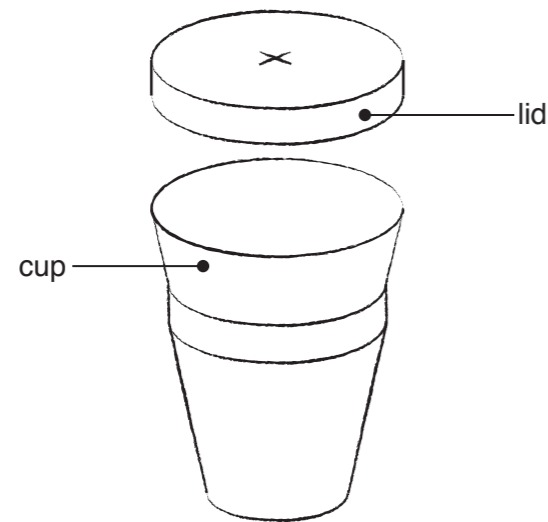


**Section A**

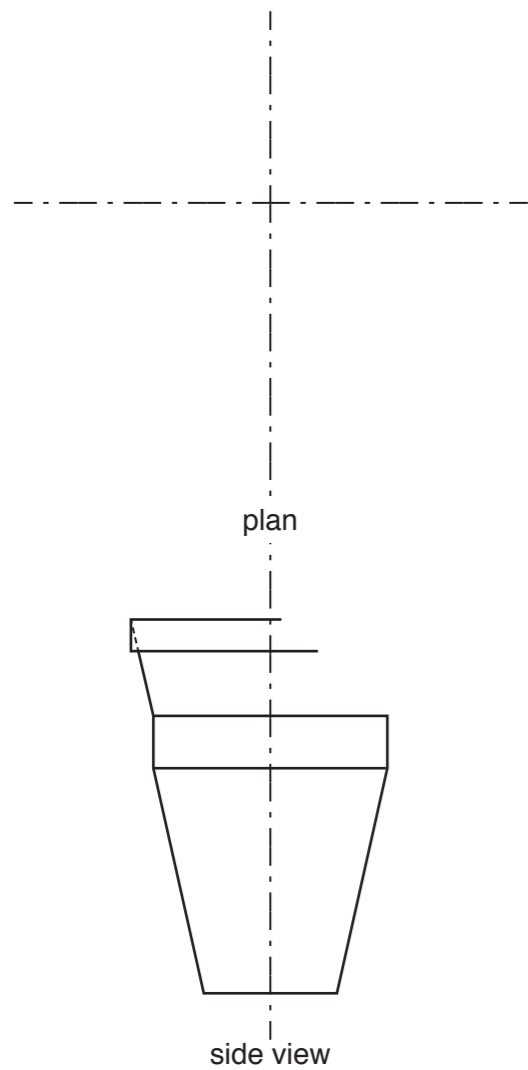
Answer **all** questions in this section.

**A1** A sketch of a plastic cup and lid is shown below.



Complete the orthographic views of the plastic cup with the lid in place shown below. Include hidden detail.

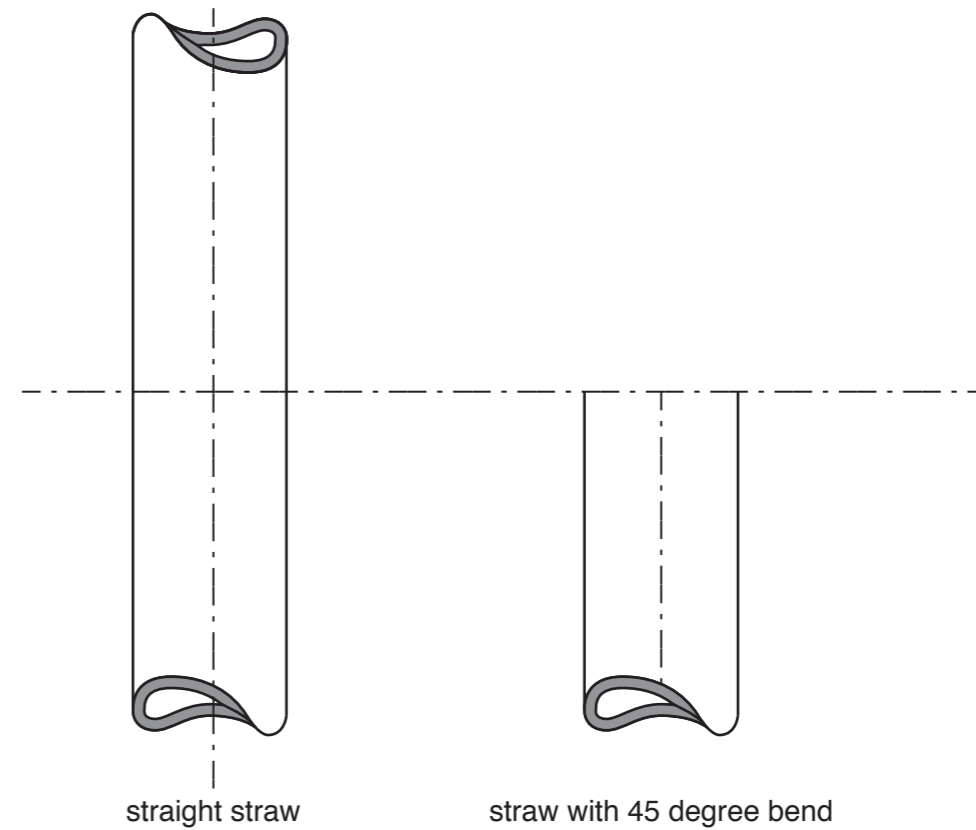
[7]



**A2 (a)** Name a method of manufacturing the lid of the cup.

..... [1]

**(b)** A straw is pushed into the hole in the top of the lid. Complete the drawing below to show part of a straw with a 45 degree bend. [4]



**(c)** Explain why the cup is wider at the top than at the bottom.

.....  
 .....  
 .....  
 ..... [2]

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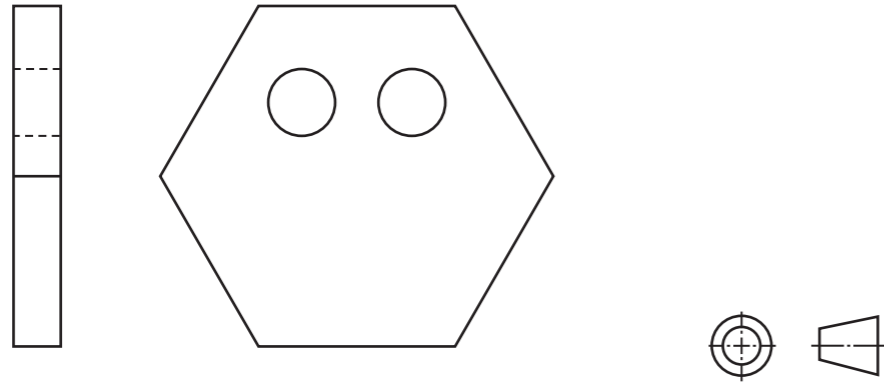
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**A3** A face shape cut from foam board sheet is to be added to the plastic cup.

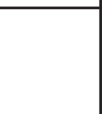
**(b)** Use a sketch and notes to show a method of attaching the foam board face shape to the cup. [2]

Orthographic views of the face shape are shown below.



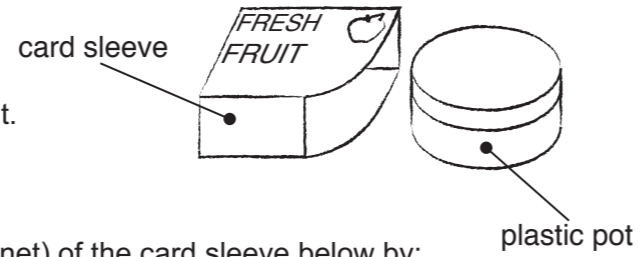
**(a)** Construct a 2 : 1 planometric drawing of the face shape in the space below. Sizes should be taken from the orthographic views. [7]

**(c)** State **two** reasons why the face would be added to the cup. [1]  
1. .... [1]  
2. .... [1]



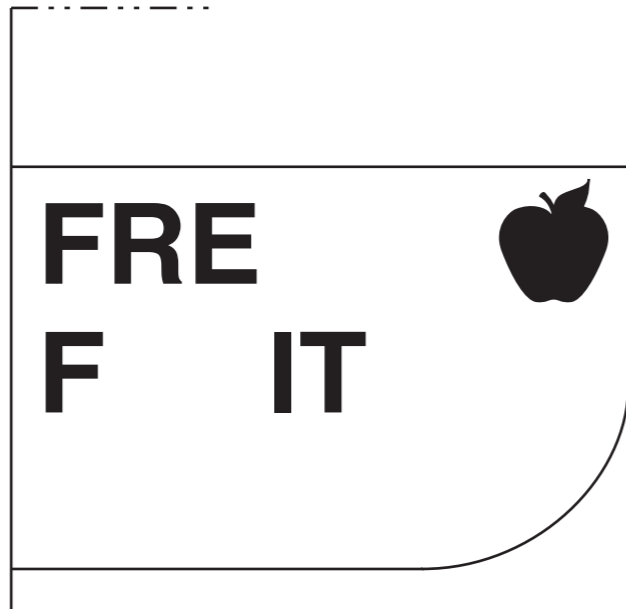
**Section B**  
Answer **either** question **B4** or **B5**.

**B4** A sketch of a package for fresh fruit is shown on the right.



(a) Complete the full size drawing of the development (net) of the card sleeve below by:

- (i) adding the missing surfaces; [9]
- (ii) adding the missing glue tab; [2]
- (iii) completing the name. [3]



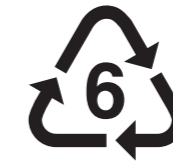
(b) Describe the method of cutting out 10 000 copies of the development (net) for the card sleeve.

.....  
.....  
.....  
.....  
.....  
.....  
..... [6]

(c) The apple shape on the card sleeve is to be embossed.

Use a sketch and notes to show what is meant by the term 'embossed'. [2]

(d) Explain why the symbol shown below is on the plastic pot.



.....  
.....  
.....  
..... [3]

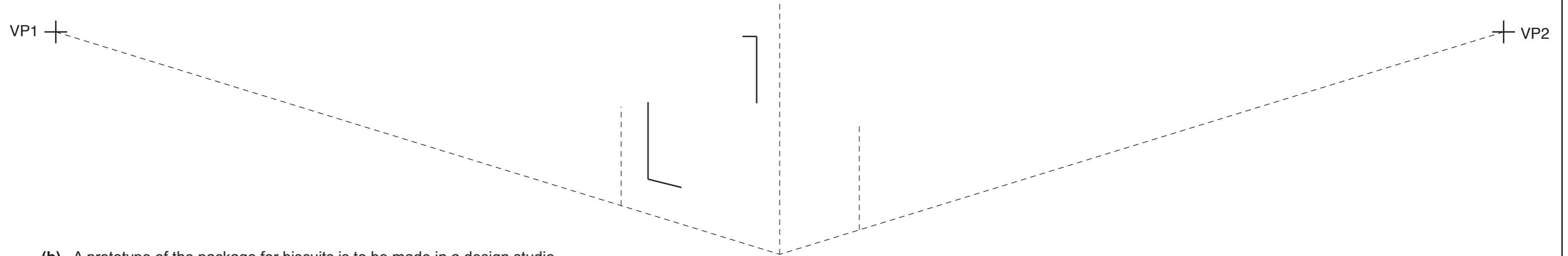
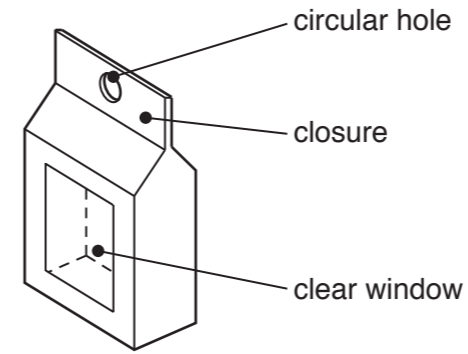
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**B5** A package for biscuits is shown on the right. The package is made from paper and has a clear window on the front surface.

**(a)** On the start lines below complete the two point perspective drawing of the package. [16]



**(b)** A prototype of the package for biscuits is to be made in a design studio.

**(i)** Name a material that could be used to make the clear window.  
 ..... [1]

**(ii)** Use sketches to show a method of making and attaching the clear plastic window to the package. [4]

**(c) (i)** Complete the list below to show **three** pieces of information that should be printed on the package.

1. Eat within one week of opening.
2. .... [1]
3. .... [1]

**(ii)** Use a sketch and notes to explain why the closure has a circular hole in it. [2]

