



### Year 6 Progressions of Skills - D&T

2025/26	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit of work		Textiles: Waistcoats		Playgrounds		Navigating the world
Enrichment opportunities						
Knowledge						
Pupils know:	<ul style="list-style-type: none"> <li>To understand that it is important to design clothing with the client/ target customer in mind.</li> <li>To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric.</li> <li>To understand the importance of consistently sized stitches.</li> </ul>		<p>Technical:</p> <ul style="list-style-type: none"> <li>To know that structures can be strengthened by manipulating materials and shapes.</li> </ul> <p>Further Knowledge:</p> <ul style="list-style-type: none"> <li>To understand what a 'footprint plan' is.</li> <li>To understand that in the real world, design can impact users in positive and negative ways.</li> <li>To know that a prototype is a cheap model to test a design idea.</li> </ul>		<p>Technical:</p> <ul style="list-style-type: none"> <li>To know that accelerometers can detect movement</li> <li>To understand that sensors can be useful in products as they mean the product can function without human input</li> </ul> <p>Further Knowledge:</p> <ul style="list-style-type: none"> <li>To know that designers write design briefs and develop design criteria to enable them to fulfil a client's request</li> <li>To know that 'multifunctional' means an object or product has more than one function</li> </ul>	



			<ul style="list-style-type: none"> <li>To know that magnetometers are devices that measure the Earth's magnetic field to determine which direction you are facing</li> </ul>
Skills			
Design	<ul style="list-style-type: none"> <li>Designing a waistcoat in accordance to a specification linked to a set of design criteria.</li> <li>Annotating designs, to explain their decisions.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.</li> </ul>	<ul style="list-style-type: none"> <li>Writing a design brief from information submitted by a client</li> <li>Developing design criteria to fulfil the client's request</li> <li>Considering and suggesting additional functions for my navigation tool</li> <li>Developing a product idea through annotated sketches</li> <li>Placing and manoeuvring 3D objects, using CAD</li> <li>Changing the properties of, or combine one or more 3D objects, using CAD</li> </ul>
Make	<ul style="list-style-type: none"> <li>Using a template when cutting fabric to ensure they achieve the correct shape.</li> </ul>	<ul style="list-style-type: none"> <li>Building a range of play apparatus structures drawing upon new and prior knowledge of structures.</li> <li>Measuring, marking and cutting</li> </ul>	<ul style="list-style-type: none"> <li>Considering materials and their functional properties, especially those that are sustainable and</li> </ul>



	<ul style="list-style-type: none"> <li>• Using pins effectively to secure a template to fabric without creases or bulges.</li> <li>• Marking and cutting fabric accurately, in accordance with their design.</li> <li>• Sewing a strong running stitch, making small, neat stitches and following the edge.</li> <li>• Tying strong knots.</li> <li>• Decorating a waistcoat, attaching features (such as appliqué) using thread.</li> <li>• Finishing the waistcoat with a secure fastening (such as buttons).</li> <li>• Learning different decorative stitches.</li> <li>• Sewing accurately with evenly spaced, neat stitches.</li> </ul>	<p>wood to create a range of structures.</p> <ul style="list-style-type: none"> <li>• Using a range of materials to reinforce and add decoration to structures.</li> </ul>	<p>recyclable (for example, cork and bamboo)</p> <ul style="list-style-type: none"> <li>• Explaining material choices and why they were chosen as part of a product concept</li> <li>• Programming an N,E, S,W cardinal compass.</li> </ul>
<ul style="list-style-type: none"> <li>• Evaluate</li> </ul>	<ul style="list-style-type: none"> <li>• Reflecting on their work continually throughout the</li> </ul>	<ul style="list-style-type: none"> <li>• Improving a design plan based on peer evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>• Explaining how my program fits the design criteria and how it would be</li> </ul>



	<p>design, make and evaluate process.</p>	<ul style="list-style-type: none"><li>• Testing and adapting a design to improve it as it is developed.</li><li>• Identifying what makes a successful structure.</li></ul>	<p>useful as part of a navigation tool</p> <ul style="list-style-type: none"><li>• Developing an awareness of sustainable design</li><li>• Identifying key industries that utilise 3D CAD modelling and explain why</li><li>• Describing how the product concept fits the client's request and how it will benefit the customers</li><li>• Explaining the key functions in my program, including any additions</li><li>• Explaining how my program fits the design criteria and how it would be useful as part of a navigation tool</li><li>• Explaining the key functions and features of my navigation tool to the client as part of a product concept pitch</li><li>• Demonstrating a functional program as part of a product concept</li></ul>
--	-------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------