

D&T Disciplinary Knowledge



Part 1 of 2

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



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Part 2 of 2

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



Food Disciplinary Knowledge



Making Food Choices	
Y1	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• Colour.• Quantity of sugar.
Y2	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• The above.• Quantity of fat.• Quantity of salt.• Dietary requirements (vegans and vegetarians)
Y3	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• The above.• Food allergies
Y4	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• The above.• Food miles.
Y5	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• The above• Time taken to prepare.
Y6	<ul style="list-style-type: none">• Make food choices based on:<ul style="list-style-type: none">• The above• Carbon footprint of production and transport.• Occasion.• Cost.

