



SUBJECT	Design Technology		YEAR	9
<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>				
What you have learned before - Year 8		What you will learn this year – Year 9		Where you can read more
Structures – Desktop storage - Mechanisms		Pewter Casting/Biomimicry - 3d modelling – Flood house		
<p>Investigation</p> <ul style="list-style-type: none"> • Mechanisms and CAD • Design styles (Art Deco, Memphis, De Stijl) • Existing storage product examples • Mechanisms and motion • Natural and manufactured structures 		<p>Investigation</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 materials, flood defences. 		<p>KS3 Design & Technology Study Guide https://www.technologystudent.com/ Tools and equipment information to read</p>
<p>Create</p> <ul style="list-style-type: none"> • Free hand sketching • Tower designs development • Model and test card and art straw prototypes. • Use graphical communication skills – Isometric, orthographic. • Model, test and refine designs ideas using different materials • Use templates and jigs • Use equipment and machinery such as drilling machines. • Work as a team on a production line 		<p>Create</p> <ul style="list-style-type: none"> • Graphical communication skills Free hand sketching and modelling • Creative and unique designs • MDF Mould design • Pewter cast product • Use hand skills and machinery • Use Sketch-up to complete 3d CAD models • Design and model a prototype house with flood defences 		<p>COMPUTER AIDED DESIGN AND COMPUTER AIDED MANUFACTURE (technologystudent.com)</p> <p>Flood prevention strategies - soft engineering - Flooding and flood management - OCR - GCSE Geography Revision - OCR - BBC Bitesize</p>
<p>Evaluate -</p> <ul style="list-style-type: none"> • Self-assess and peer evaluation of models and structures • Evaluate how well your work meets your Specification • Evaluate and make changes to improve products 		<p>Evaluate -</p> <ul style="list-style-type: none"> • Self/peer evaluation and assessment of products • Understand the positive and negative impact products have. • Evaluate your design against a specification and brief. 		