

CURRICULUM PROGRESSION PATHWAYS								
SUBJECT: DESIGN AND TECHNOLOGY								
Quality of Education: Curriculum is planned and sequenced so that new knowledge and skills build on what has been taught before and leads towards a clearly defined end point.								
Vision: We aim for our students to meet demands of an ever-changing technological world by building a repertoire of skills and knowledge that encourages creativity, independence, and reflective thinking.								
HOD: Mr J Case 2022/23	KS3:			KS4 GCSE AQA Design and Technology		Further Education and training, Careers		
	Assessments: Testing on theory and vocabulary. Evaluating- peer on peer assessment			Year 7	Year 8	Year 9	Year 10	Year 11
Textiles Knowledge:	Project: Fully equipped Recycling, Reusing, Texture, Sensory - smart materials Engraving and printing Material: Calico, felt	Project: Activity centre Recycling, Reusing, Texture Sensory - smart materials Engraving and printing Material: various fabrics and notions	Project: Upcycling Recycling, reusing, reducing, repairing. Environmental issues Material: various fabrics and notions	AQA Design Technology Introduction: Written exam: 2 hours 50% of GCSE 50% Practical coursework NEA Projects: Miniature chair and upholstery Knowledge: New and emerging Technologies Industry/ Enterprise / Sustainability Automation - technology push/market pull affects choice. Changing job roles due to technological change. Culture / Society / Environment / Production techniques and systems Critical evaluation of new and emerging technologies informs design decisions Classification and properties of Materials Skills: Exam skills Longer mark question responses Practising reading and analysing exam questions Designing and making joints under controlled conditions	Non-exam assessment will contribute towards 50% of the student's overall mark. The NEA project in its entirety should take between 30–35 hours to complete and consist of a working prototype and a concise portfolio of approximately 20 pages of A3 paper, equivalent A4 paper or the digital equivalent Knowledge: Designing and making Electronic and mechanical systems Wood metals and polymers Textiles Paper and board. Using materials efficiently Manufacturing Specifications Developing and prototypes Evaluation. Skills: Making design strategies Prototype development Communication of design ideas - 2d and 3D Responding to exam criteria/questions Creating a3 portfolio Structuring a body of work	Apprenticeships product designer, theatre set carpenter, farrier, service technician, civil engineer, plumber, design and draughting technician. model maker A levels design and technology, product design (3D), product design (textiles), systems and control technology, Related subject: Art, graphic design, media, music technology, computing, maths, physics, photography, sculpture, textiles, engineering, architecture.		
Textiles Skills:	Hand embroidery, Embellishment, Applique, Running stitch, Zig/zag, Couching, Sewing machine driving licence	Applique, Fabric Pens, Hand embroidery, Templates, Patterns Seams, Models/prototypes, Pillow stuffing, Zip	Applique, Fabric Pens, Hand embroidery, Templates, Patterns Seams, Models/prototypes, Zip, buttons, lining, shoulder strap/belt, fastening.					
Resistant materials Knowledge:	Project: Kinetic toy Planning, Timescales, Creative designing Materials, Wood, Pine, MDF. Acrylic	Project: Mechanical device 3D printing , Intricate 2D designing using CAD/CAM, Engraving methods, hand or machine Materials: Metal, Wood, plastic	Project: Fashion accessory 3D printing, Intricate 2D designing using CAD/CAM, Engraving methods hand or machine, Metals, Design and Technology key designers and industrial influences					
Resistant materials skills	Woodwork, CAD/CAM skills, Technical Drawing skills , Plastic skills, Sander, Pillar drill, Modelling/prototypes	Woodwork, CAD/CAM skills, Technical Drawing skills, Plastic skills, Sander, Laser cam, threading - tap and die, bright drawn mild steel rods	Lathe both metal and wood. Pewter casting, CAD/CAM, 3D printing and modelling, resin work					
Graphics/Product design Knowledge:	Project: DIY Wrapper Planning, Timescales, Creative designing Materials : paper and board – Different GSM card and corrugated card	Project: Celebration Working and physical properties of paper and board – including smart materials, Tabs, CAD/CAM, Intricate designs, Mass production Silhouettes, Recycling Materials : paper and board – Different GSM card and corrugated card	Project: Presentation Orthographic drawing, Lamination, Manufactured boards, Wood treatments and finishes, vacuum forming, inserts					
Graphics/Product design Skills:	Paper and board, Vinyl. CAD/CAM, Technical Drawing skills , Craft knife skills, Safety ruler, CNC, Vinyl cutting, Simple vector, Modelling/ prototypes	Bone creaser, Embossing, Scoring, Adhesive, craft knives, Models and prototypes	Woodwork, Creating nets, Vacuum forming, Patterns, Laser cutting, Typography					