


Year: 10 Subject: DT	Curriculum Intent: Students will build upon the skills and activities learnt in years 7, 8 & 9 and be introduced to new skills. This will be achieved through a design and make project based upon designing an item to be sold in a gift shop. Throughout this unit of work, students will develop their practical skills through both theoretical and physical tasks and be introduced to the technical language and vocabulary related to this topic. Students will explain and discuss their understanding of what they have read, observed, and practiced justifying the methods and techniques used. This will be evidenced through practical tasks and evaluation of the activities.					
	Term 1 <i>Autumn Term</i>		Term 2 <i>Spring Term</i>		Term 3 <i>Summer Term</i>	
	Practical	Theory	Practical	Theory	Practical	Theory
Topic Titles (in order of delivery)	<ol style="list-style-type: none"> 1. Communication of ideas 2. Design element of Design and make project 	<ol style="list-style-type: none"> 1. New & Emerging Technologies 2. Scales of Production 3. Energy Storage & Generation 4. New & Smart materials 5. Material Properties 6. Selection of Materials 7. Paper & Boards 8. Finishes 9. Vacuum forming 10. Tolerances 	<ol style="list-style-type: none"> 1. Making element of design & make project 2. 2D Design making project 	<ol style="list-style-type: none"> 1. Types of Motion 2. Natural & manufactured timber 3. Metals & Alloys 4. Polymers 5. Environmental, social & economic challenges 6. 2D Design 7. Fusion 360 8. Preparation for PPEs 	<ol style="list-style-type: none"> 1. Set up for NEA 2. Identifying and investigating design possibilities 3. Producing a Design Brief and Specification 4. Generating Design Ideas 	<ol style="list-style-type: none"> 1. PPEs 2. The work of others – Designers & Design Companies 3. Forces & Stresses
Key knowledge / Retrieval topics	<ol style="list-style-type: none"> 1. Orthographic Drawing – 3rd Angle Projection 2. Isometric drawings 3. Scale drawings 		<ol style="list-style-type: none"> 1. CAD skills Fusion/2D Design 2. Health & Safety for workshop practical 3. Tools & Equipment 		<ol style="list-style-type: none"> 1. Exam Techniques and questioning 2. Layout of NEA Project 	
Understanding / Sequence of delivery	<ol style="list-style-type: none"> 1. Drawing techniques 2. Communication of ideas. 3. Design project 	<ol style="list-style-type: none"> 1. New & Emerging Technologies 2. Scales of Production 3. Energy Storage & Generation 4. New & Smart materials 	<ol style="list-style-type: none"> 1. Design Ventura – design & make project 2. 2D Design project 	<ol style="list-style-type: none"> 1. Types of Motion 2. Natural & manufactured timber 3. Metals & Alloys 4. Polymers 5. Environmental, social & economic challenges 	<ol style="list-style-type: none"> 1. Set up for NEA 2. NEA Section A 3. NEA Section B 4. NEA Design Ideas 	<ol style="list-style-type: none"> 1. PPEs 2. The work of others – Designers & Design Companies 3. Forces & Stresses

		<ul style="list-style-type: none"> 5. Material Properties 6. Selection of Materials 7. Paper & Boards 8. Finishes 9. Vacuum forming 10. Tolerances 		<ul style="list-style-type: none"> 6. 2D Design 7. Fusion 360 8. Preparation for PPEs 		
Assessment	In class Assessments using NEA mark scheme	In class assessments End of term test Seneca	In class assessment	In class assessment End of term test Seneca	Marked using NEA grade boundaries	In class assessment Seneca