

St Thomas More Catholic Primary School Curriculum

To provide opportunities that enable our children to have the skills, knowledge, understanding, confidence and desire to achieve the highest standards of which they are capable. Enabling them to play an active part as responsible and caring members of the school community and beyond.

Humanities			Arts & Culture				Sciences			
History	Geography	Languages	Art & Design	RE	PSHE	Music	Science	PE	Computing	DT

DT

An St Thomas More Design and Technology expert will:

- An excellent attitude to learning and independent working.
- The ability to use time efficiently and work constructively and productively with others.
- The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- The ability to apply mathematical knowledge.
- The ability to manage risks exceptionally well to manufacture products safely and hygienically.
- A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.

Supporting community priorities:

- Being language rich
- Cultural and creative experiences
- Enjoying the outdoors and appreciating the locality

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	<p>*Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>*Children to represent their own ideas, thoughts and feelings.</p> <p>* They safely use and explore a variety of materials, tools and techniques, experimenting with design, texture, form and function.</p>	<ul style="list-style-type: none"> • Children to develop the process of design thinking and seeing design as a process. • Children to explore and appreciate the design process that has influenced the products we use in everyday life. • Children to develop the skills needed to make high quality products. 					

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Take inspiration from design throughout history.		Children explore objects and designs to identify likes and dislikes of the designs.		Children to identify some of the great designers in all of the areas of study to generate ideas for designs.		Children to combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.	
					Children to identify some of the great designers in all of the areas of study to generate ideas for designs.	Children to evaluate the design of products so as to suggest improvements to the user experience	
		Children to suggest improvements to existing designs.		Children to improve upon existing designs, giving reasons for choices.		Children to create innovative designs that improve upon existing products.	
		Children to explore how products have been created.	Children to explore how products have been created and how they can be used in their own designs.				

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Design, make, evaluate and improve skills	Children to have the opportunities to design products for a purpose.	Children to design products that have a clear purpose.	Children to design products that have a clear purpose and an intended user.	Children to design with a purpose by identifying opportunities to design.	Children to design with a purpose by identifying opportunities to design.	Children to design with the user in mind, motivated by the service a product will offer (rather than simply for profit).	*Children to design with the user in mind, motivated by the service a product will offer (rather than simply for profit).
				Children to make products by working efficiently, carefully selecting materials.	Children to make products by working efficiently by carefully selecting materials	Children to make products through stages of prototypes, making continual refinements	Children to make products through stages of prototypes, making continual refinements
				Children to disassemble products to understand how they work	Children to assemble products to understand how they work		
						Children to ensure products have a high-quality finish, evaluating and refining them.	Children to ensure products have a high-quality finish, evaluating and refining them.
				Children to refine work and techniques as work progresses, continually evaluating the product design.	Children to refine work and techniques as work progresses, continually evaluating the product design.		
						Children to use prototypes, cross-sectional diagrams and computer aided designs to represent designs	Children to use prototypes, cross-sectional diagrams and computer aided designs to represent designs

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Material skills	Children to have opportunities to use scissors safely.	Children to cut material safely using tools provided.	Children to measure and mark out to the nearest centimeter.				Children to cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).
	Children to have the opportunities to practise a range of joining techniques such as hinges, gluing or combining materials to strengthen.	Children to demonstrate a range of joining techniques such as gluing or combining materials to strengthen.	Children to select from a range of joining techniques such as gluing or combining materials to strengthen.		Children to select appropriate joining techniques.* HOME LEARNING PROJECT*		
		Children to demonstrate a range of cutting and shaping techniques e.g tearing, cutting, folding and curling.	Children to demonstrate a range of cutting and shaping techniques e.g tearing, cutting, folding and curling.				

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Food Skills	*Measure or weigh using measuring cups.		Children to assemble or cook ingredients.		Children to assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).		
			Children to cut and peel ingredients safely and hygienically.		Children to prepare ingredients hygienically using appropriate utensils.		
					Children to understand seasonality and know where foods are from.		
					Children to demonstrate a range of baking and cooking technique: baking and boiling.		

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Textile skills	Children to have the opportunities to decorate textiles using simple techniques, adding sequins, glitter, etc.	Children to shape textiles using given templates.				Children to shape textiles using their own templates	
		Children to join textiles using running stitch.				Children to join textiles with a combination of stitching techniques : back stitch for seams and running stitch to attach decoration	
		Children to colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing.				Children to use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles.	

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Electricals and Electronical skills						Children to create series and parallel circuits.	Children to create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)
						Children to apply their understanding of computing programs to control their products.	

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Construction skills	Children to have the opportunities to combine materials to achieve a planned effect.	Children to combine materials to achieve a planned effect.	Children to use materials to practice, gluing and nailing materials to make and strengthen products.			Children to use a range of practical skills to create products: cutting, drilling and screwing, nailing, gluing, filing and sanding.	Children to refine a range of practical skills to create products: cutting, drilling and screwing, nailing, gluing, filing and sanding.

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Mechanics skills			Children to create products using a pulley system.	Children to use mechanisms for a product: levers, winding mechanisms, and gears			Children to convert rotary motion to linear using cams.