






Year 6 – Design and Technology Overview



Topic	Textiles – Waistcoats (Autumn)	Come dine with me – Curry (Spring)	Digital World - Navigating the world (Summer)
Linked Books			
Designer/Architect/Engineer	<p data-bbox="544 671 790 695"><b>Vivienne Westwood</b></p> 	<p data-bbox="1070 671 1429 695"><b>Nisha Katona/ Shabir Hussain</b></p> 	<p data-bbox="1697 671 1888 695"><b>Marissa Mayer</b></p> 
<b>Substantive knowledge</b>			
<p data-bbox="203 1070 315 1094"><b>Technical</b></p>	<ul data-bbox="383 1034 943 1305" 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>	<ul data-bbox="981 1034 1507 1305" style="list-style-type: none"> <li>• To know that ‘flavour’ is how a food or drink tastes.</li> <li>• To know that many countries have ‘national dishes’ which are recipes associated with that country.</li> <li>• To know that ‘processed food’ means food that has been put through multiple changes in a factory.</li> </ul>	<ul data-bbox="1543 1034 2040 1241" 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>

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		<ul style="list-style-type: none"> <li>• To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides.</li> <li>• To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).</li> </ul>	
<p><b>Additional</b></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> <li>• To know that magnetometers are devices that measure the Earth’s magnetic field to determine which direction you are facing.</li> </ul>
<p><b>Skills</b></p>			
<p><b>Design</b></p>	<ul style="list-style-type: none"> <li>• Designing a waistcoat in accordance to a specification linked to set of design criteria.</li> <li>• Annotating designs, to explain their decisions.</li> </ul>	<ul style="list-style-type: none"> <li>• Writing a recipe, explaining the key steps, method and ingredients.</li> <li>• Including facts and drawings from research undertaken.</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 combining one or more 3D objects, using CAD</li> </ul>

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<p><b>Make</b></p>	<ul style="list-style-type: none"> <li>• Using a template when cutting fabric to ensure they achieve the correct shape.</li> <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>	<ul style="list-style-type: none"> <li>• Following a recipe, including using the correct quantities of each ingredient.</li> <li>• Adapting a recipe based on research.</li> <li>• Working to a given timescale.</li> <li>• Working safely and hygienically with independence.</li> </ul>	<ul style="list-style-type: none"> <li>• Considering materials and their functional properties, especially those that are sustainable and recyclable (for example, cork and bamboo).</li> <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>
<p><b>Evaluate</b></p>	<ul style="list-style-type: none"> <li>• Reflecting on their work continually throughout the design, make and evaluate process.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating a recipe, considering: taste, smell, texture and origin of the food group.</li> <li>• Taste testing and scoring final products.</li> <li>• Suggesting and writing up points of improvements when scoring others' dishes, and when evaluating their own throughout the planning, preparation and cooking process.</li> <li>• Evaluating health and safety in production to minimise cross contamination.</li> </ul>	<ul style="list-style-type: none"> <li>• Explaining how my program fits the design criteria and how it would be useful as part of a navigation tool.</li> <li>• Developing an awareness of sustainable design.</li> <li>• Identifying key industries that utilise 3D CAD modelling and explaining 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> </ul>

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			<ul style="list-style-type: none"> <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 pitch.</li> </ul>
<p>New Vocabulary</p>	<p>Accurate, adapt, annotate, design, design criteria, detail, fabric, fastening, knot, properties, running-stitch, seam, sew, shape, target audience, target customer, template, thread, unique, waistcoat, waterproof.</p>	<p>Accompaniment, collaboration, cookbook, cross-contamination, equipment, farm, flavour, illustration, imperative-verb, ingredients, method, nationality, preparation, processed, reared, recipe, research, storyboard, target audience, top tips, unit of measurement.</p>	<p>3D CAD, application (apps), biodegradable, boolean, cardinal compass, client, compass, concept, convince, corrode, duplicate, environmentally friendly, equipmen, feature, finite, function, functional, GPS tracker. if statement, infinite, investment, lightweight, loop, manufacture, materials (wood, metal, plastic etc.), mouldable, navigation, non-recyclable, product lifecycle, product lifespan, program, recyclable, smart, sustainable, sustainable design, unsustainable design, variable, workplane</p>