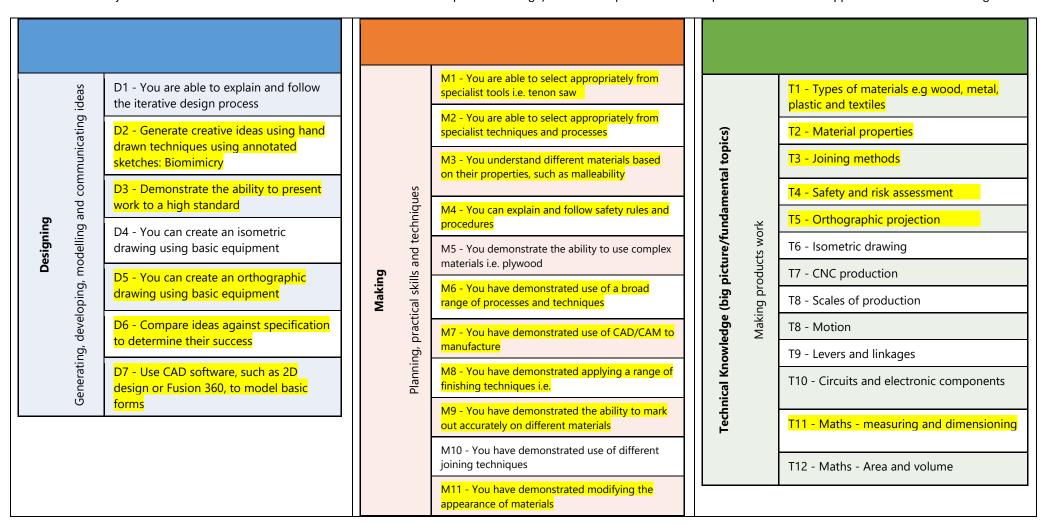## Subject: Fashion
Year group: 8

Project intent: Develop an understanding of a range of decorative techniques and textiles processes. To use this understanding to inform a design and make task.

This project aims to cover a range of decorative techniques used in the Fashion and textiles industry. Students will also gain an understanding of sewing machine skills including safety assessments. These skills will lead in to a design and make task which will guide students not only through the design and make process, including looking at the design brief, specification and design skills but will also enable them to practise and perfect their previously learnt decorative and sewing skills and how to use them creatively.

This Unit will cover topics that are not only fundamental to progression in the Design and Technology curriculum but also the GCSE Design and Technology course. Additionally, this Unit will aim to link with subjects such as Maths and Science in order to build on students' prior knowledge). This will help students develop academic links and appreciate the wider STEM agenda.

Designing
Generating, developing, modelling and communicating ideas

- D1 - You are able to explain and follow the iterative design process
- D2 - Generate creative ideas using hand drawn techniques using annotated sketches: Biomimicry
- D3 - Demonstrate the ability to present work to a high standard
- D4 - You can create an isometric drawing using basic equipment
- D5 - You can create an orthographic drawing using basic equipment
- D6 - Compare ideas against specification to determine their success
- D7 - Use CAD software, such as 2D design or Fusion 360, to model basic forms

Making
Planning, practical skills and techniques

- M1 - You are able to select appropriately from specialist tools i.e. tenon saw
- M2 - You are able to select appropriately from specialist techniques and processes
- M3 - You understand different materials based on their properties, such as malleability
- M4 - You can explain and follow safety rules and procedures
- M5 - You demonstrate the ability to use complex materials i.e. plywood
- M6 - You have demonstrated use of a broad range of processes and techniques
- M7 - You have demonstrated use of CAD/CAM to manufacture
- M8 - You have demonstrated applying a range of finishing techniques i.e.
- M9 - You have demonstrated the ability to mark out accurately on different materials
- M10 - You have demonstrated use of different joining techniques
- M11 - You have demonstrated modifying the appearance of materials

Technical Knowledge (big picture/fundamental topics)
Making products work

- T1 - Types of materials e.g wood, metal, plastic and textiles
- T2 - Material properties
- T3 - Joining methods
- T4 - Safety and risk assessment
- T5 - Orthographic projection
- T6 - Isometric drawing
- T7 - CNC production
- T8 - Scales of production
- T8 - Motion
- T9 - Levers and linkages
- T10 - Circuits and electronic components
- T11 - Maths - measuring and dimensioning
- T12 - Maths - Area and volume

Week	Subject Topic		Key Learning points/big questions	T3 Vocab	Independent/Home learning	Linked Assessment	Resources
	Decorative techniques (3 weeks)			Paper scissors Fabric shears			
1	**Sublimation printing** Repeat pattern design using CAD – Illustrator Repeat pattern design using CAD – Illustrator		**Intentions:** - Understand what sublimation printing is and how to apply it effectively to a suitable piece of fabric. - Understand what CAD and CAM are. - Use CAD to develop a repeat pattern. **Questions:** **Demonstration of CAD CAM sublimation printing by teacher:** What is sublimation printing? How do you ensure successful application of sublimation printing? Which fabric is most suitable for sublimation printing? Why? **CAD - Illustrator to produce a quick repeat print pattern** What does CAD stand for? Why do we use CAD?	Pinking shears Seam rippers Pins Needles Measuring tape Tailors chalk Steam iron Heat press Sewing machine Sublimation Paper scissors Fabric shears Pinking shears Seam rippers	Knowledge organiser self-quiz: Read and revise the main knowledge from your KO, cover and write your own summary. Fill in the box to include any questions for your teacher you may have	**M7: CAD/CAM** **Create a repeat pattern using CAD.** Apply to fabric using sublimation. Exam questions related to the use of CAD/CAM when applying a repeat pattern to fabric.	
2	Apply CAD sublimation print Trial hand sublimation Block printing (Water melon - teams?)		**Intentions** - Understand the advantages and disadvantages of using CAD to apply a pattern to a piece of fabric. - Understand how to accurately and effectively make and apply a 3 colour block print. **Questions:** What are the advantages and disadvantages of using CAD instead of by hand to create and print a repeat pattern? What is block printing? How do you create your own block print? What is the block printing process? How is this done in industry?	Pins Needles Measuring tape Tailors chalk Steam iron Heat press Sewing machine Sublimation Mordant Resist dyeing Seam allowance Annotation Quantitative Qualitative Raw edge	Knowledge organiser self-quiz: Revise the key vocabulary on your KO. Self test your understanding using the sheet provided.	**M11 – Modifying the appearance of materials.** Samples of block printing and sublimation printing.	
3	Dyeing Tie dye sampling		**Intentions** - Evaluate the use of natural dyes and chemical dyes - Understand the best fabrics to use when dyeing - Be able to produce at least 2 tie dye techniques effectively **Questions** Natural Vs Chemical dyes What can be used to naturally dye fabric? Which fabrics are best for dyeing with? Why? How to dye in batch? Resist dyeing – Tie dye What is a mordant?		Knowledge organiser self quiz: Generate 10 questions from the information on your KO. Self test yourself using these questions.	**T1/2: Materials** **M11 – Modifying the appearance of materials.** Samples of dyeing and tie dye produced. Questions about cotton and polyester	