

Subject	KS4 Threshold Concepts	How to support students' learning
<p><b>Year 9</b></p>	<p>During year 9, students will build on the skills learned in KS3 and develop these and more to prepare for the GCSE NEA. Students will also do revision during each session to enhance their knowledge and understanding of the theory required for the examination in year 11 which is worth 50% of the final GCSE grade.</p> <p>Students will complete three projects in year 9 which have been designed to cover a range of disciplines in Technology.</p> <p><b>Project Aims:</b></p> <ul style="list-style-type: none"> <li>○ To develop strong observational skills</li> <li>○ To develop skills in drawing using Isometric and perspective techniques</li> <li>○ To develop presentational skills</li> <li>○ To learn how to analyse products in detail</li> <li>○ To become aware of several designs/design companies and research 2 in detail</li> <li>○ To develop skills to develop designs by studying work from others</li> <li>○ To develop high quality modelling techniques</li> <li>○ To develop skills in evaluating their work successfully</li> <li>○ To learn how to produce a mini design and make project from start to finish</li> <li>○ To develop knowledge and understanding of materials/manufacturing processes/workshop skills</li> </ul> <p><b>Term 1</b></p>	<ul style="list-style-type: none"> <li>● Encourage your child to keep up with the set in session. This can involve completing a task set in session or it could be a new task. Exemplars of the task will always be available on the Online Curriculum to support students.</li> <li>● Encourage your child to practise the new skills learned in session. Particularly the drawing exercises as these will be required to be used in the NEA and examination.</li> <li>● Encourage your child to enhance their technique further by following YouTube tutorials.</li> <li>● <a href="#">One Point Perspective</a></li> <li>● <a href="#">Two Point Perspective</a></li> <li>● <a href="#">Three Point Perspective</a></li> <li>● <a href="#">Isometric drawing</a></li> <li>● Encourage your child to view the projects to support their learning here: <a href="#">Year 9 - Portal (ttsonline.net)</a></li> <li>● Encourage your child to be safe in the workshop by reviewing the H&amp;S information of the tools and equipment that can be used, found on the curriculum here : <a href="#">Health Safety - Portal (ttsonline.net)</a></li> <li>● Encourage your child to practise the Maths element of the course as 15% of the examination will be mathematically based: <a href="#">GCSE - Maths Skills for Design and Technology - Portal (ttsonline.net)</a></li> <li>● Encourage your child to revise the theory needed for the examination in year 11, worth 50% of the GCSE grade. Students have been provided with an AQA revision guide, or they can use the revision resources here: <a href="#">GCSE Design and Technology Revision - Portal (ttsonline.net)</a></li> </ul>

**Project – Design and Designers**

**Skills and Processes**

What is GCSE Design and Technology?  
Isometric drawing techniques  
One-Point Perspective  
Two-Point Perspective  
Three-Point Perspective  
Rendering Techniques  
Observational drawing and communication of ideas revision  
Product Analysis and designer revision  
To become inspired and Companies revision  
Design Development  
Final Design and ACCESSFM

**Term 2**

**Project - Architectural Design**

**Skills and Processes**

To Identify a variety of papers and boards  
To be able to use Grid paper effectively to plan the room structure for the house design  
Be able to use cutting equipment with confidence  
Demonstrate 2 pt perspective technique  
Demonstrate modelling skills  
Create an accurate foamboard architectural model

**Term 3**

**Project – Be on Time in Style**

**Skills and Processes**

Develop knowledge and understanding of several iconic designers/design movements  
Extend expertise by doing in depth independent research on Memphis  
Build confidence in sketching and presentation skills  
Demonstrate knowledge and understanding of client by producing a range of creative models  
Demonstrate confidence in 3d sketch modelling skills  
Planning for manufacture  
Demonstrate knowledge and understanding of using tools and equipment accurately and safely  
Build confidence in the workshop  
Evaluate the process of production in a reflective way

**Key Vocabulary:**

Horizon, Vanishing points, Rendering, Thick and thin line technique, Presentation/communication, Tone, Creativity  
Imagination, Sketch, Proportion, Scale, Technique, Detail, Refine, textures, Crating, Investigation, Communication, System diagrams, annotations, exploded drawings  
Anthropometrics, orthographic drawings, mathematical modelling, prototypes, testing, ACCESSFM, Investigation, Inspiration, Speed sketching, Situation, Design Brief  
Specification, Room layout, grid paper, floor plans, Foamboard, cutting knife, cutting matt, safety rule, crease, score, cutting, Ettore Sotsass, Memphis, style features, isometric drawing, Pattern, geometric, symmetrical, colourful, angular, Client/customer needs, creativity, imagination, think outside the box, Iteration, PPE, H&S, accuracy, evaluation

--	--	--