

Year: 7 Subject: Design and Technology - Textiles	Curriculum Intent: Students will develop a firm understanding of a range of useful fibres and fabrics and their properties through the analysis, design, and development of an LED incorporated pencil case. The introduction of subject specific vocabulary and their application will develop student’s ability to communicate their ideas effectively. Students will learn how to use basic tools and equipment through challenging practical activities, learning and using knowledge of health and safety in the workshop to enable them to safely manufacture their product. The skills and knowledge learnt in this rotation build the foundation to year 8 textiles.			
	Year 7 rotation <i>LED pencil case project (Electrotex)</i>			
Topic Titles (in order of delivery)	<ol style="list-style-type: none"> 1. Health and safety 2. Fibres and fabrics – specifically non-woven fabric 3. Product analysis 4. Hand embroidery skills 5. Understanding and exploring a given brief 6. Writing a specification 7. Designing and developing ideas 	<ol style="list-style-type: none"> 8. Creating templates and modelling ideas 9. Learning how to use sewing machine safely 10. Pinning and cutting fabrics accurately and safely 11. Sewing applique 12. Learn how to attach a zip using a sewing machine 13. Learn how to stitch a textiles electronic circuit 14. Evaluating the project and modifying 		
Key knowledge / Retrieval topics	<ul style="list-style-type: none"> • How different hazards should be identified and mitigated in the textiles workshop? • How different fibres and fabrics have different properties and uses? • How does ACCESSFM acronym enable us to evaluate multiple aspects of a product? • How to achieve the best quality outcome using a variety of appropriate tools and equipment? • Why do we analyse products and what do designers do with that information? • What is the purpose of developing ideas and how should these be communicated? • How can you achieve the highest quality outcome from your practical activities? • How does evaluation enable designers to design better products? 			
Understanding / Sequence of delivery	<p>To enable students to conduct their practical activities safely, a knowledge of health and safety specific to the space they will be working in is imperative.</p> <p>Following this, a knowledge of fibres and fabrics enables students to understand why they are working with the chosen materials to support their decision making and understand how they are appropriate for the specific product.</p> <p>With this knowledge and experience they should be able to design a range of suitable designs based on analysis of products and knowledge of materials and processes.</p> <p>These areas of knowledge should then support students moving forward to learning how to use appropriate tools and equipment safely and with the appropriate materials.</p> <p>The final stage of the process is to evaluate their process and outcome to suggest how they might make improvements going forward and reflect upon their learning.</p>			
Key vocabulary	Fibres and fabrics Woven	Needle Thread	Sew Stitch	

	Non-woven knitted Analyse and evaluate Design ideas Annotation Target market	Shears and scissors Thread Sewing machine LED circuit Zip	Applique Seam allowance Templates ACCESSFM
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Assessment		Knowledge and understanding	Design solutions and food choice	Plan and prepare	Practical skills	Analyse and evaluate
	3	Demonstrate relevant knowledge and understanding of principles and processes/ properties.	Produce straightforward solutions that meet the requirements of the problem in familiar and unfamiliar contexts.	Use simple scientific knowledge and mathematical skills to prepare products and select some appropriate materials and equipment.	Safely apply a range of skills, processes and techniques in the production of familiar products/ prototypes/ dishes.	Make straightforward comments about their work and the work of others using some appropriate language and some technical terms.
	2	Demonstrate some relevant knowledge and understanding of principles and processes properties.	Produce basic solutions that meet some requirements of the problem in a familiar context using appropriate means to explain their ideas.	Use some simple scientific knowledge to plan and prepare a simple product including the use of basic mathematical skills.	Safely apply limited skills, processes and techniques in the production of familiar products/ prototypes/ dishes.	Make straightforward and obvious comments about their work and the work of others using everyday language and some technical terms.
	1	Demonstrate limited knowledge and understanding of principles and processes/ properties.	Product limited solutions that meet some requirements of the problem in a familiar context using limited means to explain their ideas.	Use limited scientific knowledge to follow a plan effectively and use basic mathematical skill.	With support, safely apply limited skills, processes and techniques in the production of familiar product/ prototypes/ dishes.	Limited and straightforward comments about their work and the work of others.