



**GENERAL CERTIFICATE OF SECONDARY EDUCATION  
DESIGN AND TECHNOLOGY**

**A534**

**Graphics**  
Technical Aspects of Designing and Making

Candidates answer on the Question Paper

**OCR Supplied Materials:**  
None

**Other Materials Required:**  
None

**Friday 11 June 2010  
Afternoon**

**Duration: 1 hour 15 minutes**



Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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**INSTRUCTIONS TO CANDIDATES**

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions in sections **A and B**.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your Candidate Number, Centre Number and question number(s).

**INFORMATION FOR CANDIDATES**

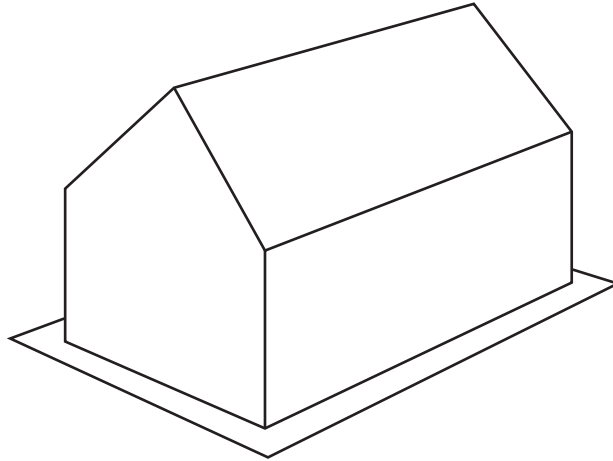
- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Your Quality of Written Communication is assessed in questions marked with an asterisk (\*).
- This document consists of **12** pages. Any blank pages are indicated.

**Section A**

Answer **all** questions

1 Fig. 1 shows the outline of a model of a house.

(a) Add pencil shading to Fig. 1 to make it appear more three dimensional (3D).



**Fig. 1**

[3]

(b) A drawing of the house is to be printed on paper.  
Complete the table below to show a colour, a size and a weight for the paper.

<b>Material</b>	<b>Paper</b>
Colour	
Size	
Weight	

[3]

(c) Explain how thermochromic inks would add interest to the drawing of the house.

.....

.....

..... [2]

(d) Name **two** finishes that could be applied to the printed drawing of the house.

1 .....

2 ..... [2]

(e) Explain **how** the paper with the printed drawing on it could be disposed of in an environmentally friendly way.

.....

.....

.....

..... [2]

[Total:12]

2 A model of the house is to be made from 5 mm thick foam board.

(a) On the orthographic drawing of the model shown in Fig. 2 complete the:

end view  
 front view  
 projection symbol

[2]  
 [2]  
 [2]

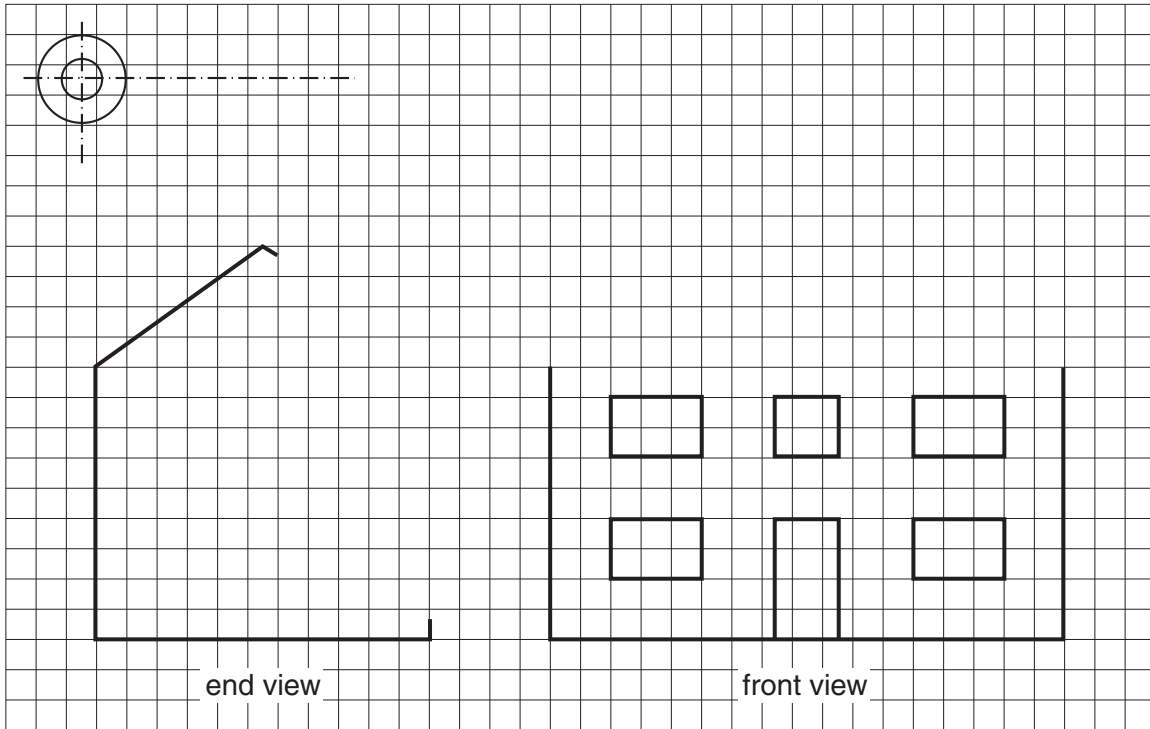


Fig. 2

(b) Tick (✓) the most appropriate scale for the model.

2:1	1:100	1:10
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[1]

(c) Give **one** reason for making a model of the house.

.....  
 ..... [1]

(d) Give **one** reason why a solvent based adhesive should **not** be used on foam board.

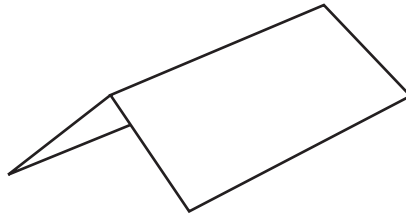
..... [1]

(e) Give **one** reason why it is important to test an adhesive before using it on foam board.

.....  
..... [1]

(f) The drawing in Fig. 3 shows the roof of the model. The roof is made from one piece of foam board.

Use a sketch and notes to show how the one piece of foam board would be **cut** and **folded** to make the roof.



**Fig. 3**

[2]

[Total: 12]

3 A layout for an estate agent's sign is shown in Fig. 4.

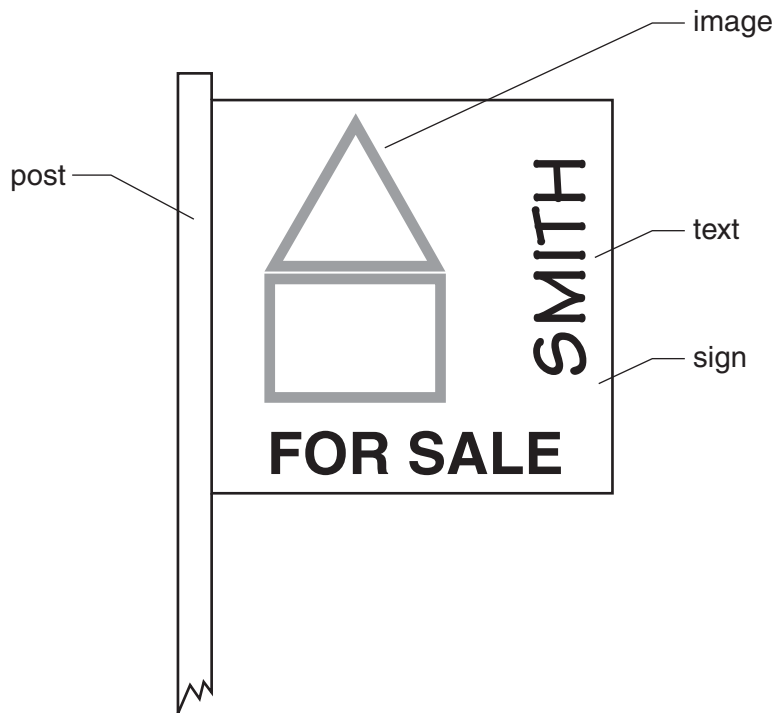


Fig. 4

(a) Name the **two** geometrical shapes that have been used to make the image on the sign.

1 ..... [1]

2 ..... [1]

(b) State **two** decisions the designer would have to make when selecting the text for the sign.

1 ..... [1]

2 ..... [1]

(c) State **one** reason why corriflute is a suitable material for the sign.

..... [1]

(d) Name **one** suitable method of printing corriflute signs.

..... [1]



Section B

Answer **all** questions

4 Details of the layout for an estate agent's brochure are shown in Fig. 5.

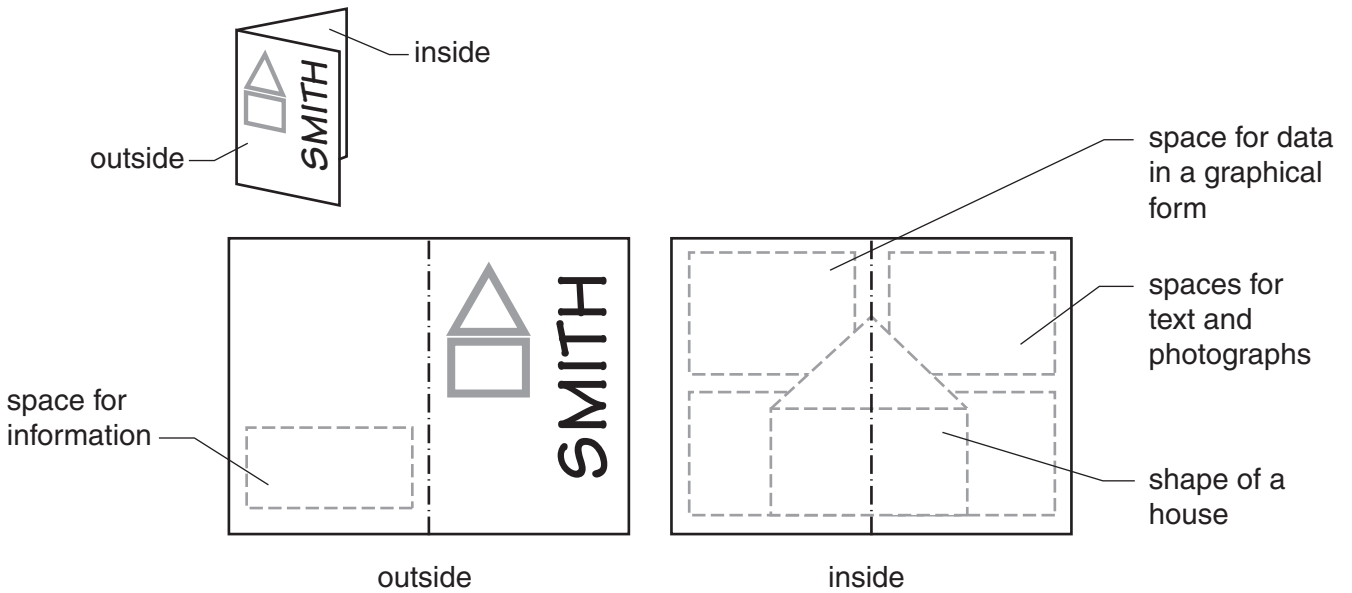


Fig. 5

(a) State **two** functions of the brochure.

1 ..... [1]

2 ..... [1]

(b) The brochure is to show a range of data in a graphical form. Name **two** methods of presenting data in a graphical form.

1 ..... [1]

2 ..... [1]

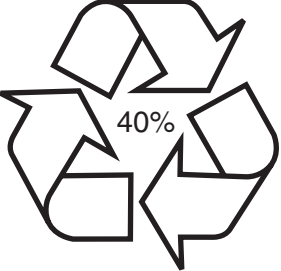


- (c) A mechanical system will make the house shape pop-up when the brochure shown in Fig. 5 is opened.

In the space below use sketches and notes to show a design for the mechanical system.

[4]

- (d) The information in the table below is printed on the back of the brochure.  
Name each piece of information and give a reason for its inclusion on the brochure.

<p>www.smith.co.uk</p>	<p>Name .....[1]</p> <p>Reason .....</p> <p>.....</p> <p>.....[1]</p>
	<p>Name .....[1]</p> <p>Reason .....</p> <p>.....</p> <p>.....[1]</p>

[Total: 12]

Turn over

5 A simple jigsaw puzzle is to be used to promote the estate agency.

(a) In the space below use sketches and notes to show **one** idea for the puzzle. The specification points for the puzzle are that:

- it is made from five pieces of 10mm thick Styrofoam sheet [1]
- the five pieces 'lock' together to form a regular **hexagon** [2]
- each piece displays one of the letters from the word 'SMITH' [1]
- when assembled it shows the name 'SMITH' [1]
- it can be temporarily fastened to a fridge door [1]



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