

A-LEVEL DESIGN & TECHNOLOGY: FASHION AND TEXTILES

7562/2: Paper 2 Report on the Examination

7562 June 2022

Version: 1.0

Further copies of this Report are available from aqa.org.uk

Copyright © 2022 AQA and its licensors. All rights reserved. AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

General

There are two written exams for the Fashion and Textiles specification in which students are assessed on their knowledge and understanding of technical principles and design and making principles. They are also tested on their ability to analyse and evaluate design decisions and outcomes, and wider issues in design and technology. Both papers give students the opportunity to demonstrate maths and science skills and knowledge. Paper 2 focuses on the designing and making principles detailed in the specification subject content.

Overall, the questions were answered positively, with many responses attracting credit from the middle mark bands. It seemed that students were fairly well prepared for this written element of assessment, and were able to give some detail, especially in the extended answer questions. It was also pleasing to see that students had, for the most part, interpreted the questions in the way intended which improved the quality of responses.

Section A

- This section focused on product analysis. Students were presented with two different images, each accompanied with questions requiring an analysis and evaluation of different aspects.
- On a positive note, many students understood the demands of these questions; however, a surprising number of students did not include negative points when responding to an evaluation or a compare and contrast command word, as required in questions 1 and 2.2.
- Responses to questions 2.3 and 2.4 were the weakest. Students did not demonstrate a detailed knowledge and understanding of the structures of weft and warp knitted fabrics; as a result most answers were only awarded credit from the lowest mark band.
- Question 2.1 was misinterpreted by some students, who failed to take note of the word 'style' which was emboldened in the question. Examiners were looking to award credit for the style of the two football kits, but many students instead gave information about the fibre content which was not relevant to the question.

Section B

- This section focused on design and commercial manufacture, and included the maths element, which was on the whole answered very positively. Nearly all students attempted to answer the maths questions, which is pleasing to see.
- Students on the whole performed better on this section of the paper. The wider nature of the topics was presented with confidence and many students gave detailed responses.
- Question 6, design theory, was answered confidently. Students gave accurate information about the influence of Paul Poiret, although only a few gave detailed descriptions of his work, which was a requirement to reach the top mark band.
- Examiners marked and interpreted responses positively; students who were awarded credit from the middle and top mark bands would often give a range of different points along with a detailed breadth of knowledge and understanding.

Section A – Product Analysis

Question 1

The opening question on the paper required students to analyse the use of trims, pleats and decorative fabric, and evaluate their suitability for a special occasion dress. The question itself was in line with previous series and offered the students a good opportunity to show their knowledge and understanding through product analysis. Surprisingly, the average mark for this question was

three out of six, and less than 10% of all answers were awarded credit from the top mark band.

On the whole, students were able to give a good analysis of the three elements of the question; weaker responses simply described what they saw in the image, without presenting an analysis. The question also required students to evaluate the suitability of trims, pleats and decorative fabric for the special occasion dress, and although the command word evaluate was clearly presented in the question, very few students gave an account of the drawbacks of some of the elements on the bodice. Overall, examiners noted a weak set of answers; given that section A is a product analysis, they were anticipating a much more informed and detailed set of responses to all of the questions in this section.

Question 2.1

This question presented two images of football kits; one from the 1920s the other from the 2020s. Again, this was an analyse and evaluate question; students were asked to analyse the *style* of the two different kits, and evaluate their suitability for sportswear. Approx. 50% of responses were awarded 3 marks, the low end of the middle mark band. On the whole students correctly identified the differences in colour, style of sleeves and the shorts in both images, and were able to link these aspects with comfort or manoeuvrability for active sportswear.

Many students however misread the focus of the question, and failed to analyse the *style* of the two kits - which was emboldened for clarity in the question wording. Some answers gave details about fibre properties of the kits; this was not a requirement of the question and students who presented this type of information were not awarded credit for this.

Question 2.2

Students were presented with a fibre content table for both football kits and were required to compare and contrast the performance characteristics of the fibres of both. Most students achieved marks from the middle mark band, and were able to give a good range of properties for the five different fibres in the two kits.

15% of all responses were credited with marks from the top mark band. Often these responses gave detailed information about the performance characteristics of the fibres, and also were able to directly compare and contrast the fibre properties e.g. wool in kit 1 is thermally insulating, whereas synthetic fibres in kit 2 do not trap air and are cooler for active wear. Disappointingly, there is some confusion about the properties of synthetic fibres such as nylon and polyester; quite a few students incorrectly believe that they are insulating, breathable fibres that are able to wick perspiration away from the wearer. There does need to be a core understanding of accurate fibre properties to be able to achieve credit in answers to this type of question.

Question 2.3

This question required students to justify the use of weft knitted fabric for the 1920s football kit. Overall, a set of fairly weak responses with the average mark less than 2 out of 6 marks. Many students were correctly able to identify weft knit fabric as being stretchy and insulating, with some able to discuss how this knitted structure would have been handmade in the 1920s. Few students went beyond these fairly obvious points; given that a weft knitted fabric is a very basic structure it was disappointing to see poor knowledge and understanding shown in the responses.

Question 2.4

This question was presented in a similar format to Q2.3 with students asked to justify the use of warp knitted fabric for the 2020s football kit. Responses were very similar to the previous question, with the average student credited with less than 2 out of 6 marks. Many students were correctly able to identify warp knitted fabrics as being complex structures, durable, and able to be made quickly by machines. It was disappointing to see low level responses to these two questions. The command word 'justify' required a focus on the benefits only of warp knitted fabric but the responses generally showed a basic lack of knowledge of knitted structures.

Section B – Design and Commercial Manufacture

Question 3.1

Students were asked to give three different performance tests for furnishing fabric, with one mark awarded for each correct response. A high proportion of all answers gained either 2 or 3 marks for this question, which was pleasing to see. Most responses were able to give flammability testing as a performance requirement for furnishing fabric, along with abrasion, strength or colour fastness tests.

Question 3.2

For this question students were asked to explain why furnishing fabric is tested in different ways before its use in public places. On the whole there was a good set of responses, although many answers did not go beyond furnishing fabric needing to be safe, to resist flammability, to be durable and to be resistant to dye transfer. Stronger responses gaining top band marks explained the legal requirements for use of fabrics in public spaces for both the client and the public and some understood that furnishing fabric is tested to protect a manufacturer's reputation. Nearly half of students were awarded three marks, with only 5% gaining credit in the top mark band.

Question 4.1

Question four was the maths element, consisting of four separate part questions. Although nearly all students attempted the maths questions, it was apparent that some found them fairly challenging. It is advisable that students do try to answer these questions and show their working out as examiners award marks where possible for correct mathematical methods.

Students were presented with an image of a fabric ball made up of 12 regular pentagons and asked to calculate the amount of thread needed to make one ball. 99% of all students attempted this question, with 40% achieving the full two marks. It was necessary to calculate the number of joined edges; this then enabled them to multiply the number by the amount of thread required to give the correct answer; many answers did not score any marks as they incorrectly calculated the number of joined edges in the first instance.

Question 4.2

Part 2 required students to calculate the probability that one ball in a sample would have faulty stitching. A third of students gained 2 marks for their responses, while a further one third gained 1

mark. Many students were able to work out the method to gain the first mark, but could not go further and give the correct answer. Many answers were not correct to two decimal places and therefore failed to achieve the second mark.

Question 4.3

In the third part, students were asked to calculate the total amount of stuffing required to make a batch of 12,000 large balls. 75% of students gained 2 marks on this question, showing an ability to work out the correct difference in grammes between the small and large ball. This enabled students to multiply the amount of stuffing required for a large ball with a batch of 12,000 balls to arrive at the correct answer. Only 4% did not attempt this question.

Question 4.4

This was a 4 mark question based on the calculation of the area of the pentagon, representing one of the twelve shapes that made up the fabric ball. One third of students gained full marks for their responses.

The pentagon was presented on the question paper with a series of measurements, enabling students to calculate the area of the shape in a number of ways. 30% of answers correctly calculated the area of the triangle in the top half of the pentagon for mark 1. Fewer students however, were able to go beyond this point and work out the area of the trapezium, in the lower half of the pentagon. Those able to calculate the area of the trapezium added the calculations for the triangle and trapezium together to give the total area for the shape. It is pleasing to see that nearly all students attempted most of the questions.

Question 5

This question asked students to outline three ways that designers and manufacturers of children's soft toys can meet health and safety standards. One mark was awarded for each correct answer. 50% of all students gained 2 marks for this question. Most responses were able to identify strangulation, choking hazards, use of non-toxic dyes on fabrics as correct answers. Many students were able to state that a lion mark would often be seen on toys but examiners did not accept the use of flammability warnings as this is not a requirement for health and safety standards for toys.

Question 6

Nine marks were available for this extended answer question. A description of Paul Poiret's fashion designs was required along with an explanation about how his work went on to influence 1920s art deco fashion. On the whole, students were fairly knowledgeable about his influence on 1920s art deco fashion, and examples of his work were given in responses – harem pants, lampshade tunic, and the hobble skirt were some of the most popular examples.

In terms of marking, there was a spread of marks across all three mark bands. Most responses were able to give a range of characteristics of Paul Poiret's work such as his use of embellishment, draping, and freeing women from wearing the corset, but fewer students were able to actually describe his fashion designs. Examiners were anticipating accurate descriptions of the features and characteristics of Poiret's fashions, e.g. the harem pant was inspired by Turkish trousers, which were loosely draped with gathered fabric from the waist but tightly fitted at the ankle. Very few students had the knowledge or confidence to fully describe his work and whilst 80% of responses scored between 1-6 marks, only 8% scored marks from the top mark band, where a detailed description was a requirement.

Question 7

There were a range of responses to this question, scoring between one and six marks. Students were asked to identify and explain the different stages in a product life cycle. Many clearly understood the demands and focus of the question and nearly all were able to confidently and accurately explain the different stages. Most answers correctly identified the introduction of a new design on the catwalk, through to its evolution and growth until it matures and then declines as a new fashion takes its place.

More detailed responses were able to explain how fashions are exclusive and costly at the start of the cycle, and then become copied and cheaper for the mass market before the product is replaced or becomes obsolete. A few answers started the product life cycle at the fibre sourcing stage through to design and garment manufacture but examiners did not credit this aspect of a response; credit for answers started at the design introduction stage where fashions are introduced to the market when worn by models, celebrities and influencers.

Question 8

85% of students gained credit for this question, with half gaining a full two marks. There was good understanding of the principles of total quality management which is pleasing given that it is a small section of the specification. Many students clearly understood what TQM involved and were able to give specific information, often in terms of ensuring quality at every stage, involving everybody in the business in development, and ensuring high quality to reduce waste.

Question 9.1

Two marks were available for this question; one mark each for stating what was meant by the term 'fabric nap' and 'pattern repeat'. Half of the responses scored two marks, demonstrating a good understanding of both terms. Some students found it challenging to accurately describe a fabric nap, and many were not credited for answers such as the 'direction' or 'texture' of a fabric as they were too vague. Examiners were looking for specific information about the raised effect created with nap fabrics. Students were more confident in describing a pattern repeat.

Question 9.2

Although some students were able to reach the top mark band for this question, most scored marks in the mid mark band. This question linked with Q9.1, and required an explanation of the impact of fabric nap and pattern repeat on the design and manufacture of garments.

Students on the whole gave the more obvious responses to this question and were able to cite the need to match up pattern repeats across garment pieces, ensure that napped fabrics run in the same direction and were confidently able to explain that these aspects require more fabric, therefore more cost and more waste for the manufacturer. More detailed understanding was shown by those who explained how feature panels can be created with napped fabric and how checked fabrics, for example, can be used by designers in a creative way to position and highlight features such as pockets. A few students were able to discuss the impact of large scale printed repeats compared with smaller scale prints, and there were many examples of different types of fabric, such as tartans and one-way floral designs, as requested in the question.

Question 10

Students were asked to state what was meant by the term 'upcycling'. There was a clear understanding of the question and topic in this instance, with nearly all students being able to state how new garments can be created or adapted from unwanted products and nearly all were awarded the mark allocated to this question.

Question 11

The last question on the paper, with two marks available. Students were required to give two environmental benefits of making garments from fully fashioned knitted panels. Nearly half scored one or two marks for this question, showing a fairly good understanding of the topic area. Most understood that fully fashioned panels are knitted in particular garment shapes, and are not cut out of a larger roll of pre-made fabric. Many answers explained that the environmental benefits of fully fashioned panels were to reduce fabric waste and create less environmental and CO² damage, as there are fewer post knitting operations involved in its manufacture.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results Statistics</u> page of the AQA Website.