

THOMAS MILLS HIGH SCHOOL
Department Curriculum Overview: Design Technology / Textiles

Year	Term	Topic	Subject Knowledge and Skills	SMSC/FBV/PSHEE/Careers / National Curriculum/PSHE Ref
10	Autumn	Core theory Construction – wearable electronics	<p>Knowledge:</p> <ul style="list-style-type: none"> Extend student knowledge of Section A: 'Core' content: mechanical devices, timber, polymers, metals, electronics, paper and board, SMART and modern materials; be able to apply 'core' knowledge to make informed choices; develop creative, technical and practical expertise; build and apply a repertoire of knowledge, understanding and skills in order to design and make a high quality product; evaluate and test design ideas and products and review the work of others. <p>Key skills and learning outcomes:</p> <ul style="list-style-type: none"> Develop the skills and knowledge required to successfully complete Section A: 'Core' of the written exam paper; demonstrate the knowledge, understanding and skills needed to engage in an iterative process of designing and making – Christmas themed pin badge which incorporates electronic components to form a simple circuit (input: switched battery, conductive thread, LED and output: light) be given regular opportunities to consolidate their literacy and numeracy skills by applying them purposefully in order to learn. 	<p>Edexcel GCSE Design and Technology: Textiles (1DT0/01)</p> <p>SMSC: Identify environmental issues associated with the manufacture of timber, polymers, metals, paper and board – raw materials, processing, transportation and packaging. Identify environmental issues associated with disposal of 'core' materials: landfill vs. recycle or reuse.</p> <p>FBV: Mutual respect Students work collaboratively and support in each other in the manufacture of quality products.</p> <p>PSHE: Students work safely and effectively using a wide range of specialist equipment. Students are encouraged to develop competence in a wide range of skills which they may access in the future.</p> <p>CAREERS: Students are introduced to career opportunities within fashion and textiles.</p>
Assessments			<p>There are 4 Standardised Assessed Tasks for this topic. They are:</p> <p>Standardised Assessed Task 1: 'Core' knowledge assessment – metals. (Marked - TEAMS)</p> <p>Standardised Assessed Task 2: 'Core' knowledge assessment – timbers. (Marked - TEAMS)</p> <p>Standardised Assessed Task 3: 'Core' practice exam questions. (Marked and graded)</p> <p>Standardised Assessed Task 4: Apply knowledge and skills to make a high-quality product. (Marked and graded)</p>	

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10	Spring	Practice NEA – Theme: Sustainability and Recycling	<p>Knowledge:</p> <ul style="list-style-type: none"> Extend knowledge and understanding of environmental issues: sustainability, processing, transportation, wastage, pollution, deforestation, oil extraction, recycling, disposal, packaging and wildlife habitat loss; extend knowledge of the NEA component of the GCSE qualification: ‘Investigate’, ‘Designing’, ‘Making’ and ‘Evaluate’ <p>Key skills and learning outcomes:</p> <ul style="list-style-type: none"> Demonstrate the knowledge, understanding and skills needed to engage in an iterative process of designing and making; ‘Investigate’ – research and investigation methods: analysis of the theme, ACCESSFM, questionnaire, design brief, specifications ‘Designing’ – utilise a range of communication techniques to show the development of design ideas. 3D paper modelling ‘Make’ and ‘Evaluate’ – use a range of specialist equipment and construction skills to produce a prototype product suitable for testing ‘in use’ be given regular opportunities to demonstrate and apply knowledge and understanding of textiles and the environment. 	<p>Edexcel GCSE Design and Technology: Textiles (1DT0/01)</p> <p>SMSC: Identify environmental issues associated with the manufacture of textiles – raw materials, processing, transportation and packaging. Identify environmental issues associated with disposal of fabrics: landfill vs. recycle or reuse.</p> <p>FBV: Mutual respect Students work collaboratively and support in each other in the manufacture of quality products.</p> <p>PSHE: Students work safely and effectively using a wide range of specialist equipment. Students are encouraged to develop competence in a wide range of skills which they may access in the future.</p> <p>CAREERS: Students are introduced to career opportunities within fashion and textiles.</p>
Assessments			<p>There are 4 Standardised Assessed Tasks for this topic. They are:</p> <p>Standardised Assessed Task 1: Regular ‘Investigate’ assessment and feedback using RAG mark scheme. (Marked)</p> <p>Standardised Assessed Task 2: Regular ‘Designing’ assessment and feedback using RAG mark scheme. (Marked)</p> <p>Standardised Assessed Task 3: Final assessment of the practice NEA – written evidence. (Marked and graded)</p> <p>Standardised Assessed Task 4: Final assessment of the practice NEA – practical outcome. (Marked and graded)</p>	

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10	Summer	Year 10 preparatory exam NEA Themes issued by Edexcel – 1 st June	<p>Knowledge:</p> <ul style="list-style-type: none"> • Extend understanding of the format of the GCSE exam paper: section A ‘Core’ and section B ‘Textiles’ and application of numeracy skills; • develop revision strategies; • begin the NEA component of the final GCSE qualification: ‘Investigate’ <p>Key skills and learning outcomes:</p> <ul style="list-style-type: none"> • Review, select and apply effective revision strategies; • identify generic question formats: properties of materials, application of numeracy skills, process question, design/drawing question, essay/long answer questions; • demonstrate the knowledge, understanding and skills needed to engage in an iterative process of designing and making - NEA; • NEA ‘Getting started’: A3 border • NEA ‘Investigate’: research and investigation methods - analysis of the themes (brainstorm), identification of one contextual challenge, investigate the contextual challenge; • use conclusions/summaries to demonstrate consideration of the iterative design process. 	<p>Edexcel GCSE Design and Technology: Textiles (1DT0/01) and NEA (1DT0/02)</p> <p>FBV: Mutual respect Students work collaboratively and support in each other in the manufacture of quality products.</p> <p>PSHE: Students work safely and effectively using a wide range of specialist equipment. Students are encouraged to develop competence in a wide range of skills which they may access in the future.</p> <p>CAREERS: Students are introduced to career opportunities within fashion and textiles.</p>
Assessments			<p>There are 4 Standardised Assessed Tasks for this topic. They are:</p> <p>Standardised Assessed Task 1: Year 10 preparatory exam. (Marked and graded) Standardised Assessed Task 2: RAG assessment – A3 border and title page. (Marked) Standardised Assessed Task 3: RAG assessment – Brainstorm of the themes and conclusion. (Marked) Standardised Assessed Task 4: RAG assessment – Research of the chosen contextual challenge. (Marked)</p>	