

# D&T Disciplinary Knowledge



## Part 1 of 2

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





## Part 2 of 2

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

