## KS4 CURRICULUM: TEXTILES (YEAR 10)

## Overview

In Textiles you will learn about:

- Core design and technology principles with some emphasis on maths and science skills
- In-depth knowledge of how different materials and manufacturing processes are used to design and make products.

	Focus / Topic	Knowledge & Skills	Assessment
Autumn 1	Core Design and Technology Content  • Mini contextual challenge (Tabard design and make project)	<ul> <li>Impact of new and emerging technologies</li> <li>Informing design developments</li> <li>How energy is generated and stored</li> <li>Modern and smart materials</li> <li>The functions of mechanical devices</li> <li>Electronic systems</li> </ul>	<ul> <li>Maths formative assessment homework on Google classroom</li> <li>Half Term Test on theory content covered (w/b 14<sup>th</sup> October 2019)</li> </ul>
Autumn 2	Core Design and Technology Content  Mini contextual challenge (Tabard design and make project)	<ul> <li>The use of programmable components</li> <li>The categorisation of the types, properties and structure of ferrous and non-ferrous metals</li> <li>The categorisation of the types, properties and structure of papers and boards</li> </ul>	Assessment week (w/b 11th November 2019)
Spring 1	Specialist Material Categories (Textiles)  • Mini Contextual challenge – Manufacture (Skirt project)	<ul> <li>The categorisation of the types, properties and structure of natural, synthetic, blended and mixed fibres and woven, non-woven and knitted textiles</li> <li>Developments in modern and smart materials, composite materials and technical textiles</li> </ul>	<ul> <li>Maths formative assessment test on Google classroom</li> <li>Half Term Test on theory content (w/b 10<sup>th</sup> February 2020)</li> </ul>
Spring 2	Specialist Material Categories (Textiles)  • Mini Contextual challenge – Manufacture (Skirt project)	<ul> <li>Impact of forces and stress on textiles products.</li> <li>Typical stock forms, types and sizes used for textiles</li> <li>Processes used to manufacture products to different scales of production.</li> <li>Specialist techniques used for high quality textiles prototypes.</li> <li>Surface treatments and finishes.</li> </ul>	<ul> <li>Maths formative assessment homework on Google classroom</li> <li>Half Term Test on theory content (w/b 30<sup>th</sup> April 2020)</li> </ul>
Summer 1	Specialist Material Categories (Textiles)  • Mini Contextual challenge – Manufacture (Skirt project)	<ul> <li>Investigate social and economic challenges</li> <li>Investigate the work of others</li> <li>Avoiding design fixation</li> <li>Developing design ideas</li> </ul>	<ul> <li>Maths formative assessment homework on Google classroom</li> <li>Half Term Test on theory content (w/b 18<sup>th</sup> May 2020)</li> </ul>
Summer 2	Non-exam assessment	<ul> <li>Contextual challenge – Investigate</li> <li>Contextual challenge – Specification</li> <li>Contextual challenge – Design</li> </ul>	End of Year exams (w/b 22nd June 2020 for 2 weeks)

## Further Information

- Exam board: Pearson Edexcel
- Component 1 (1DT0/1E): Written paper (100 Marks 2 Hours) (50% of GCSE 9-1)
- Component 2 (1DT/02): Iterative Design Challenge Non-exam Assessment (100 Marks Approx. 40 hours) (50% of GCSE 9-1)