

# Entry Level Certificate in Design & Technology

## Entry 3 Candidate Assessment Booklet (CAB)

Centre number:						Candidate number:				
Year of examination:						Candidate name:				

Focus area: (please circle)				
Resistant Materials Technology	Graphic Products	Textiles Technology	Food Technology	Electronic Products

Edexcel task:	Edexcel set task and brief
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<b>Photographic Evidence:</b>
<p>Please attach securely, in this space, at least one photograph clearly showing the completed product.</p> <p>Centres should use the space on the back page of this booklet for supplementary photographic evidence. The quality of photographs supplied must be sufficient to enable the moderator to see the quality of the outcome(s). Include close-ups of any detail where necessary.</p> <p>A maximum of three photographs should be used. (Please include more photographs in the candidate portfolio.)</p> <p>Digital cameras may be used but the photographs must NOT be digitally enhanced.</p>

1. Investigate		Teacher	Moderator	Page ref/Comment
1.1 Analysing the Brief	<b>Analyse</b> your design brief by identifying the design needs you will need to consider before designing your product.	Tick or cross to show achieved		Minimum requirement page numbers from the learner portfolio
1.2 Research	<b>Present</b> selective and focused research that is guided by the analysis in your design brief. <b>Investigate</b> a similar existing product to find out useful information to use when designing, to include how it is made, what materials it is made from and how it is assembled.			
1.3 Specification	<b>Develop</b> a design specification for your product using the following headings: <ul style="list-style-type: none"> <li>• form</li> <li>• function</li> <li>• user requirements</li> <li>• performance requirements</li> <li>• material/ingredient/component requirements.</li> </ul>			

2. Design		Teacher	Moderator	Page ref/Comment
2.1 Initial Ideas	<p><i>RMT, Graphics, Food, Textiles:</i> Present a range of different initial ideas for your product that are creative, realistic, workable and detailed and meet all the points in your specification. Explain your designs/plans using annotation to show the materials/ingredients/components and processes you will need to make them. Justify your selection of specific materials/ingredients/ components. Explain how your designs meet your specification points. Discuss your designs with peers and gather general and technical information based on specification points to use in design development.</p> <p>-----</p> <p><i>Electronics only:</i> Present a range of initial ideas that use established electronic building blocks in a creative way to create workable circuit designs that meet all the points in your specification. Present a range of different circuits or sub-systems and explain how they work and how they meet specification points referring to specific components or sub-systems. Present a range of different case design ideas and explain how each could be made. Justify your selection of materials. Discuss your designs with peers and gather general and technical information based on specification points to use in design development.</p>			

2.2 Review	<p>Review your design ideas against your original specification criteria and choose the best <b>one</b> to develop in more detail. <b>Explain</b> how feedback from peers will be used in development.</p>			
2.3 Develop	<p><i>RMT, Graphics, Food, Textiles:</i> Develop your best design idea into a final design proposal that is improved and refined compared to the original. <b>Explain</b> how your design changes have improved your design. <b>Model and test</b> an important part of your design idea as it progresses. This could be a 2D/3D model using traditional materials and/or a 3D model using CAD.</p> <p>-----</p> <p><i>Electronics only:</i> Use circuit simulation software to test the final design proposal virtually, or use prototyping board (breadboard) to test the circuit or parts of it using real components. Use modelling to adjust component values for the <b>best circuit performance</b>.</p> <p>-----</p> <p><i>RMT, Graphics, Textiles:</i> Draw your final design showing the major dimensions and the materials/ components it is made from.</p> <p>-----</p> <p><i>Food only:</i> Draw your final plan and include information on ingredients, techniques and method.</p> <p>-----</p> <p><i>Electronic only:</i> Draw your final circuit diagram; include values of electronic components and a circuit layout ready for manufacture. <b>Draw</b> the final case design and include dimensions and what materials it is made from.</p>			

3. Make		Teacher	Moderator	Page ref/Comment
3.1 Production Plan	<p><b>Outline</b> a production plan that shows the main stages for making your product, including some quality control checks.</p>			
3.2 Making Skills	<p><i>RMT, Graphics, Food, Textiles:</i> <b>Make</b> a product that involves different component parts using different materials/ingredients/ components, equipment, techniques and processes, that functions fully and matches most specification points. <b>Select</b> the correct tools, equipment and processes, including CAD/CAM where appropriate, for specific uses. <b>Use</b> different making skills that demonstrate precision and accuracy in manipulating and using materials, tools, equipment and processes. <b>Make</b> your product safely.</p> <hr style="border-top: 1px dashed black;"/> <p><i>Electronic only:</i> <b>Make</b> an electronic circuit that uses input, process and output building blocks. <b>Make</b> the case you have designed or use one given to you by your teacher that you will modify significantly and assemble these into an electronic product. <b>Assemble</b> the circuit securely in its case and allow easy access to the power supply. <b>Select</b> the correct tools, equipment and processes, including CAD/CAM where appropriate, for specific uses. <b>Use</b> different making skills that demonstrate precision and accuracy in manipulating and using materials, tools, equipment and processes. <b>Make</b> your product safely.</p>			<p>Use of assessor witness statements showing where help has been provided and to what extent.</p>

3.3 Quality of Final Outcome	Make component parts that are accurate, well finished and well assembled into an intended product or demanding sub-systems of the product. <b>Produce</b> a product or demanding sub-system of the product that matches the specification criteria and functions as intended.			
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4. Test and Evaluate		Teacher	Moderator	Page ref/Comment
4.1 Test and Evaluate Final Outcome	Test and evaluate your final product against the measurable points of your specification criteria.			
4.2 Suggest Improvements	Suggest and sketch how your product could be modified to improve its performance and/or quality if it were made again.			

## Assessor witness statement

This form should be used by the assessor to support all relevant assessment criteria, particularly **Making Skills** and **Quality of Final Manufacture**. Please use as much detail as necessary to show that the candidate met the assessment criteria.

Assessment criteria	Comment of evidence	Date observed
1		
2		
3		
4		

Assessor name:			
Assessor signature:		Date:	

Candidate declaration			
I hereby certify that this work has been produced without external assistance beyond that which is acceptable under the scheme of assessment and is recorded. <b>IMPORTANT:</b> both the candidate and assessor must sign this form.			
I give permission for this work to be used by Edexcel for training purposes. (please tick)		YES	NO
Candidate signature:		Date:	
Assessor name:			
Assessor signature:		Date:	
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