



General Certificate of Secondary Education  
January 2014

## Manufacturing

Paper 2

Assessment Unit 3

*assessing*

Manufacturing Technology

[GMA32]



TUESDAY 14 JANUARY, AFTERNOON

### TIME

1 hour.

### INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.

Answer **all** parts of the **one** question in this paper.

The paper should be answered in relation to the Pre-Release Material.

You will be provided with a new copy of the Pre-Release Material.

You should **not** bring any of the material previously issued, or any notes made into this examination.

### INFORMATION FOR CANDIDATES

The total mark for this paper is 40.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each part question.

Quality of written communication will be assessed in **(h)** and **(i)**.

Centre Number

71

Candidate Number

For Examiner's use only	
Question Number	Marks
(a)	
(b)	
(c)	
(d)	
(e)	
(f)	
(g)	
(h)	
(i)	

Total Marks	
-------------	--

Answer **all** parts of the question.

- 1 (a) The mainframe of a kitchen island like the one shown in the pre-release material can be manufactured using either a hardwood or softwood. Distinguish between the two different types of wood and give **one** example of each.

Hardwood

\_\_\_\_\_ [2]

Softwood

\_\_\_\_\_ [2]

- (b) The majority of kitchen islands like the one shown in the pre-release material have a butcher block top.

- (i) Suggest an appropriate surface finish which could be applied to this worktop.

\_\_\_\_\_ [1]

- (ii) Give **one** reason why this is an appropriate finish.

\_\_\_\_\_ [1]

- (c) Computer numerical control (CNC) machinery is used throughout the manufacture of kitchen islands.

- (i) Outline **one** area of manufacture where CNC machinery is used and name the specific type of CNC machinery used at that stage.

Area of manufacture

\_\_\_\_\_ [1]

Type of CNC machinery used

\_\_\_\_\_ [1]

Examiner Only	
Marks	Remark

- (ii) Outline **one** advantage of using this modern technology throughout the manufacture of a kitchen island.

\_\_\_\_\_ [2]  
\_\_\_\_\_

- (d) Manufacturers of mobile kitchen islands often buy in standard components like the castors attached to the frame of the island.

Give **one** reason why a manufacturer would buy in castors rather than produce the castors themselves.

\_\_\_\_\_ [2]  
\_\_\_\_\_

- (e) Knock-down fittings are also used in the manufacture of cheaper kitchen islands.

Give **one** example of a knock-down fitting which could be used in a kitchen island construction.

Example of a knock-down fitting

\_\_\_\_\_ [1]

- (f) Manufacturers in order to achieve sales must ensure that their product is not only functional but also aesthetically pleasing.

Outline **one** example of how a manufacturer adds to the aesthetic appeal of a kitchen island before selling it to the public.

\_\_\_\_\_ [2]  
\_\_\_\_\_

Examiner Only	
Marks	Remark

(g) Information and communication technology (ICT) is used in the design and manufacture of kitchen islands.

(i) State and describe **one** use of ICT in the design stage of a kitchen island.

Type of ICT used

\_\_\_\_\_ [1]

Description of use

\_\_\_\_\_  
\_\_\_\_\_ [2]

(ii) Outline **one** benefit of using ICT at this stage.

\_\_\_\_\_  
\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark

(h) In the box below using annotated sketches show how the shelf in the middle of the kitchen island is assembled and attached.

Marks will be awarded for

- Detail contained in sketches [4]
- Quality of sketches [3]
- Detailed notes [3]



[10]

Examiner Only	
Marks	Remark

- (i) In the box below using annotated sketches and the correct terminology show how the butcher block is attached to the frame of the kitchen island.

Also demonstrate how a typical drawer can be constructed for a kitchen island.

Marks will be awarded for

- Detail contained in sketches [4]
- Quality of sketches [3]
- Detailed notes [3]



[10]

Examiner Only	
Marks	Remark

---

**THIS IS THE END OF THE QUESTION PAPER**

---

Permission to reproduce all copyright material has been applied for.  
In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA  
will be happy to rectify any omissions of acknowledgement in future if notified.



*Rewarding Learning*

General Certificate of Secondary Education  
2014

---

**Manufacturing**

Pre-Release Material

EXAMINATION COPY

Paper 2

Assessment Unit 3

*assessing*

Manufacturing Technology

**[GMA32]**

**JANUARY 2014 AND SUMMER 2014**

---



You must use **this** clean copy of the Pre-Release Material in the examination and **not** your own annotated copy.



## Manufacturing Technology Pre-Release Material

Answer **all** parts of the question.

There is **one** question in this paper which relates to the pre-release materials.

You should draw on the knowledge gained from the pre-release task and also Unit 3: Manufacturing Technology.

The image below shows a Kitchen Island.



© Eddingtons Ltd

### Description

A kitchen island like the one shown is a valuable asset to any kitchen. It enables the user to have extra worktop space for the preparation and placement of food items. It can be easily moved around the kitchen and is very adaptable to any style and shape of kitchen. The storage underneath and the drawer facility are also useful when it comes to using those items which are used most frequently or need access easily.

### Features include:

- Swivel castors.
- Available in different sizes.
- Frame material Hardwood/Softwood.
- Butchers' Block Styling.
- Lockable castor wheels.
- Delivered flat packed with easy assemble instructions.

Permission to reproduce all copyright material has been applied for.  
In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA will be happy to rectify any omissions of acknowledgement in future if notified.