

Design & Technology Skills Progression at St Andrew's

Concept	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design, make, evaluate and improve	<p>I can construct with a purpose in mind.</p> <p>I know how and can add more detail.</p>	<p>I know how to design products that have a clear purpose and an intended user – Home & Away / Castles.</p> <p>I know how to make products, refining the design as work progresses – Home & Away / Castles</p>	<p>I know how to design with purpose by identifying opportunities to design – Pre Historic Britain / Making Connections / Amazing Americas / The Greeks.</p> <p>I know how to make products by working efficiently - Pre Historic Britain / Making Connections</p> <p>I know how to refine work and techniques as work progresses, continually evaluating the product design - Pre Historic Britain / Making Connections / Amazing Americas / The Greeks.</p>	<p>I know how to design with the user in mind, motivated by the service a product will offer – World at War / Ancient Egyptians / Our Wonderous World / The Victorians / Space / Blue Planet.</p> <p>I know how to make products through stages of prototypes, making continual refinements – World at War / Ancient Egyptians / The Victorians / Space / Blue Planet.</p> <p>I know how to ensure products have a high-quality finish using art skills where appropriate – World at War / Our Wonderous World / The Victorians / Space.</p>			
To master practical skills with food	<p>I know how to use a variety of cooking equipment.</p> <p>I can and know how to follow simple cooking instructions</p>	<p>I know how to cut, peel or grate ingredients safely and hygienically - Toys / Our Wonderful World.</p> <p>I know how to measure or weigh using measuring cups or scales Wonderful World .</p> <p>I know how to assemble or cook ingredients – Wonderful world</p>	<p>I know how to prepare ingredients hygienically using appropriate utensils – World Traveller.com / The Greeks.</p> <p>I know how to measure ingredients to the nearest gram accurately – World Traveller.com / The Greeks.</p> <p>I know how to follow a recipe – World Traveller.com / The Greeks.</p> <p>I know how to assemble or cook ingredients – World Traveller.com / The Greeks.</p>	<p>I know and understand the importance of correct handling and storage of ingredients – Ancient Egyptians.</p> <p>I know how to measure accurately and calculate ratios of ingredients to scale up or down in a recipe – Ancient Egyptians.</p> <p>I know and can how to demonstrate a range of baking and cooking techniques – Ancient Egyptians.</p> <p>I know how to create and refine recipes – Ancient Egyptians.</p>			
To master practical skills with materials	<p>I know how to use scissors with increasing control</p> <p>I know how to join using tape/glue or screws</p>	<p>I know how to measure and cut materials safely to the nearest centimetre – Toys / Castles.</p> <p>I know how to cut and shape by tearing, cutting, folding and curling – Toys / Home & Away / Castles.</p> <p>I know how to join using glue, hinges or combining materials to strengthen them – Toys / Castles.</p>	<p>I know how to cut materials accurately and safely by selecting the appropriate tools – Rotten Romans / Making Connections.</p> <p>I know how to measure and mark to the nearest mm – Rotten Romans / Making Connections.</p> <p>I know how to apply appropriate cutting and shaping techniques – Rotten Romans / Making Connections / The Greeks.</p> <p>I know and can select appropriate joining techniques – Rotten Romans / Making Connections / The Greeks.</p>	<p>I know how to cut materials with precision and refine the finish with appropriate tools – Invaders & Settlers / Our Wonderous World / The Victorians / Space.</p> <p>I know understanding and can show the qualities of materials to choose appropriate tools to cut and shape – World at War / Our Wonderous World / The Victorians / Space / Blue Planet.</p>			
To master practical skills with construction	<p>I can use a variety of real tools</p>	<p>I know how to use materials to practice drilling, screwing, gluing and nailing materials to make and strengthen a product – Castles / Toys.</p>	<p>I know how to choose suitable techniques to construct products or to repair them – Rotten Romans / Amazing Americas / The Greeks.</p>	<p>I know how to develop a range of practical skills to create products – World at war / Our Wonderous World / The Victorians / Space / Blue Planet.</p>			

			I know how to strengthen materials using suitable techniques – Rotten Romans / Amazing Americas /		
To master practical skills with mechanics	I can explore how things work	I know how to create products using levers, wheels and winding mechanisms - Castles	I know and can use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (levers, winding, pulleys, gears).		I know how to convert rotary motion to linear using cams - Space.
To master practical skills with textiles		<p>I know how to shape textiles using templates – Great Fire of London / Wonderful World</p> <p>I know how to join textiles using running stitch – Home & Away / Wonderful World</p> <p>I know how to colour and decorate textiles in a number of ways – Home & Away / Wonderful World</p>		<p>I know and understand the need for a seam allowance - Making Connections</p> <p>I know how to join textiles with appropriate stitching- Making Connections</p> <p>I know to select the most appropriate techniques to decorate textiles- Making Connections.</p>	<p>I know how to create objects that employ a seam allowance.</p> <p>I know how to join textiles with a combination of stitching techniques.</p> <p>I know how to use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles – The Victorians.</p>
To take inspiration from design throughout history		<p>I know and can explore objects and designs and identify likes and dislikes – Toys / Home & Away.</p> <p>I know how and can suggest improvements to existing designs and explore how they were created – Toys / Home & Away / Castles</p>	<p>I know how to improve upon existing designs giving reasons for my choice - Making Connections / Rotten Romans / Amazing Americas / The Greeks.</p> <p>I know how and can disassemble products to understand how they work.</p>	<p>I know how to combine elements of design from a range of inspirational designers – World at war / The Victorians.</p> <p>I know how to create innovative designs that improve upon existing products – World at War / The Victorians / Space / Blue Planet.</p>	