

Design and Technology Scheme of Learning

Year 9 – Topic Textiles

Intent - Rationale

Students should: demonstrate an good understanding of Health and Safety; confidently use the sewing machines accurately and safely; analyse a design brief in detail, identify the TMG and how to obtain information from them; independently research from both primary and secondary sources, fully annotate and explain; write a detailed design specification using technical terminology with measurable points which is fully justified; design three/five different creative ideas with clear annotation and peer feedback; make a finished prototype demonstrating confident and accurate pattern and garment construction; document the step by step making of the prototype with notes, quality control (www/ebi) and diagrams; be able to analyse a garment using ACCESSFM and consider ways this could be improved; evaluate their work throughout the designing and making process and the prototype against the design specification, design brief and design work.identifying areas to improve and peer opinion.

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequent learning does this topic feed into?
Y8 Topic Textiles - Pyjama Project	Y10 – Design and Technology GCSE
Y7 Wall organiser project	Y11 – Design and Technology GCSE
	A Level design and Technology Fashion and Textiles
What are the links with other subjects in the curriculum?	What are the links to SMSC, British Values and Careers?
History – 1940s 1950s 1960s 1970s study of different historical eras	Problem solving; independence; resilience; encouraging creativity; communication skills; confidence;
Business Studies – marketing and pricing	organisation (GB4)
Art – Presentation, illustration and design	 Links with social/cultural understanding – choice of skirt length and styling linked to modest dressing in different cultures. (BV4) (BV5) (C1) (C2) (SP1) (SP2) (SP3)
	Moral, social and Environmental topics covered on sustainability and cloth wastage. (C2) (M1) (SO1)
What are the opportunities for developing literacy skills and developing learner confidence and	What are the opportunities for developing mathematical skills?
enjoyment in reading?	
Independent research	Measuring skills using a ruler and tape measure
Written instructions	Seam allowance of 15mm in construction
Subject specific vocabulary	Average measurements
FROM THE LIBRARY	Mathematical problem solving
20 TH Century fashion-J. Peacock-391	Geometric understanding
To the state of th	
Fashion: A History from the 18 th -20 th Century; 391.07	
A fashionable history of Dresses and Skirts; H. Reynolds-391	
A fashionable history of Dresses and Skirts; H. Reynolds-391 A fashionable History of Coats and Trousers; H. Reynolds	
A fashionable history of Dresses and Skirts; H. Reynolds-391	
A fashionable history of Dresses and Skirts; H. Reynolds-391 A fashionable History of Coats and Trousers; H. Reynolds	



Design and Technology Scheme of Learning Year 9 – Topic Textiles

Intent - Concepts

What knowledge will students gain and what skills will they develop as a consequence of this topic?

Know

- How to use research and exploration to identify and understand user needs
- How to identify and solve their own design problems and understand how to reformulate problems given to them
- How to develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations

Apply

- use a variety of approaches to generate creative ideas and avoid stereotypical responses
- User needs and user centred design
- select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture when appropriate
- select from and use a wider, more complex range of materials and components, considering their properties
- analyse the work of past and present professionals and others to develop and broaden their understanding
- Make detailed plans in order to construct the desired product.

Extend

- test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups
- understand and use the properties of materials and the performance of structural elements to achieve functioning solutions

What subject specific language will be used and developed in this topic?	What opportunities are available for assessing the progress of students?
 Target Market Group (TMG) – The people or person that the product is designed for. Zig Zag – machine stitch used for neatening edges Lockstitch – straight stitch used for creating seams 	Outcomes & Key work for assessment: Research; design specification; techniques – gathers, darts and pleats; product analysis;
 Basic Blocks – Average sized card pattern blocks of shorts or trousers used as a starting point for student adaptations Paper Pattern – shorts or trouser templates made by students 	design work; finished product; diary of make; evaluation. Regular marking of class and homework.
 Grain Line – the weave of the fabric that runs parallel to the selvedge and warp threads of the fabric Selvedge – the 'finished' edge where the weft yarns wrap around the warp threads 	Mid Project Review Tracking points.
 Warp – the yarns that run down the length of the fabric Weft – the yarns that run across the width of the fabric 	Final Assessment of completed project.
 Balance notches – small triangular pattern markings to allow matching the pattern pieces Seam allowance – the 15mm border that is added in order to make seams 	
Aesthetics – what a product looks like	
 Environment - the setting or conditions in which a particular activity is carried out, Context - the effect the production of a product has on the environment. 	
Manufacture – how has the product been made – Context in a factory etc.	
Function –the practical use or purpose in design. How the edge of a piece of eleth or elething which has been turned under and sown.	
 Hem – the edge of a piece of cloth or clothing which has been turned under and sewn Seams - a line where two pieces of fabric are sewn together in a garment or other article 	



- Interfacing an extra layer of material or an adhesive stiffener that is applied to the facing of a garment to add support
- Facings a piece of material sewn on the inside of a garment, especially at the neck and armholes, to strengthen it Context waistband.
- Waistband a strip of cloth forming the waist of a garment such as a skirt or a pair of trousers.
- **Zipper** a device consisting of two flexible strips of metal or plastic with interlocking projections closed or opened by pulling a slide along them, used to fasten garments
- Button a small disk secured to clothing and used as a fastener by passing it through a buttonhole
- Lining an additional layer of different material attached to the inside of a garment to make it warmer or hang better.
- Darts a tapered tuck stitched in a garment in order to shape it.
- Gathers draw and hold together (fabric or a part of a garment) by running thread through it
- Pleats a double or multiple fold in a garment or other item made of cloth, held by stitching the top or side.

Intent – Concepts

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
Lesson title Introduction to project -	Working in table groups analysis of design brief and planning independent research to aid designing.	Higher level challenge Consider properties of fabric and suitability for the specific product.	Analysis of design brief. Develop plan of research. Identify target market – customer and shop profile. Spider diagram – develop and share ideas in groups. T Overview of changing fashions and eras. DVD Fashion Frenzy 20 mins Discuss fabric and component requirements – cost – note cost for final costing of garment – materials and components. H/W Independent research task explained to inform design development – visual, annotation, sources, planning a questionnaire: Mood board; TMG questionnaire; identify trends/ colours/ themes for A/W or S/S. Comparison of high street skirts on sale; research Key designers - Mary Quant; Chanel; Dior explain the context at the time rather than present day design houses; Zara. 3 weeks homework. Ss make own notes to prepare for homework task.
Sewing Machine.	Revision of using the sewing machines — threading up, using lockstitch and zigzag. Completing a dart sample with some accuracy.	Threading and using the sewing machines independently. Completing a dart sample independently with good accuracy.	T:\Departments\Curriculum\Design and Technology\DT_Textiles 2019\DT_KS3\Y9\Vintage Skirts Revision – threading up – filling a bobbin. H&S on sewing machines and irons. Construction techniques: Methods of controlling fullness - Making a dart – T demo – Ss complete sample and write up method and evaluate sample stuck into books T:\Departments\Curriculum\Design and Technology\DT_Textiles 2019\DT_KS3\Y9\Vintage Skirts
Construction techniques	Revision of using the sewing machines – threading up, using lockstitch and zigzag. Completing a gathering sample with some accuracy	Threading and using the sewing machines independently. Completing a gathering sample independently with good accuracy.	Construction techniques: Methods of controlling fullness – gathering on machines, T demo. Ss write up method and evaluate samples stuck into books. H&S on sewing machines and irons. T:\Departments\Curriculum\Design and Technology\DT_Textiles 2019\DT_KS3\Y9\Vintage Skirts
Construction techniques	Completing pleated samples with some accuracy Building on developing a product specification – must, could, should – 10-12 points justified, with measurable points	Completing pleated samples independently with good accuracy. A fully developed and detailed justified design specification with measurable points considering independent research, TMG and design brief.	Construction techniques: Methods of controlling fullness – pleats using paper strips. Knife pleat; Inverted pleat and Box pleat. Ss write up method and evaluate samples stuck into books. T:\Departments\Curriculum\Design and Technology\DT_Textiles 2019\DT_KS3\Y9\Vintage Skirts Design Specification explained – justify choices against questionnaire/ design brief. Include at least 10 points from brief/ TMG and research.



	considering independent research, TMG and design brief.		
Design Development –	Development of 3 different creative design solutions meeting the design brief and specification	Development of 5 different creative design solutions meeting the design brief and specification. Design work is annotated and	3/5 different design ideas with annotation and colour. Peer evaluation and evaluation of designs against the specification; selection of chosen idea.
Design Development –	Peer feedback is documented. Designs are evaluated against the specification.	well presented in colour. TMG feedback is detailed and aids design development. Designs are fully evaluated against the specification.	3/5 finished design ideas with annotation and colour. Peer evaluation and evaluation of designs against the specification; selection of chosen idea H/W Complete design work in colour with detailed annotation.
Making paper patterns	Ss develop an understanding of how to make a paper pattern for their product.	Working independently from instructions given.	T demo: Making a paper pattern using basic skirt block. How to change the shape, create flare, make shorter, longer, wider, larger, smaller.
Making paper patterns	Adapting basic blocks to fit. Product analysis includes all of the ACCESSFM headings and annotation is detailed.	Worksheet to support independent working. Once paper patterns are completed Ss move on to cutting out fabric.	How to change the hem shape/finish. T revises pattern annotation, balance marks, grain lines, seam allowance. Ss start to make paper patterns for their own designs using independent work sheets as support.
Making paper patterns		Detailed product analysis includes all of the ACCESSFM headings and annotation is thorough – demonstrates that extra research has taken place.	Cutting out – T demo: pinning, marking, cutting. Sustainability, economic use of fabric, waste. NB. Checks and one-way designs. Ss Practical session. One to one support as required. H&S cutting out. H/W Product analysis of a skirt from home (or school skirt) using ACCESSFM prompt sheet.
Garment construction	Ss develop an understanding of how to lay up and cut out their pattern considering grain and one-way designs.	Working independently from worksheet given, planning next steps and problem solving as work progresses.	Ss Practical session. T demo as required Revision of making seams, matching balance marks, darts gathers etc. One to one support as required.
Garment construction	H and S re cutting		H&S when using sewing machines & irons. Planning order of make: Darts
Garment construction			Side seams – seam allowance – tolerance + /5cm Zip insertion – concealed, flat or metal. Waistbands and facings – using interfacing materials
Garment construction			Hems. Finishing buttons, button holes, hook and eye fastenings. H/W Diary of production explained document the step by step making of the
Garment construction			prototype with notes and photographs, evaluated (Quality Control) at each step with risk assessment
Garment construction			
Garment construction			Making catch up. Ss complete garments ready for peer assessment and marking. Wash Labelling and swing tickets.
Evaluation	Ss evaluate prototype product against the design specification identifying strengths and areas that could be improved.	Detailed evaluation of prototype product considering specification, measurable points, design brief and TMG feedback. Costing included.	Evaluation content explained: T explanation of evaluation against the design specification identifying areas to improve and TMG opinion. Include a costing in final evaluation H/W complete evaluation and self-assessment sheet



User Centred Design	Development of different design solutions meeting the H&M design brief	Development of different creative design solutions meeting the design brief. Design work is annotated and well presented in colour.	Extra lesson if required for those students that have completed the practical and evaluation work. Design Challenge - Design Task H&M T:\Departments\Curriculum\Design and Technology\DT_Textiles 2019\DT_KS3\Y9 Hand in books for marking
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