

**DEVELOPMENT OF DESIGN PROPOSALS
(including modelling)**

1. Imaginative and innovative ideas have been developed, demonstrating creativity, flair and originality. Further developments made to take account of ongoing research.
2. A coherent and appropriate design strategy, with clear evidence of a planned approach, adopted throughout.
3. The implications of a wide range of issues including social, moral, and environmental and sustainability, are taken into consideration and inform the development of the design proposals.
4. Excellent development work through experimentation with a wide variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution.
5. Appropriate materials/ingredients and components selected with full regard to their working properties.
6. Fully detailed and justified product/manufacturing specification taking full account of the analysis undertaken.

<p>MAKING</p> <ol style="list-style-type: none"> 1. Final outcome(s) shows a high level of making/modelling/finishing skills and accuracy. 2. Selected and used appropriate tools, materials and/or technologies including, where appropriate, CAM correctly, skilfully and safely. 3. Worked independently to produce a rigorous and demanding outcome. 4. Quality controls are evident throughout the project and it is clear how accuracy has been achieved. 5. The outcome has the potential to be commercially viable and is suitable for the target market. 								
<p>TESTING & EVALUATION</p> <ol style="list-style-type: none"> 1. Detailed testing and evaluation as appropriate throughout the designing and making process taking account of client/user or third party opinion. 2. All aspects of the final outcome have been tested against the design criteria and/or the product/manufacturing specification. 3. Evaluate and justify the need for modifications to the product and consideration given as to how the outcome might need to be modified for 								

commercial production.								
COMMUNICATION 1. Design folder is focused, concise and relevant and demonstrates an appropriate selection of material for inclusion. 2. All decisions communicated in a clear and coherent manner with appropriate use of technical language. 3. The text is legible, easily understood and shows a good grasp of grammar, punctuation and spelling.								

Review of previous examinations: Examiner Comments from 2015 for controlled assessment.

Criterion 1 (investigating the design context) 8 Marks

It is important that candidates remain focussed on the task. Some candidates are still including generic or irrelevant material much of it downloaded or simply copied directly from a range of sources. In some cases this work can stretch to a disproportionate number of pages. Much of this work gains little to no credit. Many candidates are still failing to fully analyse the design context, this being the main reason why it is leading to a proliferation of peripheral material. It is pleasing that more candidates are disassembling products considering the constructional detail. Candidates should be encouraged to carry out this disassembly activity stage in their primary research. More candidates are now producing detailed annotated and photographic evidence of this activity. Analysis of the research undertaken was often done well, but in some cases the annotation was more descriptive than analytical. Good analysis should lead candidates towards a design specification, identifying the important design criteria to be considered, however many candidates failed to identify the target market and few profiled it. Many candidates are still producing mood boards containing downloads and photographs with no further comment or feedback to them. Mood boards are only useful if the candidates use the information or inspiration from them later in their design work. Likewise questionnaires should be used to gain facts and information that proves useful later in the design and development and evaluation stages. Often no further mention is made to either the questions or answers found in this research activity. This section was again generally well assessed by the majority of centres, however there are still centres awarding candidates full or near full marks for pages of generic copied research with little analytical comment, or when one or several of the above criteria were not evidenced in the candidate's folders.

Criterion 2 (development of design proposals) 32 Marks

In this section candidates are expected to show and develop a range of imaginative design ideas. The use of 2D and 3D annotated sketches through which they demonstrate graphic imagery and constructional detail, developed through well evidenced modelling and testing. It was pleasing to see candidates are now developing and using these skills to produce some pleasing work, with the use photographs to evidence this activity. However a number of centres are not encouraging candidates to include the early sketches from which originate their designs and thinking. Modifications and prototypes can then be made as a result, before final proposals are presented. Some went on to consider wider issues including social, moral, and environmental and sustainability but in many cases these wider issues did not relate to their chosen brief and were generic and copied out of textbooks. The use of CAD continues to contribute greatly to this section. Candidate are encouraged to use “screen dumps” to evidence the development of CAD work, but far too often drawings and images are still appearing in candidate’s folders with little evidence of how they were formed or where they appeared from. Candidates who produce nets that appear from “thin air” without any design work cannot be awarded maximum credit; the preparatory work must have been included in candidate’s folders, as well as the CAD work, that precedes outcomes that are cut out using a laser cutter. Candidates are still missing out some elements of this important process and it was often difficult to follow the development of their thinking from design ideas to their final proposals. Many candidates still repeat their earlier ideas with only minor adjustments and miss out the important modelling and testing stages. There is still a tendency for some candidates to concentrate too much on the graphic imagery, some of this type of work forming the bulk of the development thus missing out on the constructional detail or materials required to make an effective product. In some cases the product appears from “thin air” at the end of the development stage, with the selected image inserted. As a result many final proposals did not have sufficient detail given to enable them to be made by a 3rd party. Candidates are now including in their production a justified manufacturing specification and sequential plan for making. The best of these compared manufacturing in the school environment to that in industry and included quality control information. Some candidates are still failing to produce either a product or manufacturing specification, whilst others are simply including imagery of a manufacturing process with comments added to the sheet of work. Many centres included an annotated and sequential making diary, which highlighted where modifications were considered to be necessary in the making process. This section was again significantly over marked in many centres with high marks being awarded when several of the assessment criteria had not been addressed and in others where a number of simple labelled 2D sketches formed the majority of evidence offered.

Criterion 3 (making) 32 Marks

Moderation was once again greatly assisted by the inclusion of photographic evidence of the final making and all centres are encouraged to do this. It is important to point out once again that making marks were only considered or adjusted following a visit to the centre. The Controlled Assessment Briefs often stated exactly what should be made but left it to the candidate to build in an appropriate level of difficulty and rigour. Many again took up this challenge and produced some challenging and pleasing outcomes. Candidates are using a wider range of materials and processes to produce outcomes with a much better quality of finish. CAM at various levels is being used more selectively in this process. Many outcomes are much more commercially viable. More candidates are to be congratulated on the excellence of their work in this section. It is still disappointing that some candidates opted for the easiest option and the lack

of constructional planning often meant that their work was less than challenging or commercially viable. Corner joints were often masking taped together in the final construction stages. In other cases temporary spray mount adhesive was used, resulting in surface finishes peeling off or joints coming apart. Unfortunately these constructional shortcomings were not limited to the less able. Once again it was disappointing that sections of the design briefs were ignored by some centres. Briefs that asked for a number of manufactured outcomes, including promotional materials or smart materials were ignored; yet high marks were still awarded for the final outcome. This section was very well assessed in the majority of centres visited, or work viewed using photographic evidence. There were however some notable exceptions where very high marks were awarded for work, which lacked both rigour and a good quality of finish. Once again I would encourage all centres to contact their coursework advisor or view work on the e-AQA website, if they have any queries over what is required from the final outcome

Criterion 4 (testing & evaluation) 12 Marks

It is accepted that the evidence for this section will be found throughout the folder. Much of the work done in development can contribute as on-going testing and evaluation, which through modification then lead to improvement. Often this is the weakest area. Summative evaluation was generally done well with the majority of candidates involving the opinions of the client and matching their evaluation against the specification. Some candidates gave very brief generalised evaluations, which sometimes focussed on the process rather than the product. It is important to involve clients and users at this stage of the project. Many candidates failed to consider the modifications required for industrial production. Conclusions, modifications, testing and third party opinion are all important aspects of a good evaluation; the twelve marks awarded for this section can be gained, as has been stated, for work throughout the folder. Some evaluations that only made brief or little reference to these important aspects were awarded marks in the higher range band. Centres are recognising the importance of this section and generally it is well assessed by the majority, but there were a small but significant number of centres who are awarding high marks for self-congratulatory evaluations or when there was very little evidence in the folders.

Criterion 5 (communication) 6 Marks

This criterion requires candidates to be selective, concise, and clear in their presentation and have the ability to use technical language correctly. Only a small majority of candidates failed to be concise and produced folders well in excess of the 20 recommended A3 pages. Much of this excess material continues to be in the investigation section and candidates should be encouraged to select and summarise only relevant material. Candidates should also be encouraged to avoid repetition and consider the best and most economical layout of each sheet. Candidates who miss out stages in development and fail to show evidence of the modelling and prototyping are still gaining maximum credit from a number of centres Use of technical language, spelling, punctuation and grammar is improving but was surprisingly poor from a small minority of candidates especially when considering that much of their work was word processed. Assessments in this section were generally accurate.

Design Task 12 Cinema Fairy Tale Promotion

A popular choice producing outcomes of a varying quality and complexity. The required items were not as readily available for investigation as in some of the other tasks and many candidates again concentrated on the graphic imagery rather than constructional disassembly. It is accepted that a scale of 1:5 relates only to the height of the free standing display and not the thickness of the foam/card board and that adhesive could be used to fix any printed-paper material to the board as a finish. Again there were some excellent and original graphics used and these combined with complex flat packed structures for the foyer display gave many candidates an excellent 3D outcome. Some candidates produced very simple structures however, but were rewarded with high marks when the complexity of the manufacture was often lacking and sometimes very simplistic. It is important that candidates show models and prototypes in the development stage of any folder work. Sadly this work is often overlooked. Many candidates then completed their submissions by producing a smart cinema ticket, poster and press advertising. Some of the press adverts were shown incorporated into the page of a newspaper. Smart and modern materials used on tickets were generally related to security or made use of 'glow in the dark' or holographic material, candidates displaying some novel final solutions. A small number of candidates did not acknowledge or use a smart or modern material; others restricted their use of these materials to a generic explanation in their initial research section.