-style-type: none"> 12. Understand and apply the principles of a healthy and varied diet 13. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques 14. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 					
		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Knowledge:				T – making chocolate	T – Roman shields (homework)	T- making puppets

Coverage						project) T – Sewing (Roman purse)	
	Skills:				1, 4,(ingredients) 5, 6,	1,2, 4,5, 6,	3,4 (construction materials, textiles), 5, 6
Year 4 Coverage	Knowledge:	T=You're a Bad Man Mr Gum (Sweet Making)			SA (Sewing Project – roll up cases)		
	Skills:	1, 3, (4= ingredients), 5, 6 + 13			(2=annotated sketches + pattern pieces), 3, (4=textiles), 5+6		
Year 5 Coverage	Knowledge:	T = Burgers Burgers from different countries and seasons		T = Ancient Greeks Relief portraits of mythical creatures			
	Skills:	1, 2 (exploded diagrams), 3, 4 (ingredients), 5, 6, 7, 12, 13, 14		1, 2, 3, 4, 5, 6, 8,			
Year 6 Coverage	Knowledge:			T= lighthouses 7= John Smeaton			T= Our bodies and keeping healthy
	Skills:			1, 2 (annotated sketches/ computer-design), 3, 4 (construction materials), 5, 6, 10, 11			1, 2 (annotated sketches)3, 4, 5 ,6, 12, 13 (pizza)