

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**  
International General Certificate of Secondary Education

**MARK SCHEME for the May/June 2013 series**

**0445 DESIGN AND TECHNOLOGY**

**0445/21**

Paper 2 (Graphic Products), maximum raw mark 50

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

Page 2	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2013	0445	21

- A1 (a) Logo outline**  
Hexagonal shape evident (1)  
60° extension 80 long lower LHS (1)  
60° extension 80 long top RHS (1)  
60° × 80 top LHS (1)  
Top connecting line (1) [5]
- (b) Fruit**  
circle Ø80 (1) [1]
- (c) Triangle top of fruit**  
Equilateral (1)  
20 side (1) [2]
- (d) Sandwich**  
45° line (1)  
Side height 90 (1) [2]
- [Total: 10]**
- A2 (a) Lettering**  
Accuracy and proportion of:  
**S** (1)  
**W** (1)  
Spacing (1)  
Height (1) [4]
- (b) Sign board outline**  
45° mirror angle/vertical extended (1) [1]
- [Total: 5]**
- A3 (a) Isometric view**  
End triangle to size (1)  
Ghost box evident (1)  
Ghost box projected to form front (1)  
Lid outer drawn overhanging (1)  
Lid outer drawn 90 wide (1)  
Radius corners (1)  
Window drawn (1)  
Window drawn 120 × 50 (1) [8]
- (b) Tone**  
applied to show transparency (0 – 2pr) (2) [2]
- [Total: 10]**

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2013	0445	21

- B4 (a) Front elevation**  
 Width 71 (1)  
 Box height 40 (1)  
 Divider 55 above box (1)  
 Finger slot evident (1)  
 Finger slot C/L 15 from top (1)  
 Finger slot 9 deep (1)  
 Thickness evident on L/H of slot (1) [7]
- (b) Plan**  
 71 × 71 square outline (1)  
 Thickness of card 6mm to scale (1)  
 Divider evident (1)  
 Finger slot length evident (1)  
 Finger slot drawn central (1) [5]
- (c) End elevation**  
 Heights projected (1)  
 Finger slot projected from plan (1)  
 Finger slot Height projected from FE (1)  
 Thickness evident on R/H of slot (1) [4]
- (d) Drink can**  
 Drink can in position **D** (1)  
 Ø66 drawn (1)  
 Ø54 drawn (1)  
 Ø54 concentric (1)  
 Can centred on box diagonal (1)  
 Can projected to FE & visible (1)  
 Can projected to EE & visible (1)  
 Overall height correct (50 ± 3) (1)  
 12mm shoulder to can visible (60°) (1) [9]

**[Total: 25]**

Page 4	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2013	0445	21

**B5 (a) *Development***

5 panels evident (1)  
Centre panel 150 wide (1) [2]

Base 40 deep (1)  
Two glue flaps to base  $2 \times 1$  (2) [3]

Back 120 tall (1)  
Two sides 40 wide  $2 \times 1$  (2)  
Two glue flaps to sides  $2 \times 1$  (2) [5]

Front 80 tall (1)  
Ellipse shape evident (1)  
Minor axis 80 (1)  
Major axis 120 (1)  
Construction evident (1)  
Profile to candidate construction (1)  
15 wide shoulder to front (1) [7]

All glue tabs 10 wide (1)  
All glue tabs with angled ends (1) [2]

**[Total: 19]**

**(b) (i) *Octagon outline***

Outline completed  $2 \times 1$  (2) [2]

**(ii) *Symbol***

Napkin evident (1)  
Hand (or equivalent) evident (1)  
Movement arrow(s) (1)  
Symbol in proportion to outline (1) [4]

**[Total: 6]**