



SUBJECT	<b>Construction and the Built Environment</b>	YEAR	<b>10</b>
<p><b>Why do we study Construction and the Built Environment?</b></p> <p>The Tech award gives learners the opportunity to develop sector specific applied knowledge and skills through realistic vocational contexts. Learners will have the opportunity to develop applied knowledge and practical skills.</p>			
What you have learned before	What you will learn this year	Where you can read more	
<b>Pewter Casting/Biomimicry - 3d modelling – Flood house</b>	Component 1: Construction Technology (Exam)		
<p><b>Investigation</b></p> <p>Bio mimicry</p> <p>Iterative design</p> <p>Pewter casting</p> <p>Material properties</p> <p>CAD/CAM software, 3d printers.</p> <p>Sketch-up, Solid works</p> <p>Performance of structural elements, sustainability.</p>	<p>Construction processes and terminology.</p> <p>Work of the construction industry</p> <p>Buildings Performance requirements</p> <p>Strength and Stability</p> <p>Foundations</p> <p>Wall, floor and roof structures</p> <p>Sound and Thermal Insulation.</p>	<p>Construction and the built environment. <b>Specification</b></p> <p><a href="#">Construction and the Built Environment (2022)   BTEC Tech Awards   Pearson qualifications</a></p> <p><a href="https://constructionnews.co.uk">https://constructionnews.co.uk</a></p> <p><a href="#">Construction - Health and safety for the construction industry (hse.gov.uk)</a></p>	
Component 2: Construction in Practice (Practical Assessment)			
<p><b>Create</b></p> <p>Free hand sketching</p> <p>Graphically communication skills and modelling, creative imaginative designs.</p> <p>MDF Mould design</p> <p>Pewter cast product</p> <p>Use hand skills and machinery</p> <p>Use Sketch-up to complete 3d CAD models</p> <p>Design and model a prototype house with flood defences</p>	<p>Correct techniques to perform a construction activity joinery and carpentry.</p> <p>Practical skills - appropriate use of Tools and equipment.</p> <p>(timber frame construction)</p> <p>Wood joints</p> <p>Marking out techniques</p> <p>Hazards and risks associated with a practical activity.</p> <p>Assessed practical activity</p>	<p>Component 2 Pearson set Assignment</p> <p>Risk rating matrix sheet</p> <p>Marking grid</p>	
Component 3: Construction and Design (Design Brief and Sketches)			
<p><b>Evaluate -</b></p> <p>Self/peer evaluation and assessment of products</p> <p>Understand the positive and negative impact products have.</p>	<p>Client's needs - developing a design</p> <p>Constraints on design</p> <p>Understand and know how to write a Design Specification.</p> <p>Graphical communication skills</p>	<p>Component 3 - Pearson set Assignment</p> <p>Marking grid</p> <p>Video's - drawing in 2-point perspective.</p>	

Evaluate your design against a specification and brief.	Freehand, 2 Point perspective, Isometric Plan views Assessed task	
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