

Year 10- Hoodies - Design and Technology: Textiles

Rationale and Context of Unit:	Core curriculum content:	Tier 2 & Tier 3 vocabulary explicitly taught:
<p>At the beginning of the GCSE course, students were introduced to a variety of techniques, materials, and equipment.</p> <p>1.1 The impact of new and emerging technologies 1.1.8 Production techniques and systems</p> <p>1.5 The functions of mechanical devices used to produce different sorts of movements, including the changing of magnitude and the direction of forces. 1.5.2 Classification of levers</p> <p>1.8 The categorisation of the types, properties, and structure of ferrous and non-ferrous metals. 1.8.1 Ferrous Metals 1.8.2 Non-Ferrous Metals 1.8.3 Properties</p> <p>1.11 The categorisation of the types, properties and structure of natural, synthetic, blended and mixed fibres, and woven, non-woven and knitted textiles. 1.11.1 Natural 1.11.2 Synthetic 1.11.3 Woven 1.11.4 Non-woven 1.11.5 Knitted</p>	<p>This unit main focus is:</p> <ul style="list-style-type: none"> • Design and make a hoodie • Working independently • Experience new equipment which they would have not used at KS3 • Test and evaluate their product <ul style="list-style-type: none"> • Woven, non-woven and knitted fabrics • Seams • Pockets • Working Drawing • Production Log • Metals – Ferrous and Non-Ferrous • Eyelet Punch • Overlocker • Logo – decoration (variety of techniques) • CAM Embroidery • Evaluation • Life cycle and carbon footprint <p>All these skills will allow students to understand the manufacturing of textile products. This will allow students to gain independence, take creative risks and solve their own design problems which they need in Year 11.</p>	<ul style="list-style-type: none"> • Pattern • Templates • Stretch Stitch • Tessellation • Lay Plan • Wastage • Overlocker • Ferrous • Non-Ferrous • Tough, ductile, malleable • Natural • Synthetic • Class 1, 2 and 3 – levers • Scales of production – one off, batch and mass • Manufacture

<p>6.5 Typical stock forms, types and sizes used in order to calculate and determine the required quantity of natural, synthetic, woven and non-woven, knitted, blended and mixed- fibres textiles.</p> <ul style="list-style-type: none">6.5.1 Stock forms/types6.5.2 Sizes <p>6.6 Alternative processes that can be used to manufacture typical products of natural, synthetic, woven and non-woven, knitted, blended and mixed-fibre textiles to different scales of production.</p> <ul style="list-style-type: none">6.6.2 Scales of production6.6.3 Techniques for quantity production – methods that are employed when making products in quantity. <p>6.7 Specialist techniques, tools, equipment and processes that can be used on natural, synthetic woven and non-woven, knitted, blended and mixed-fibre textiles to shape, fabricate, construct and assemble a high-quality prototype.</p> <ul style="list-style-type: none">6.7.1 Tools and equipment6.7.3 Fabricating/constructing/assembling <p>6.8 Appropriate surface treatments and finishes that can be applied to natural, synthetic, woven and non-woven, knitted, blended and mixed fibre textiles for functional and aesthetic purposes.</p> <ul style="list-style-type: none">6.8.1 Surface finishes and treatments		
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Challenge and Support:	World wide learning/ links to 21 st century:	Cultural capital/ Industry/ Enrichment:
<p>Examples of projects are provided. Step by steps and writing frames can be provided for SEND/PP students. Keywords clearly visible in classroom.</p> <p>Fabric provided free to PP students. Students can either purchase their own fabric or off the school.</p> <p>Technician support available in some lessons to support students and the help with the equipment.</p> <p>Students are stretched and challenged with their design ideas and practical pieces. Students will be encouraged to think and express for themselves in original ways, generate and develop ideas, define problems, push the boundaries for textiles techniques to exploit the potential of their individual hoodie. They can adapt pattern (e.g shape, style of hood, pocket, decoration, design)</p> <p>Extension tasks available during the lessons and for all homework tasks set. Exam questions.</p> <p>Scholarly directed reading – Research tasks allow students to be directed to websites and textbooks. Opportunities for students to read allow in class and provide oral feedback and contribute to class discussions.</p>	<ul style="list-style-type: none"> • Cognitive skills - problem solving, creativity • Self-management and self-development • Relationship-building skills – teamwork • Systems thinking – decision making and reasoning. 	<ul style="list-style-type: none"> • East Norfolk College Trip – an opportunity for students to experience textiles at 6th Form. • Students learn to be imaginative and creative, are able to problem solve, learn to take risks and becoming resourceful. • Students learn about health and safety within industries and how clothing are manufactured in industry.

Historical, Social, Moral, Spiritual, Cultural context:	Cross curricular links/ literacy/numeracy:	Common misconceptions:
<ul style="list-style-type: none"> • We look at the global and social impact with the production of natural and synthetic fibres. • Life cycle of their product – carbon footprint 	<ul style="list-style-type: none"> • Students will have opportunities to engage in speaking and listening activities through reading and writing. (e.g. class discussions, questioning, verbal feedback – self and peer, share research through presentations, annotate and comment upon the work of peers through reading, writing and listening, exercise books used for extended writing tasks) • Numeracy – measuring- producing working drawings, seam allowance.. Costings materials. • Homework – opportunities for students to produce extended writing pieces • Cross curricular – science, maths and geography. 	<ul style="list-style-type: none"> • Textiles products are just made from textiles – metal eyelets. Different materials and their properties. • Where fabric comes from? Unknown differences between natural and synthetics fibres. Different properties for each fabric. • Products only take a lesson to make! Students unaware on how production works, the need for accuracy and time.
<p>Assessment timeline:</p>		
<p>All groups of lessons will have a success criteria using EDSM and WAGOLL's. Feedback4 is used to assess current progress with students designs and practical skills. End of unit test (summative assessment) is performed using the google classroom platform. A01 –Investigate A02 – Design A03 – Manufacture A04 – Testing and Evaluate</p> <p>A03 and A04 covered more in depth in this project.</p>		

Home learning
Senecra Assignments used for homework tasks and revision.
Feedback
Self and peer assessment used to mark the formative tests/exam questions. Self and peer assessment on design ideas and practical work using WWW/EBI. Homework marked using the star system. Feedback4 used to assess designs, practical pieces, and presentation of work. End of unit assessment

Length of unit (duration indicated in lessons)

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
<ul style="list-style-type: none"> • Intro project • Working Drawings • Tessellation • Lay Plan • Natural and Synthetic fibres 	<ul style="list-style-type: none"> • Metals – Ferrous and Non Ferrous • Woven, non-woven and knitted fabrics 	<ul style="list-style-type: none"> • Make – Hoodie/sweatshirt • Industrial processes 	<ul style="list-style-type: none"> • Evaluation 	<ul style="list-style-type: none"> • Production Systems • Global and social impact • Life Cycle of a product • Carbon footprint 	<ul style="list-style-type: none"> • End of unit assessment