

# Design and Technology: Disciplinary Knowledge Progression Map 1

	Designing in Different Contexts	Design Values	Identifying User Needs	Evaluating Products
Y1	<p>Design a product for users in a home environment.</p> <p>Design a product for users in a local community environment.</p>	<p>Design and evaluate based on:</p> <ul style="list-style-type: none"> <li>• Visual appeal;</li> <li>• Materials;</li> <li>• Function;</li> <li>• Inclusivity and accessibility.</li> </ul>	<p>Identify the specific users that products have been made for and the purpose they have.</p> <p>Make choices about user(s) to design for.</p> <p>Identify user needs through interviews (qualitative).</p>	<p>Evaluate products according to the design criteria, which grows in complexity as the list of design values grow.</p>
Y2	<p>Design a product for users in a school environment.</p>	<p>Design and evaluate based on:</p> <ul style="list-style-type: none"> <li>• The above values</li> <li>• The making process.</li> </ul>	<p>Identify design criteria through approximate measurements.</p>	
Y3	<p>Design a product for users in a commercial environment.</p>	<p>Design and evaluate based on:</p> <ul style="list-style-type: none"> <li>• The above values</li> <li>• Sustainability (of the whole product life cycle).</li> </ul>	<p>Identify user needs through observations (qualitative).</p> <p>Identify user needs through a 'user trip' (doing the thing that users do).</p> <p>Identify a user's needs in a specific context, when they have a specific problem.</p>	
Y4	<p>Design a product for users in an enterprise environment.</p> <p>Design a product for users in a leisure environment.</p>	<p>Design and evaluate based on the above values.</p>	<p>Explicit review of the above.</p>	
Y5	<p>Design a product for users in a wider environment.</p>	<p>Design and evaluate based on the above values.</p>	<p>Explicit review of the above.</p>	
Y6		<p>Design and evaluate based on:</p> <ul style="list-style-type: none"> <li>• The above values</li> <li>• Necessity (do we really <i>need</i> this product?).</li> </ul>	<p>Identify design criteria through exact measurements (cm).</p> <p>Recognise the difference between needs and wants in user interviews.</p> <p>Identify different users who may use a service, and how their needs may differ.</p>	

## Design and Technology: Disciplinary Knowledge Progression Map 2

	Generating Ideas	Making, Testing, Iterating	Communicating Designs
Y1	Generate ideas in a range of ways, including: taking photographs and using these as inspiration.	Designing is about trying something and seeing what works, and trying again.	Contribute to a class storyboard to show the process for making.  A model is a way of showing a design idea in 3D.  When we communicate our design ideas they need to be drawn at the right size.  Talk about simple design ideas with others.
Y2	Generate ideas in a range of ways, including: <ul style="list-style-type: none"> <li>The above.</li> <li>'What if' questions.</li> <li>Premade templates.</li> <li>'Draw and fold'.</li> <li>Using story books.</li> <li>Using personal photographs.</li> </ul>	Designers build prototypes to test their products.  When using textiles, designers make a pattern from paper to test before making the final product.	Draw simple design ideas and labelling them.
Y3	Generate ideas in a range of ways, including: <ul style="list-style-type: none"> <li>The above.</li> <li>Disassembling existing products.</li> <li>Using design constraints.</li> <li>Using Zwicky tables.</li> <li>Using nature to get inspiration.</li> </ul>	Explicit review of the above.	Explicit review of the above.
Y4	Generate ideas in a range of ways, including: <ul style="list-style-type: none"> <li>The above.</li> <li>'Quick Draw Eights'</li> </ul>	Use CAD to test models quickly and effectively.  Design process is iterative, and includes generating ideas; evaluating; testing and refining.	Create a flow chart for process for making.  Draw an exploded diagram.
Y5	Review of the above, selecting best strategies for the given context.	Explicit review of the above.	Explicit review of the above.
Y6	Review of the above, selecting best strategies for the given context.	Explicit review of the above.	Draw designs that show measurements.