



SUBJECT	GCSE Design Technology	YEAR	10
<p>Why do we study Innovations - Design Technology? The curriculum in this subject provides students with the knowledge to think creatively in order to solve problems to meet the needs of society and the wider world.</p> <p>You will get the opportunity to work creatively when designing and making and apply your technical knowledge to specialist materials, tools and processes in your making.</p>			
What you have learned before	What you will learn this year	Where you can read more	
<p>Create</p> <ul style="list-style-type: none"> Free hand sketching Model and test prototypes. Use graphical communication skills – Isometric, orthographic. Use templates Use equipment and machinery such as drilling machines. Work as a team 	<ul style="list-style-type: none"> Drawing techniques – isometric, rendering, perspective, orthographic (CAD) modelling exercises Design challenges – Prototype development Using and working with specialist materials – card, timber, polymers 	<p>https://www.technologystudent.com/despro_fls/mobapp2.html</p> <p>Mobile App for DT</p> <p>AQA GCSE (9-1) Design and Technology: Timber, Metal-Based Materials and Polymers - Hodder</p>	
Evaluate			
<p>Evaluate -</p> <ul style="list-style-type: none"> Self-assess and peer evaluation of models Evaluate how well your work meets your Specification Evaluate and make changes to improve products 	<ul style="list-style-type: none"> Evaluation of the iterative cycle Annotations on designs Consider the views of others 	<p>https://www.bbc.co.uk/bitesize/guides/zsnwj6f/revision/3</p>	
Investigate			
<p>Investigation - 3d modelling - Flood House - Pewter casting</p> <ul style="list-style-type: none"> Bio mimicry Iterative design Pewter casting Material properties CAD/CAM software, 3d printers. Sketch-up, Solid works Performance of structural elements, sustainability. 	<p>Core technical principles: Section A</p> <ul style="list-style-type: none"> new and emerging technologies energy generation and storage developments in new materials systems approach to designing mechanical devices materials and their working properties. <p>Specialist Technical Principles: Section B</p> <ul style="list-style-type: none"> Working with specialist materials Origins of materials Stock forms, scales of production <p>Design and make principles: Section C</p> <ul style="list-style-type: none"> Specialist processes, tools, equipment. The work of others Design communication Environmental, social, economic challenge 	<ul style="list-style-type: none"> AQA GCSE (9-1) Design and Technology: Timber, Metal-Based Materials and Polymers - Hodder My revision notes – AQA GCSE Design Technology – Timbers, Metals and Polymers - Hodder Learn and revise https://www.bbc.co.uk/bitesize/examspecs/zby2bdm https://www.technologystudent.com/despro_fls/mobapp2.html 	