

Year 8 DT and Textiles Curriculum Plan							
Unit	Core		Hinterland		NC Coverage	Assessment	Whole Education Opportunities
	Knowledge	Skills	Knowledge	Skills			
Mobile Phone holder (DT)	<ul style="list-style-type: none"> Basic Health and safety with heat processes Basic introduction into materials (polymers and electronics) Understanding the process of soldering Understanding of simple circuits and standard components Designing for specific user needs from conducting informed research Introduction to permanent joining methods for timbres Learning about the advantages of finishing techniques for Timbers Identifying the advantages of using jigs, templates and moulds in batch production Understanding environmental factors within a product's production Introduction to 2D design (CAD) and the laser cutter Card modelling to test designs 	<ul style="list-style-type: none"> Basic hand tools (mitre saw) Soldering standard components to make a simple circuit Accurately using the line bender and a jig Finishing techniques (wood) Drawing using CAD Analysing research in order to inform decisions Effective modelling to check limitations within designs Analysing and evaluating in order to inform design decisions 	<ul style="list-style-type: none"> Understanding the wider implications of the use of a range of materials upon the environment – making links to global warming etc Making links between scales of production, costing, manufacturing processes and time Understanding the functions of standard components used in a wide range of electrical appliances at home 	<ul style="list-style-type: none"> Ability to apply understanding of tools and processes to other applications Using a wide range of CAD functions in order to make a challenging design To create an original jig to alter the products function To use alternative joining methods to construct their product (comb joint) 	<p>Design - Identify and solve their own design problems and understand how to reformulate problems given to them.</p> <p>Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.</p> <p>Develop and communicate design ideas using annotated sketches.</p> <p>Make -select from and use specialist tools, techniques, processes, equipment and machinery precise.</p> <p>Evaluate - test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups.</p> <p>Analyse the work of past and present professionals and others to develop and broaden their understanding.</p> <p>Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p> <p>Technical knowledge -understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.</p> <p>To understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs].</p>	<ul style="list-style-type: none"> Specification (ability to add detail using research collected and making it specific to the brief) Designing a range of ideas suitable for the user and identifying was it can be adapted to suit others Independence and accuracy when cutting/shaping materials using basic hand tools, machines and CAM. Evaluation of designs and final product considering a wider range of issues Low stakes testing in starters and plenaries 	<ul style="list-style-type: none"> Links with geography- deforestation, fossil fuels, sustainability Links to maths – tolerances, angles and recording data. Careers
Soft Toy (Textiles)	<ul style="list-style-type: none"> Understanding different classifications of materials and their working properties Identifying the needs of different user groups and their needs Basic sewing machine set up and maintenance Decoration techniques for different effects Understanding seam allowances Surface treatments for fabrics Environmental issues relating to a range of materials 	<ul style="list-style-type: none"> Creating patterns in order to create a final product Practising a range of hand sewing techniques Applique Temporary tacking Analysing the work of others in order to make informed decisions. Evaluating in order to further improve and develop ideas 	<ul style="list-style-type: none"> Understanding of mass-produced items of a similar nature Alternative decoration techniques Packaging and the law Ability to look at existing products and different types of branding which are directed at different users Smart materials used within textiles Safety tests for textiles products (the laws) Well known textiles designers and their influences Mass production of textiles products 	<ul style="list-style-type: none"> To utilise the sewing machines as an alternative to hand sewing Sewing buttons Hidden supports Pockets Alternative fastenings (zips/poppers) 	<p>Designing - use research and exploration, such as the study of different cultures, to identify and understand user needs.</p> <p>To identify and solve their own design problems and understand how to reformulate problems given to them.</p> <p>To develop and communicate design ideas using annotated sketches, detailed plans, oral and digital presentations.</p> <p>Make - Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture.</p> <p>Evaluate - analyse the work of past and present professionals and others to develop and broaden their understanding.</p> <p>To understand developments in design and technology, its impact on individuals, society and the environment, and</p>	<ul style="list-style-type: none"> Designing a range of creative ideas Independence and accuracy when constructing their prototype Evaluation of designs and final product considering a wide range of factors. Low stakes testing in starters and plenaries 	<ul style="list-style-type: none"> Maths – tessellation Careers

					<p>the responsibilities of designers, engineers and technologists.</p> <p>Technical Knowledge - To understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.</p>		
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