



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	<p><b>Rotation 1: Siege Weapons</b></p> <p>Health and Safety in the workshop Basic Joints – Use of hand tools in the workshop Working Drawings Collaborative designing Making Skills – focus on Wood</p>		<p><b>Rotation 2: Elements</b></p> <p>2 dyeing techniques – tie dye &amp; batik 2 printing techniques – stencilling &amp; block Safe and correct use of the Sewing Machine Core design skills</p>		<p><b>Rotation 3: IT</b></p> <p>Logging in Email safety Practicing email Internet searching and sourcing Learning how to use Excel Learning how to use word Creating a report Microbit Programming Block Editing Logic Statements Inputs and Outputs Computer Aided Design 2 Computer Aided Manufacture 2 Vacuum Forming Logo Development Marketing</p>	<p><b>Rotation 4: Food</b></p> <p>Hygiene and safety Eatwell guide/healthy eating Knife skills/how and why we cook food Cereals and staple foods Milk and dairy Meat and fish Eggs</p>
8	<p><b>Rotation 1: Automata</b></p> <p>Modelling Skills Cam Mechanisms Material use – Manufactured Boards and Natural Timbers CAD/CAM - linkages</p>	<p><b>Rotation 2: Sustainable Design</b></p> <p>Electronic component symbols Environmentally conscious design – 6R's Soldering Skill – Practical Design – sketching &amp; CAD Mould Making &amp; Thermoforming</p>	<p><b>Rotation 3: Upcycling</b></p> <p>Factors influencing design Product Branding Environmental issues associated with manufacture of denim Design and Manufacture of upcycled denim product</p>	<p><b>Rotation 4: IT</b></p> <p>Research topic skills Storyboards for Flash Animation/Movie Learn how to use Flash software and create animation Filming Windows live moviemaker</p>	<p><b>Rotation 5: Food</b></p> <p>Food choice and nutrition Bread Functions of ingredients; pastry/cakes/gelatinisation Multicultural influences Availability of food</p>	
9	<p><b>Topic: Focus Skill Project</b></p> <p>Focus project on the student specified area with design work/research to support</p> <p>Advancing practical skills</p> <p>Core Knowledge: New and Emerging Technologies</p>	<p><b>Topic: Focus Skill Project</b></p> <p>Focus project on the student specified area with design work/research to support</p> <p>Advancing practical skills</p> <p>Core Knowledge: Energy Generation</p>	<p><b>Topic: Mini Rotations – Core Material Knowledge</b></p> <p>Pupils complete 4 2 week rotations covering key material knowledge and working properties.</p> <p>Core Knowledge: Materials Categories</p>	<p><b>Topic: Completing Mini Rotations &amp; Core Knowledge Testing</b></p> <p>End of module test</p> <p>Core Knowledge: Materials Categories</p> <p>Core Knowledge: Smart and Modern Materials</p>	<p><b>Topic: Multi Material Focus project</b></p> <p>A project which focusses on at least 2 materials from these areas: Timber/Polymers/Metals/Textile/Graphics</p> <p>Core Knowledge: Systems approach to design</p> <p>Core Knowledge: Materials Properties / Stock Forms</p>	<p><b>Topic: Multi Material Focus project</b></p> <p>A project which focusses on at least 2 materials from these areas: Timber/Polymers/Metals/Textile/Graphics</p> <p>Finish and Evaluate</p> <p>Core Knowledge: Design Movements/Designers</p> <p>Core Knowledge: Materials Properties / Stock Forms</p>

10	<p><b>Topic: Core knowledge and Specific area theory</b></p> <p>Test – Modern/Smart Materials</p> <p>Core Knowledge: Modern and Smart Materials Focus Material Area</p>	<p><b>Topic: Introduction and start of MockNEA (Non-Examined Assessment/Coursework)</b></p> <ul style="list-style-type: none"> <li>- Research</li> <li>- Specification</li> <li>- Initial Designs</li> </ul> <p>Core Knowledge: Energy Storage Experience of NEA and its criteria</p>	<p><b>Topic: Mock NEA</b></p> <ul style="list-style-type: none"> <li>- Initial Designs</li> <li>- Development</li> <li>- Modelling</li> </ul> <p>Core Knowledge: Mechanical Devices Experience of NEA and its criteria</p>	<p><b>Topic: Mock NEA</b></p> <ul style="list-style-type: none"> <li>- Final designs</li> <li>- Manufacture of Prototype</li> </ul> <p>Core Knowledge: Material Properties Experience of NEA and its criteria / Advanced Practical skills &amp; Construction Techniques.</p>	<p><b>Topic: Mock NEA</b></p> <ul style="list-style-type: none"> <li>- Completion of Prototype</li> <li>- Evaluation of final product</li> </ul> <p>Experience of NEA and its criteria / Advanced Practical skills &amp; Construction Techniques.</p> <p>Preparation for Year 10 Mock Exam</p>	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Release of titles from Exam Board</p> <p>Pupils start initial research:</p> <ul style="list-style-type: none"> <li>- Task Analysis</li> <li>- Primary Research</li> <li>- Secondary Research</li> <li>- Specification</li> </ul>
11	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Pupils continue NEA from end of Year 10.</p> <ul style="list-style-type: none"> <li>- Initial Designs</li> <li>- Development</li> <li>- Modelling</li> </ul> <p>NEA - Coursework Core Knowledge: Materials and their working properties(Retech)</p>	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Pupils continue NEA as main focus</p> <ul style="list-style-type: none"> <li>- Final Design</li> <li>- Plan of Manufacture</li> </ul> <p>Mock Exam – Full 2 hours</p> <p>Mock Exam Preparation Core Knowledge: Mechanical Devices (Retech)</p>	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Pupils continue NEA as main focus</p> <ul style="list-style-type: none"> <li>- Manufacture of Final Prototype</li> <li>- Manufacturing Diary</li> </ul> <p>Core Knowledge: Materials and their working properties Core Knowledge: Specialist Technical Principles (Retech)</p>	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Pupils finish NEA as main focus</p> <ul style="list-style-type: none"> <li>- Manufacture of Final Prototype Complete</li> <li>- Testing and Evaluation</li> <li>- HAND IN</li> </ul> <p>Core Knowledge: Specialist Technical Principles (Retech)</p>	<p><b>Topic: Preparation for final exam</b></p> <p>Revision and Review of prior learning Practice Papers All Core Knowledge Areas Exam Technique</p>	<p><b>Topic: Final NEA (50% GCSE)</b></p> <p>Pupils continue NEA from end of Year 10.</p> <ul style="list-style-type: none"> <li>- Initial Designs</li> <li>- Development</li> <li>- Modelling</li> </ul> <p>NEA - Coursework Core Knowledge: Materials and their working properties(Retech)</p>