

### **General Certificate of Secondary Education**

# Design and Technology: Graphic Products

45501

**Unit 1: Written Paper** 

## Report on the Examination

2010 examination – June series

Design and Technology (Graphic Products) - AQA GCSE Report on the Examination 2010 June series
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#### **General**

This is the first year that this course has been examined. A detailed analysis of the level of candidate responses is available to centres if they refer to the Enhanced Results Analysis (ERA) system that can be accessed via e-AQA. It is recommended that centres look at this as it may prove valuable in terms of identifying issues which could inform future course planning/revision programmes.

Centres should be reminded that this written paper was written to test candidates' knowledge and understanding all areas of the new specification. In some cases, it was apparent that some candidates did not have the specific knowledge to successfully answer Section B. This may be due to the lack of experience in the specialist subject areas such as Ergonomics, Anthropometric Data, Sustainable Design and Symbols found on Packaging, as many candidates were entered early.

#### **Section A**

#### **Question 1 - Design Theme**

- (a) The majority of the candidates answered this question with two differently shaped rectangular boxes. Many candidates failed to design to the requirements of the specification, relying on words to address the issues. Many spent time on surface decoration and graphics which was not required. The more successful candidates supported their 3D sketches with additional drawings of net packaging to help explain their solutions. Notes on materials and constructional details were often vague or unjustified.
- (b) Solutions were usually based around vacuum formed trays and card inserts. Poorer attempts were often a simple 2D diagram of the 'holes' to hold the chocolates securely. Too often the solutions lacked clarity and clear communication skills to award full marks.
- (c) Most candidates achieved 3 marks, but many failed to include the method of protecting the chocolates. Some attempted exploded drawing but without understanding how the elements should be positioned. Only a few drew it in two dimensions.
- (d) Varied responses were seen for this part but most were superficial. Many candidates failed to give analytical/critical responses, or attempted to provide suitable modifications/improvements to their final design.

#### Section B

#### **Question 2 - Ergonomics**

- (a) A lack of knowledge of basic tools and safety was evident. Most could identify the craft knife though not the rotary cutter which was often referred to as a pizza cutter. Many candidates failed to correctly name the cutting mat and safety ruler.
- (b) (i) Many candidates were unable to provide a suitable example for this question. It was apparent that not all candidates had been taught this area of the specification.
  - (ii) Candidates usually provided an answer but without referring to relevant anthropometric data. A large number of candidates misguidedly discussed questionnaires.
  - (iii) This part was reasonably attempted. Most sketches showed a more rounded design, adding finger grips and cushioning materials / finishes.
  - (iv) Most candidates achieved one mark, with Styrofoam being a popular response. Generic terms such as foam and sponge did not attract credit.

#### **Question 3 - Designers**

- (a) On the whole, this question was well done with many awarded full marks and others picking up 1 or 2 marks.
- (b) (i) Most attempted this guestion with the word *traffic* being mentioned in most answers.
  - (ii) Candidates displayed limited knowledge of signage and block drawing. Many candidates failed to include a triangle in the same style as the example. Sketching skills were not strong with many candidates relying on notes rather than visual images.

#### **Question 4 - Packaging**

- (a) Most candidates picked up some marks for the reasons for packaging, but answers needed to be more detailed.
- (b) Well answered question with most picking up two marks.
- (c) This part was poorly attempted, with answers being general and vague and relating to packaging in general
- (d) (i) Very few candidates referred to 'international language' type responses. Most talked of 'easy to recognise/understand' or 'uses less space'. Many failed to give an example. Those that did were often a little general for example, 'road signs'.
  - (ii) Identification of symbols was very poor. There appeared to be a lot of guess work, but little knowledge.

#### **Question 5 - Disassembly**

- (a) Very well answered by the vast majority of candidates.
- (b) Some centres had covered this issue, but the majority of candidates seemed to think that sustainability was about the shelf life of a product. The level of QWC was very variable.

#### **Question 6 - Card Engineering**

- (a) Generally there were many reasonable responses, with 'not being offensive' the most common response. Many candidates failed to relate the response to the greeting card.
- (b) (i) Candidates usually identified glue and fold line correctly but often missed the fact that the outer line was a cut line.
  - (ii) Well attempted part of the question.
- (c) (i) Seven marks was not uncommon for this question. E and F were sometimes mixed up by some candidates.
  - (ii) Feedback loops were poorly done or many failed to attempt it.
- (d) Commercial process was not well answered. Few candidates failed to respond with die cutting. Laser cutter or batch production were popular answers.