Acle Academy

Year 7, Introduction to Design and Technology: Textiles

Rationale and Context of Unit:	Core curriculum content:	Tier 2 & Tier 3 vocabulary explicitly taught:
Previous knowledge varies due to students attending a wide range of primary schools with some having limited knowledge in textiles and DT. KS2 curriculum follows the same model through KS3 and KS4: Design, Make, Evaluate and technical knowledge. Within this unit, we focus on design, make and technical knowledge. We focus more on evaluate in Year 8 and 9. At KS2 students should be taught research skills which able students to generate, develop, model and communicate a range of ideas. Students take these skills learnt at KS2 and develop new skills at KS3 to design and make a pencil case. Technical knowledge that should have been taught at KS2 is "understand and use electrical systems in their products [for example, series circuits, incorporating switches, bulbs, buzzers and motors]". We use this knowledge to corporate electricals in textiles and introduce e-textiles.	• What is Design and Technology? What is Textiles? • Health and safety within the classroom • Introduction to sewing machines • Machine/hand embroidery • Polymers • Electronics • Woven fabrics • Bonded fabrics This unit teaches the basics of textiles, the skills learnt (for example learning to thread the sewing machine) is an essential skill to have throughout KS3 and KS4. This leads to more independent learning throughout KS3 and KS4 as students have the knowledge and skills to use the sewing machines on their own. The introduction to polymers and electronics within textiles leads to students understanding that you can work with a range of materials and components in textiles, combining them together.	• Components (Standard) • Conductive • LED's, switch, battery (storing energy), resistor • Embroidery • Fibres, yarn, fabric • Woven, Bond, Knitted • Loom

Other technical knowledge they will cover is how fabric is made, how to use the sewing machines and hand embroidery.

This will hopefully allow students to take more risks when designing and be more creative.

Challenge and Support:	World wide learning/ links to 21st century:	Cultural capital/ Industry/ Enrichment:
Examples of projects are provided. Step by steps can be provided for SEND/PP students. WAGOLL are displayed. Keywords clearly visible in classroom. Students are stretched and challenged with their design ideas and practical pieces. Students are able to challenge themselves by using a range of techniques and materials on their finished practical pieces. The project also allows the students to stretch and challenge themselves by designing for different users where they are research into their user requirements.	We look at the global and social impact with the production of plastic and natural fibres. ● Plastic – environment ● Natural fibres – links to farming	As stated from the Design and technology programme of study "High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation." 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.
Historical, Social, Moral, Spiritual, Cultural context:	Cross curricular links/ literacy/numeracy:	Common misconceptions:
● Historical – loom, woven fabrics, ● Historical – hand embroidery – Bayeux Tapestry ● Moral – use of plastics	● This unit covers textiles, electronics and polymers so a large amount of material knowledge from the Design and technology curriculum. ● Cross curricular to science (electronics and plastics)	● Students are unaware how fabric is made and where fibres come from.

- Numeracy – measuring- producing working drawings.
- Homework – opportunities for students to produce extended writing pieces (e.g. The impact on plastic in the environment)
- Opportunities for students to speak in front of the class – peer assessment of design ideas and presenting their homework.

Assessment timeline:

Textiles is delivered as part of a carousel system within the Creative Industries Faculty, alongside Computer Science, Food, and Product Design. This structure allows each subject to be taught over a focused period of approximately nine weeks per academic year. Within this timeframe, students engage in a broad range of activities designed to develop both practical and theoretical understanding of Textiles, ensuring they gain meaningful exposure despite the short delivery window.

Assessment in Textiles is split equally between two key areas: subject knowledge and employability skills, each marked out of 50. Subject knowledge assessments evaluate students' understanding of design principles, materials, processes, and the ability to apply this knowledge to problem-solving tasks. The employability assessment is bespoke to Textiles and assesses a range of transferable skills such as creativity, teamwork, time management, and independent thinking—key attributes valued by employers within the creative industries.

All student achievements are logged by teaching staff on the KS3 subject tracking sheet to ensure consistent monitoring of progress across the faculty. In addition, individual achievement scores are recorded on the front of student books, providing a clear and accessible reference for students and parents. The Creative Industries Faculty prides itself on being forward-thinking, consistently integrating the latest technologies to enhance teaching and learning. This aligns with government guidance and supports students in developing digital literacy as part of their broader educational experience.

Subject Knowledge:

Literacy

Employability Skills:

Students will develop and demonstrate key employability skills through a textiles project focused on hand embroidery and practical construction techniques. They will learn and apply a range of decorative

Electronics	and functional textile skills, including running stitch, back stitch, cross stitch, and sewing on buttons, before producing a clear step-by-step guide for one of these methods. To consolidate their learning, students will design and make a zip pencil case, combining their hand-sewing skills with accurate machine stitching to create a high-quality final product. This project encourages precision, problem-solving, creativity, and independence—essential skills for both the textiles industry and wider future employment pathways—while allowing students to gain confidence in using tools, materials, and sewing machinery safely and effectively.
Materials and Components	
Fabric and Fibres	
Exam: 50 marks	
	Practical: 50 marks

Home learning

Home learning in Textiles is set in accordance with the subject's home learning schedule, which is available through the Acle Academy website. These tasks are carefully designed to reinforce both the subject knowledge and employability skills assessment areas that are implemented into the classroom. By supporting the curriculum in this way, students can consolidate their understanding of key concepts and continue developing transferable skills such as problem-solving, creativity, and time management beyond the classroom setting.

To support independent learning, subject-specific YouTube playlists have been created and curated to align directly with classroom content. These playlists include a range of resources, such as instructional videos, practical demonstrations, and relevant theory-based content. Where appropriate, audio books or audio versions of set literacy texts are also included, allowing students to access content in a format that suits different learning styles. This approach encourages students to take ownership of their learning while making use of high-quality digital resources that complement and enhance their in-school experience.

Feedback

Feedback plays a vital role in the delivery of practical subjects within the carousel system, including Textiles. Due to the hands-on nature of the curriculum, verbal feedback is an essential tool for effective teaching and learning. This ongoing, in-the-moment dialogue allows teachers to guide students through processes, correct errors as they occur, and reinforce good practice. Evidence of this approach can be seen in focused, purposeful classroom environments where students are actively engaged and responsive to teacher input.

To further support learning, structured strategies such as WWW (What Went Well), EBI (Even better if) and WAGOLL (What A Good One Looks Like) are embedded within lessons. These strategies help students to reflect on their own work, recognise strengths, and understand expectations through high-

quality exemplars. Peer and self-assessment opportunities are often built into practical tasks, enabling students to become more independent and reflective learners.

To complete the feedback loop, students review their Subject Knowledge assessments with reference to personalised feedback provided via their school email accounts. This process encourages students to identify and address any misconceptions, reinforcing personal responsibility and promoting continuous improvement. By reviewing assessment outcomes and targeted feedback, students can take clear, informed steps to improve their understanding and performance in future tasks.

Length of unit (duration indicated in lessons)

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Health and safety What is Design and Technology? What is Textiles? Sewing machines Hand embroidery	Design and make a pencil case	Polymers Electronics	Where do fabrics comes from? Natural fibres Weaving and felting (Woven and bonded fabrics)	**Exam**

Year 7

Bobbin, Take-up Lever, Hand Wheel, Reverse, Stitch Width, Stitch Length, Foot Pedal, Spool, Plate Bed

Equipment

Needles

Sewing Machine

Embroidery Needle

Craft Punch

Paper Scissors

Fabric Shears

Craft Mat

Components

Buttons

Embroidery Threads

Ribbon

Sequins

Materials

Wood Veneer

Felt

Polymorph
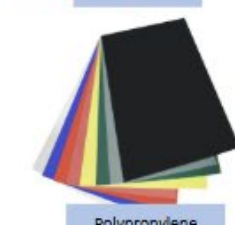
Polypropylene

Electronics

Series Circuit

INPUT

PROCESS

OUTPUT

Parallel Circuit

Battery

Buzzer

Bulb

LED

Resistor

Switch
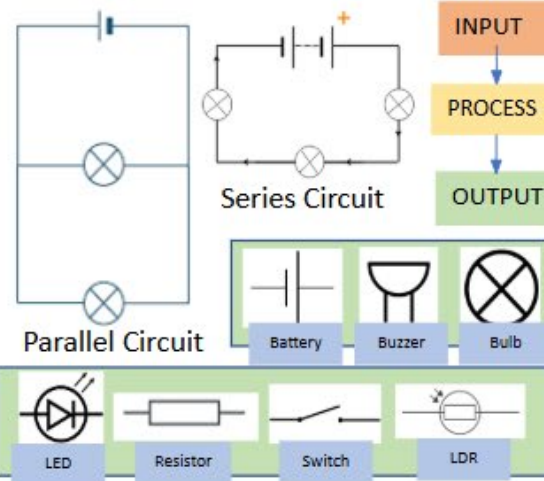
LDR

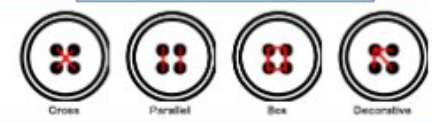Hard to spell words: Scissors, Stitch, Measure, Pieces, Sewing, Design

Cross Stitch

How to stitch on buttons?

Cross

Parallel

Box

Decorative

How fabric is made?

Natural Fibres

Cotton

FIBRE ➤ YARN ➤ FABRIC

Silk

Woven Fabric

Plain Weave

Weft

Warp

Cotton

Twill Weave

Loom

Denim