

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

A 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

Year	Topic	End point	Vocabulary		
			Anchor	Goldilocks	Step on
EYFS	A	I am Special Begin to experiment with junk modeling	make, strong,	Design, join, tools	Designer, Materials, construction
	S	Frosty and Frozen or Out of the Egg Designing and making an egg carrier Cooking - chocolate nests			

	S	Once upon a time Experimenting with glue guns – how to use tools safely Experimenting with hammers and nails – how to use tools safely	<u>Continuous provision</u> Construction skills Material skills 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 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			
Y1	A					
	S	Naughty Bus Big question: Can you make a friend for the Naughty Bus?	Construction skills Material skills Design their own bus. Investigate how wheels and axles go around. <u>Designer: Isambard Kingdom Brunel</u> <u>Outcome questions</u> ❖ Can the children name a wheel? ❖ Can the children name an axle?	Design, designer, tools,	materials	product, evaluate, label
	S	Secret Garden Big question: Can you create a bird puppet?	Material skills Textile skills Textile: running stitch. Look at a running stitch – practise a running stitch. Use a range of bird templates children to select and draw round on felt. Adults cut out designs. Children to colour and decorate the textiles - adding sequins, googly eyes and printing <u>Outcome questions</u> ❖ Can the children name a sewing stitch? ❖ Can the children name an axle?	pin,		Textiles needle thread pattern piece
Y2	A	Turrets and Tiaras Big question: Can you make a drawbridge work?	Construction skills Mechanic skills Material skills Research Pulley system from everyday life. Design, make and evaluate a pulley system. A range of cutting techniques (curling and folding) Glue or nail. <u>Outcome question</u> • Can the children name a pulley system?	Design, designer materials, tools,	product, evaluate, label	brief, problem-solving
	S	Flames and Fevers Big question: Can I design a healthy muffin?	Food skills Identify flavors, evaluate muffins, know where food comes from. Assemble ingredients, cut, peel or grate safely and hygienically (if any children have allergies pre-peeled vegetables) Measure and mark out to the nearest ml,grams. <u>Outcome questions</u> • Can the children name 3 healthy foods? • Can the children name where 2 items of food come from i.e.: flour, butter		Ingredients, appealing	hygiene, balanced, nutritious
	S					
Y3	A					

	S					
	S	I love Peterborough Big Question: Can you make a moving vehicle?	Mechanic skills Research gears. Make a moving vehicle with gears. K-Nex vehicle has to have gears. <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children name a gear? 	Design technology, product,	intended user,	design criteria
Y4	A	Rags to Riches Big question: What can I eat today?	Food skills Research and design a dinner – (soup) Can they improve a Victorian recipe? Research seasonal vegetables, design, prepare and cook. Clare Smyth <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children name 2 seasonal vegetables?e.g.: Berries in the summer, root vegetables in the winter 	cut, slice,	Hygiene, grown, grate	reared, local, produce, seasonal, produce, Cross contamination
	S	Law and order Big question: The soldier has all his armour. How can we protect him further?	Home learning project Design a shield using exploded diagrams. Select appropriate joining techniques. <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children name 2 joining techniques? 	Design technology, product,	intendd user, design criteria,	Annotat ed sketch,
	S					
Y5	A					
	S	Raiders and Traders (Anglo-Saxons and the Vikings) Big Question: Can you help me make a purse for all my money?	Material skills Textile skills Recall stitching techniques – which would be the best to make an Anglo Saxon style purse? Make an Anglo-Saxon style purse using hessian and thread. <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children name 2 types of stitching? 	Pattern, pieces,	fastener	back stitch, turn out, tension, seam, fashion designer, ethical product, corporate, social responsibility.
	S	Tomb Raiders (Ancient Egyptian) Big question: Can you move the bricks for the pyramids?	Electricals and Electronic skills Construction skills Children to design and make a crane using electronics - choose suitable materials, cut, assemble and join <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children talk about choices of materials? 		strengthen, reinforce	Frame, structure, load transport, mechanical engineer
Y6	A	Magic, Mystery or Mayhem? Big Question: Can you make a moving part for a shop in Diagon Alley?	Mechanics Skills Material Skills Construction skills Explore different movements of linear and rotational movements. Create a design sheet including measurements and materials. Design a front of a shop from Diagonal Alley. Cut cams and rods in order to fit the structure using hacksaws. Evaluate the movement and aesthetics of the design. <u>Outcome question:</u> <ul style="list-style-type: none"> Can the children name linear and rotational movements? 	strengthen, reinforce,	Frame, structure, load transport, mechanical engineer	

	S					
	S	<p>Primary Engineer Project: Can I make a lighthouse?</p>	<p>Mechanics Skills Construction skills Electricals and Electronic skills Primary Engineer Project: Dissect an existing product and identify the components. Redesign the product, suggesting improvements and aesthetics. Use a range of measuring/cutting skills to create suitable parts, and combine parts for the finished product. Evaluate the process and suggest changes for the future.</p> <p><u>Outcome question:</u></p> <ul style="list-style-type: none"> Can the children name 3 components in an existing dissected product? 	<p>Frame, structure, strengthening, reinforcement, mechanical engineer</p>		