

Year	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
7	<p>Topic: Door Hanging Signage.</p> <p>Resources: Custom workbook, Drawing equipment, MDF blanks, Workshop tools and machinery.</p> <p>Focus: Marking out using basic geometry using a range of tools. Making door hanger . Investigation into potential user. Design Ideas.</p> <p>Outcome: Awareness of user-centred designing to create unique design solutions. Practical experience.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Door Hanging Signage.</p> <p>Resources: Custom workbook, Drawing equipment/card, MDF offcuts, Workshop tools and machinery .</p> <p>Focus: Design development. Use of templates. Making design additions. Use of increased range of tools and equipment.</p> <p>Outcome: Unique practical outcome. Increased workshop experience and confidence.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Door Hanging Signage.</p> <p>Resources: Custom workbook, Workshop tools and machinery, CAD/CAM equipment, Acrylic paint.</p> <p>Focus: Making final door hangers, CAD/CAM additions using Laser cutter and Vinyl cutter. Decorating and finishing techniques using paint.</p> <p>Outcome: Unique practical outcome. Awareness of commercial production techniques. Completed workbook showing full designing & making cycle.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Sea life Pewter Jewellery.</p> <p>Resources: Custom workbook, Image bank/ internet research, Drawing equipment/templates.</p> <p>Focus: Health & Safety Induction. Investigation into jewellery from around the world. Investigation into sea life. Design ideas.</p> <p>Outcome: Independent analysis of task and research materials. Range of unique ideas.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Sea life Pewter Jewellery.</p> <p>Resources: Custom workbook, Drawing equipment/templates, MDF mould blocks, Workshop tools and machinery, Pewter & casting equipment.</p> <p>Focus: Development and evaluation of ideas using iterative designing processes and peer feedback techniques. Introduction to hand tools and basic machinery. Making moulds and casting. Tools & materials processes theory.</p> <p>Outcome: Unique design solutions. Initial practical experience with basic tools and processes. Unique cast pewter jewellery piece.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Sea life Pewter Jewellery.</p> <p>Resources: Custom workbook, Pewter finishing and polishing equipment.</p> <p>Focus: Making, finishing & polishing using a range of processes. Focus on high quality outcomes. Consideration of costings and commercial considerations. Testing & evaluation.</p> <p>Outcome: Completed unique jewellery piece. Completed workbook showing full designing & making cycle.</p> <p>Duration: 3-4 lessons.</p>

8	<p>Topic: Custom Clock</p> <p>Resources: Custom workbook. MDF strip cut to length. Workshop tools and machinery.</p> <p>Focus: Health & Safety Refresher. Marking out basic clock frame using a range of processes. Cutting MDF using a range of tools and machinery. Planning, tools & materials processes theory.</p> <p>Outcome: Range of new skills developed, increased practical experience and confidence. Awareness of planning for making and documenting practical stages.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Custom Clock</p> <p>Resources: Custom workbook. MDF—various pieces. Workshop tools and machinery.</p> <p>Focus: Cutting, joining and finishing MDF using a range of tools and machinery. Planning, tools & materials processes theory.</p> <p>Outcome: Opportunity to use a wide range of machinery with independence and confidence. Assembly and finishing skills. Completed clock frame finished to a high standard ready for customisation.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Custom Clock</p> <p>Resources: Custom workbook. Completed clock frame from block 1&2. Drawing equipment/ card. Various timber offcuts. Workshop tools and machinery.</p> <p>Focus: Investigating design opportunities to customise the previously made clock frame. Developing iterative design skills, investigating aesthetics and functionality. Planning for making through templates and cutting lists. Decorative and finishing skills using CAD/CAM, paint and associated techniques.</p> <p>Outcome: Fully customised clock with added features and functions.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Bird Feeder.</p> <p>Resources: Custom workbook. Aluminium sheet. Marking out, cutting, shaping and forming tools for metal.</p> <p>Focus: Using a range of new tools and equipment to work with aluminium with precision. Engineering principles. Working with others to develop and model design solutions. Tools & materials processes theory.</p> <p>Outcome: Awareness of career pathways and practical outcomes within engineering. Developed models of outcomes prior to making.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Bird Feeder.</p> <p>Resources: Custom workbook. Aluminium sheet. High Impact Polystyrene (HIPS). Vacuum former. Workshop tools and machinery.</p> <p>Focus: Using knowledge of metals and plastics and associated tools and machinery to plan a customised birdfeeder. Environmental impacts.</p> <p>Outcome: Designs and plans for a customised birdfeeder. Increased practical experience with new materials, machinery and processes.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Bird Feeder.</p> <p>Resources: Custom workbook. Aluminium sheet. High Impact Polystyrene (HIPS). Vacuum former. Workshop tools and machinery.</p> <p>Focus: Using knowledge of metals and plastics and associated tools and machinery to make a customised birdfeeder. Joining different materials. Environmental impacts.</p> <p>Outcome: Final customised birdfeeder using aluminium and High Impact Polystyrene. Increased practical experience with new materials, machinery and processes.</p> <p>Duration: 3-4 lessons.</p>
	<p>Topic: Timber - Skills Box</p> <p>Resources: Custom workbook. Pre-cut length of Pine timber. Workshop tools and machinery.</p> <p>Focus: Isometric design drawing and rendering skills. Investigating timber joinery techniques. Soft woods & Hard woods theory. Making and assembly of box.</p> <p>Outcome: Range of new practical skills and theory knowledge developed.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Timber - Skills Box</p> <p>Resources: Custom workbook. Timber offcuts Workshop tools and machinery. CAD/CAM equipment.</p> <p>Focus: Manufactured boards theory. Investigating design movements. Making and assembly of box. Adding internal and external features with use of workshop equipment and CAD/CAM.</p> <p>Outcome: Range of new practical skills and theory knowledge developed.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Timber - Skills Box</p> <p>Resources: Custom workbook. Timber offcuts Workshop tools and machinery. CAD/CAM equipment.</p> <p>Focus: Manufactured boards theory. Investigating design movements. Making and assembly of box. Adding internal and external features with use of workshop equipment and CAD/CAM.</p> <p>Outcome: Customised box completed with decorative features linked to chosen design movement.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Polymers - Phone Holder</p> <p>Resources: Custom workbook. Modelling materials and tools. Workshop tools and machinery.</p> <p>Focus: Polymers - 'raw material to stock forms' theory knowledge. Design ideas, modelling using a range of materials; card, high density foam, plastic offcuts.</p> <p>Outcome: Range of new practical skills and theory knowledge developed. Awareness of using the iterative design process.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: Polymers - Phone Holder</p> <p>Resources: Custom workbook. Acrylic and High Density Polystyrene offcuts. Workshop tools and machinery.</p> <p>Focus: Plastic production processes. Iterative designing. Cutting/shaping/ forming plastics and associated materials. Assembly and finishing.</p> <p>Outcome: Range of new practical skills and theory knowledge developed. Finished product developed after several modelling stages.</p> <p>Duration: 3-4 lessons.</p>	<p>Topic: STEM Challenges</p> <p>Resources: Variety of workshop materials and equipment.</p> <p>Focus: A selection of individual and team-based problem solving challenges. Bridge building, flying machines, marble run, batch production exercises.</p> <p>Outcome: Increased awareness of STEM subjects developed.</p> <p>Duration: 3-4 lessons.</p>

10	<p>Topic: Ergonomics & Anthropometrics</p> <p>Resources: Ergonomic template. Uncased USB memory stick. Modelling materials and tools. Workshop tools and machinery.</p> <p>Focus: 'Designing & Making Principles' Ergonomics & Anthropometrics. Designing for a target market. CAD design & modelling.</p> <p>Outcome: Theory relating to exam content. Finished product developed after several modelling stages.</p> <p>Duration: 9 lessons.</p>	<p>Topic: Manufacturing Skills - Flat Pack Rack.</p> <p>Resources: Pre-cut timber blanks. Templates, jigs, knock down fittings. Workshop tools and machinery.</p> <p>Focus: Designing & Making Principles' Flat Pack Furniture concepts. Quantity production. Quality Control. Assembly, finishing, packaging.</p> <p>Outcome: Finished & packaged product.</p> <p>Duration: 9 lessons.</p>	<p>Topic: Sustainable Design</p> <p>Resources: Offcut and reclaimed materials. Workshop tools and machinery.</p> <p>Focus: Industrial production. 'Impact on Society' aspects of designing and making. Sustainability making challenge. Revision Begins alongside project work: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Sustainably designed product. Increased exam awareness.</p> <p>Duration: 9 lessons.</p>	<p>Topic: The 'Work of Others' - Design & Make task.</p> <p>Resources: Full workshop/ material access.</p> <p>Focus: Designing to a theme in the style of prominent designers. Demonstrating independence when investigating/designing. Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Increased awareness of GCSE level design processes. Increased exam awareness.</p> <p>Duration: 9 lessons.</p>	<p>Topic: The 'Work of Others' - Design & Make task.</p> <p>Resources: Full workshop/ material access.</p> <p>Focus: Making to a theme in the style of prominent designers. Demonstrating independence when making/testing. Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Increased awareness of GCSE level making processes. Increased exam awareness.</p> <p>Duration: 9 lessons.</p>	<p>Topic: Exam Revision / Non Exam Assessment (NEA).</p> <p>Resources: Revision guides and materials. Google Classroom NEA portfolio.</p> <p>Focus: Pre public exam revision. NEA tasks released 1st June: Analysis preparation.</p> <p>Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Increased awareness of GCSE Exam and NEA work.</p> <p>Duration: 9 lessons.</p>
11	<p>Topic: Non Exam Assessment (NEA) 100 marks total (50% of grade)</p> <p>Resources: Google Classroom Portfolio Guidance worksheets.</p> <p>Focus: NEA Sections: A: Investigation (10 marks) B: Brief & Specification (10 marks).</p> <p>Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Student independent outcomes.</p> <p>Duration: Dependent on student.</p>	<p>Topic: Non Exam Assessment (NEA)</p> <p>Resources: Google Classroom Portfolio Guidance worksheets.</p> <p>Focus: NEA Sections: C: Generating Ideas (20 marks) Mock Exam Preparation.</p> <p>Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Student independent outcomes.</p> <p>Duration: Dependent on student.</p>	<p>Topic: Non Exam Assessment (NEA)</p> <p>Resources: Google Classroom Portfolio Guidance worksheets.</p> <p>Focus: NEA Sections: D: Developing Ideas (20marks) E: Realising Ideas: Making (20 marks).</p> <p>Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Student independent outcomes.</p> <p>Duration: Dependent on student.</p>	<p>Topic: Non Exam Assessment (NEA)</p> <p>Resources: Google Classroom Portfolio Guidance worksheets.</p> <p>Focus: NEA Sections: E: Realising Ideas: Making (20 marks) F: Testing & Evaluation (20 marks) .</p> <p>Revision: Seneca learning online platform. CGP Guides.</p> <p>Outcome: Student Independent outcomes.</p> <p>Duration: Dependent on student.</p>	<p>Topic: Formal Exam Revision</p> <p>Resources: Revision materials.</p> <p>Focus: 'Core Technical Principles' 'Specialist Technical Principles' Designing & Making Principles'</p> <p>Outcome: Final exam (50% of grade) 2 hour written paper.</p> <p>Duration: 9 lessons.</p>	