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## **Administration**

It is pleasing to note that the majority of centres complied with AQA's instructions relating to the collation, packaging and dispatching of scripts.

A significant number of candidates contravened the regulations with regard to the use of the colour of ink employed to record their answer. Black ink or black ball-point pen should be used for written answers and pencils and coloured pencils should be used for drawings.

## **General**

There was substantial evidence of the use of the preliminary material by centres when preparing their candidates for the examination.

The use of the preliminary material is intended to give the candidates 'ownership' of their paper. It allows them to produce real and valid responses based on work done in the weeks before the examination. Where centres had made good use of the preliminary material their candidates invariably went on to produce good quality designs.

Teachers should emphasise good examination techniques to their candidates, in particular; the need to read and re read each question carefully before attempting it. They should also be taught to use any 'spare' time at the end of the examination to carefully go through both the questions and their answers.

## **Question 1**

This question was well answered. Many candidates gained full marks by producing three relevant specification points for a range of casing designs for an mp3 player docking station which are suitable for the teenage market. They invariably went on to expand their answers to provide suitable explanations.

Candidates lost marks by repeating answers or by repeating information that was given in the design brief.

## **Question 2**

It was clearly evident that the majority of candidates had worked with the preliminary material.

The majority of candidates produced 5 design ideas for a range of casing designs for an mp3 player docking station which are suitable for the teenage market. The more able candidates produced 5 significantly different ideas that display creativity, flair and originality. Weaker candidates' ideas were obvious and simplistic.

## **Question 3**

### **Quality of notes**

Candidates were able to gain full marks by providing detailed notes regarding the development of their design regarding its function, the materials, and the construction methods they would use to manufacture their idea. Weaker candidates simply labelled their sketch.

### **Materials and finishes**

Candidates were required to provide specific details of relevant materials and suitable finishes for their chosen design. Candidates lost marks by simply naming generic materials.

### **Method of construction**

Many candidates failed to answer this part of the question. Candidates gained some marks by naming a suitable method of construction but few went on to provide and detailed responses.

### **Sizes and design features**

Many candidates outperformed this part of the question by giving numerous details relating to the features of their design. They also gained marks for adding realistic dimensions to their design. It should be noted that where a candidate does not indicate a specific unit of measurement, the examiner will assume they are using millimetres.

#### **Question 4**

Many candidates simply listed features of their design without making any value judgements, or simply stated that their design fulfilled the design requirements, making no further comment. Teachers should ensure that their candidates are aware that marks are only awarded where an analytical point has been fully explained.

#### **Question 5**

The majority of candidates correctly identified the tool as a Tenon saw. Candidates lost marks where a specific process was not correctly identified. Simply stating, 'for sawing things' was not considered a detailed enough response for the award of a mark.

Most candidates correctly identified the tool as a File. Candidates lost marks where a specific process was not correctly identified. Simply stating, 'for filing something smooth' was not considered a detailed enough response for the award of a mark.

Surprisingly few candidates correctly identified the tool as a tri-square. A 'set square' was frequently given as an incorrect answer. Again, candidates lost marks where a specific process was not correctly identified.

#### **Question 6**

- a) This question was very well answered. The majority of candidates gained full marks by correctly identifying the PPE that would be required in each given situation.
- b) The majority of candidates gained some marks by correctly identifying the 'Toxic' and 'Flammable' symbols. Many went on to give correct precautions. Fewer candidates knew the meaning of the third symbol.

## Question 7

### Stage 1

The majority of candidates were able to gain 2 of the 4 marks available by giving details of how they would mark out the sports trophy. Few candidates achieved full marks by addressing the issue of the kitchen roll having to be being batch produced.

### Stage 2

Most candidates were able to gain 2 of the 4 marks available by giving details of how they would cut and shape the sports trophy. Few candidates achieved full marks by addressing the issue of the sports trophy having to be being batch produced. Candidates who chose to use CAM to manufacture their sports trophy tended to give simplistic answers.

### Stage 3

Again, the majority of candidates were able to gain 2 of the 4 marks available by giving details of how they would bend or join the sports trophy. Fewer candidates achieved full marks by giving a detailed response.

### Stage 4

This part of the question was answered well with many candidates giving correct details of how to apply a relevant finish to the sports trophy. The use of varnish was the most common correct response.

### Stage 5

Candidates provided a variety of ways in which to produce the '1st' text. Many candidates correctly chose to engrave the text by a laser cutter.

## Question 8

- a) Teachers and candidates are reminded that only **specific** materials will be awarded marks on this paper.

### Kitchen stool

The majority of candidates correctly named a specific type of solid wood from which the kitchen stool was likely to have been made from. 'Oak' and 'Pine' were the most

common correct responses. The generic term wood or an incorrect wood was awarded one mark.

Reference to its 'appearance' and 'strength' were generally given as correct reasons for their choice.

The majority of candidates correctly identified that the original source of their chosen material was a tree.

#### Toy train

Many candidates failed to gain full marks by simply using the generic term plastic or by naming an incorrect plastic such as 'acrylic'. Reference to it being 'colourful' and 'tough' were generally given as correct reasons for their choice.

- b) The majority of candidates gained some marks for discussing the environmental impact of using metal to manufacture products. Few candidates provided sufficient detail to gain full marks.

#### Question 9

- (a) The majority of candidates correctly identified three components of the mountain bike that required maintenance. Weaker candidates simply described the function of the component rather than giving details of a maintenance operation that would be needed to be carried out on that particular component.
- (b) Candidates gained some marks by giving brief details that linked maintenance to safety. Many candidates simply went on to make repetitive comments. Few candidates attained full marks.

#### Question 10

- a) Candidates found this a very challenging question. A number of candidates simply drew a pillar drill. Others drew a multi headed drill. Those who understood the concept of a drilling jig generally gained some marks by showing some details of a suitable device. Very few gained full marks.
- b) Many candidates gained some marks by making reference to the fact that jigs, moulds and templates increase the speed and accuracy of manufacture. Few went onto develop their answers to gain higher marks. Many simply repeated their answers.

### **Question 11**

This was the least well answered question on the paper. The term ‘sustainability’ was not understood by the majority of candidates. Candidates gained some marks by producing superficial responses referring to the longevity of a product, but very few gained over half marks. This question also examined the candidates Quality of Written Communication. This varied considerably. Teachers and candidates are reminded of the need for good English, particularly in this question.

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