


<p>Year: 9 Subject: Design & Technology – Product Design</p>	<p>Curriculum Intent: Students will develop a basic understanding of all the topics covered by the GCSE AQA Design & Technology specification. They will learn key skills and knowledge through a series of mini projects that support the work undertaken in theory lessons and that broadens the students workshop capabilities in preparation for their NEA in year 10 & 11. Practical projects allow students to have creative/design freedom which allows them to explore within areas of their own interests. The theory side of the course follows the three main areas of the AQA specification which includes Core Technical Principles, Specialist Technical Principles and Design & Making Principles. Within these areas students will cover all of the exam topics ensuring a strong understanding of materials, processes, design communication and technologies as this information could affect what they choose to work with in their coursework at the end of year 10.</p>					
	<p>Term 1 <i>Exam Theory</i> <i>Wooden Animal Project</i> <i>Bendy Boxes Project</i></p>		<p>Term 2 <i>Exam Theory</i> <i>CAD - Fusion</i> <i>Children's Toy Project</i></p>		<p>Term 3 <i>Exam Theory</i> <i>Children's Toy Project</i></p>	
<p>Topic Titles (in order of delivery)</p>	<ol style="list-style-type: none"> 1. The work of others (Harry Beck, Norman Foster, Raymond Templier, Dyson, Apple, Alessi) 2. Ecological & social footprint 3. Wood – sources and origins 4. Material processes and finishes 5. Health and safety in the workshop 	<ol style="list-style-type: none"> 1. Communication of ideas (isometric, 2 point perspective, orthographic) 2. Investigating, primary and secondary data 3. One-off production 4. Packaging 	<ol style="list-style-type: none"> 1. CAD skills (sketches, extrusion, revolve etc) 2. Enterprise 3. Designing for groups 4. Environmental considerations 	<ol style="list-style-type: none"> 1. Investigating, primary & secondary data 2. Human factors 3. Development of design ideas 4. Prototype development 	<ol style="list-style-type: none"> 1. Modelling techniques 2. Communication of ideas 3. Exam technique 	<ol style="list-style-type: none"> 1. Scales of production 2. Mechanical devices 3. Forces and stresses 4. Design strategies
	<p>Project Focus; Woodwork</p> <ul style="list-style-type: none"> • Health & Safety • Tools & Equipment • Materials • Laminating • Using Jigs • Hinges & joints 		<p>Project focus; CAD</p> <ul style="list-style-type: none"> • Learning how to use Fusion 360 software • Following step-by-step software tutorials • How to create their own individual 3D objects in Fusion 360 			

