

Meden School Curriculum Planning							
Subject	GCSE D&T	Year Group	11	Sequence No.	NEA 5	Topic	Realising Design Ideas

Retrieval	Core Knowledge	Student Thinking
What do teachers need <b>retrieve</b> from students before they start teaching <b>new content</b> ?	What <b>specific ambitious knowledge</b> do teachers need teach students in this sequence of learning?	What real life examples can be applied to this sequence of learning to <b>development of our students thinking, encouraging them to see the inequalities around them</b> and 'do something about them!'
<input type="checkbox"/> The importance of/methods for: <ul style="list-style-type: none"> <li>- working using tolerances,</li> <li>- planning in order to allow for joint overlap/to avoid waste etc,</li> <li>- measuring and marking out accurately,</li> <li>- selecting and using tools, equipment and processes correctly and safely,</li> <li>- using surface finishes and treatments</li> </ul> <p>has been considered in Y10 D&amp;T studies and this learning should be retrieved and applied here. The exact application will vary from student to student dependant upon their prototypes design.</p>	<input type="checkbox"/> Know the importance of/how to work accurately using tolerances. How a range of materials are cut, shaped and formed to designated tolerances. Why tolerances are applied during making activities. Apply the above in the making of the NEA prototype. <input type="checkbox"/> Know the importance of planning the cutting and shaping of material to minimise waste e.g. nesting of shapes and parts to be cut from material stock forms. How additional material may be removed by a cutting method or required for seam allowance, joint overlap etc. Apply the above in the making of the NEA prototype. <input type="checkbox"/> Know the value of using measurement and marking out to create an accurate and quality prototype. Understand the use of data points and coordinates including the use of reference points, lines and surfaces, templates, jigs and/or patterns. Apply the above in the making of the NEA prototype. <input type="checkbox"/> Know how to select and use specialist tools and equipment, including hand tools, machinery, digital design and manufacture, appropriate for the material and/or task to complete quality outcomes. Know how to use them safely to protect themselves and others from harm. Apply the above in the making of the NEA prototype. <input type="checkbox"/> Know how to select and use specialist techniques and processes appropriate for the material and/or task and use them to the required level of accuracy in order to complete a quality outcome. Know how to use them safely to shape, fabricate and construct a high-quality prototype, including techniques such as wastage, addition, deforming and reforming. Apply the above in the making of the NEA prototype.	<input type="checkbox"/> Illustrate and explain the word tolerance by considering its more common/wider use in society. If tolerance in society is an acceptance of differences, then in DT it is an acceptance of difference from the specified dimension. <input type="checkbox"/> In considering safety in working practices – show its parallels with 'The Health & Safety at Work Act 1974' which is in force within the UK – contrast it with the lack of safe working practices in other areas of the world and the impact of this on workers. Consider what we as consumers can do to combat/not support such practices.

	<input type="checkbox"/> Know and understand that surface treatments and finishes are applied for functional and aesthetic purposes. Know how to prepare a material for a treatment or finish. Know how to apply an appropriate surface treatment or finish. Apply the above in the making of the NEA prototype.	
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