

Subject	KS4 Threshold Concepts	How to support students' learning
Year 9	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. Students will complete three projects in year 9 which have been designed to cover a range of disciplines in Technology. Project Aims: • To develop skills in drawing using Isometric and perspective techniques • To develop presentational skills • To learn how to analyse products in detail • To become aware of several designs/design companies and research 2 in detail • To develop skills to develop designs by studying work from others • To develop high quality modelling techniques • To develop skills in evaluating their work successfully • To learn how to produce a mini design and make project from start to finish • To develop knowledge and understanding of materials, manufacturing processes and workshop skills	• 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 in the students' Teams area. • Encourage your child to practice the new skills learned in session. Particularly the drawing exercises as these will be required to be used in the NEA and examination. • Encourage your child to enhance their technique further by following YouTube tutorials. • One Point Perspective • Two Point Perspective • Three Point Perspective • Isometric drawing • Encourage your child to view exemplar work to support. Exemplar work will be shared with students every lesson and they can be accessed in their Teams area. • Encourage your child to practice the Maths element of the course as 15% of the examination will be mathematically based. Support will be provided in their Teams area. • 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 in their Teams area. STEM Learning also has a variety of GCSE support.
Term 1	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 • KAP: Communication techniques
Term 2	Project - Architectural Design Skills and Processes • 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 • KAP: Paper and Board
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 clients 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 • KAP: Timber
	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 Sottsass, 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
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