

Doing better in GCSE design and technology

To achieve a grade C in GCSE design and technology you need to be confident in all of these aspects.

(Use the code in the second column to say how well you think you are doing: G - green, very confident; O - orange, not fully sure; and R - red, not very confident. Ask your teacher about anything you colour red.)

Can I?	What can I do to improve?
Designing	
Identify a need and produce a design brief.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input type="radio"/> R <input type="radio"/> O <input type="radio"/> G </div> <ul style="list-style-type: none"> • Talk to your friends and teacher to make sure you have identified a real and realistic design need. • Get a friend to read your design brief. Do they think that the detail is clear and that the user group has been clearly identified? If they have any questions, try to improve your brief to cover these points. </div>
Collect and collate research from a variety of sources.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input type="radio"/> R <input type="radio"/> O <input type="radio"/> G </div> <ul style="list-style-type: none"> • Carefully select the information you use and credit the sources. • Check with your teacher that you have found enough sources of evidence. </div>
Analyse the task and produce a design specification.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input type="radio"/> R <input type="radio"/> O <input type="radio"/> G </div> <ul style="list-style-type: none"> • Make sure your design specification list covers all following areas of performance: <ul style="list-style-type: none"> - appearance/aesthetics of the design - cost of making the product - durability of the materials - relevance to the users' needs - other factors relating to your chosen product. <p>(Remember that the final evaluation of your product will be against these design/performance criteria.)</p> </div>

Can I?		What can I do to improve?
Engage in ongoing testing, evaluating and modifying.	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Listen to anything your teacher or friends say about your work as they may be able to see things more clearly than you can. Record the outcomes of testing and evaluation by annotating your design sheets or keeping a design diary/log.
Use a range of communication skills to present your ideas, including the use of ICT.	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Try to match the communication methods you use to the nature of the design and to what you need to show. Ask your teacher how you can use ICT to help with accuracy and the effective use of time. Ask a friend whether they could make your design from the information you have provided.
Show consideration of industrial practices, including systems and control.	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Identify and make references to the manufacturing techniques that industry might use to make your product. Talk to your friends about the scale of production that would best suit your designs - would it be one-off, batch production or mass production? Ask your teacher to help you to understand the similarities and differences between those production processes and the production methods you will be using.
Making		
Identify, make and justify changes and modifications.	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Discuss with friends and/or your teacher any changes you intend to make to your design. Can you justify the changes? Record these changes by annotating your design sheets or filling in your design diary/log.
<p>Use tools, materials, components, equipment and processes correctly and safely, including CAM.</p> <p>Produce a well-assembled, well-finished and effective outcome.</p>	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Always use tools and equipment safely and try not to rush your making, whatever the pressure of time. Listen to your teacher's comments and take note of any suggestions for improving the quality of your work. Double-check key measurements with others before carrying out operations that cannot be reversed. If there are delays or difficulties ask your teacher if there is something else you could be doing.
<p>Use QA (quality assurance) and QC (quality control) throughout.</p> <p>Fully test and evaluate the final product.</p>	<input type="radio"/> R <input type="radio"/> O <input type="radio"/> G	<ul style="list-style-type: none"> Take time out to stand back from your work to consider quality issues. Ask your friends and/or your teacher to be honest with you about anything that needs to be better. Test the product against the original design brief and the specification, and record this testing by taking notes and photographs. Listen carefully to any feedback from the user or market group. Write an honest evaluation of the product's strengths and weaknesses, and include suggestions for any improvements that could be made.