

**Section A**

Answer **all** questions in this section.

**A1** The drawings below show two designs for boxes made from card. In the spaces provided complete:

(a) the isometric drawing of design **A**; [6]

(b) the orthographic views of design **B**. [4]

	orthographic views	isometric
<b>A</b>		
<b>B</b>		

**A2 (a)** The word **FRAGILE** is printed on a self-adhesive vinyl label and attached to design **A**. State **two** reasons why self-adhesive vinyl is suitable for this application.

1. .... [1]

2. .... [1]

**(b)** The lid for design **B** lifts off the base. Use a sketch and notes to show a design that allows the lid to lift off the base. [2]

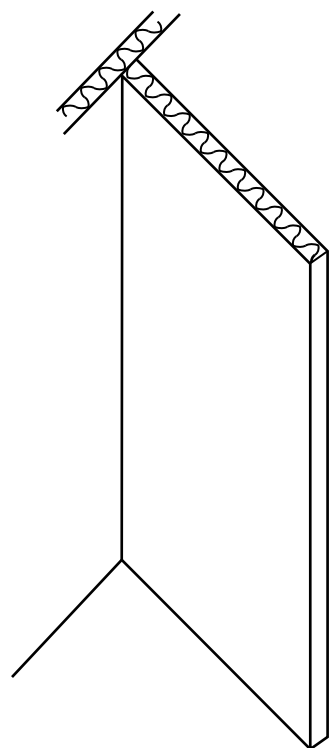
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A3 The box in design A is divided into four equal parts by slotting together two pieces of corrugated card.

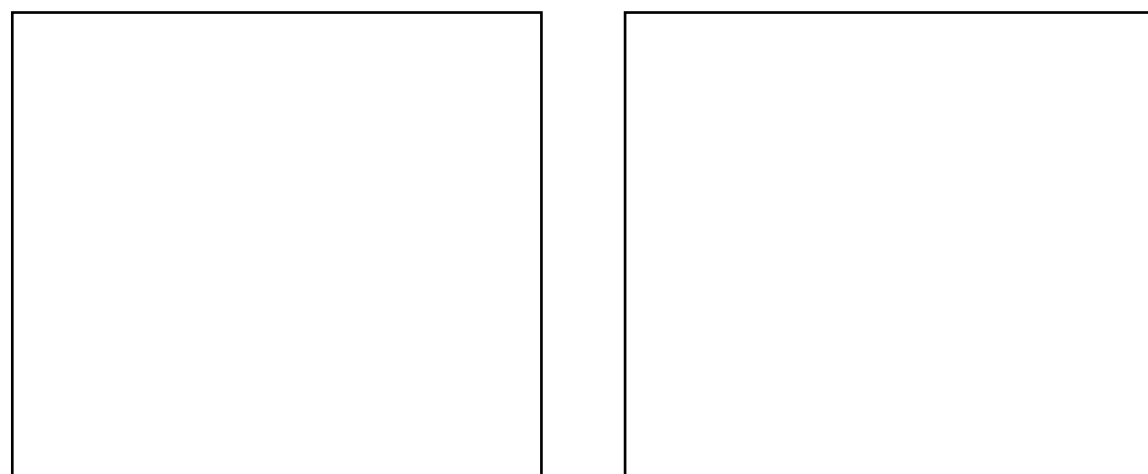
- (a) (i) Complete the planometric drawing below of the two pieces of corrugated card slotted together at right angles. [4]



- (ii) The two pieces of corrugated card which make the divider are shown below.

Draw the slots required to join the card at right angles.

[3]



- (b) The box in design B is available in three sizes. The 2015 sales of each size is shown below.

	large	medium	small
sales	1200	600	900

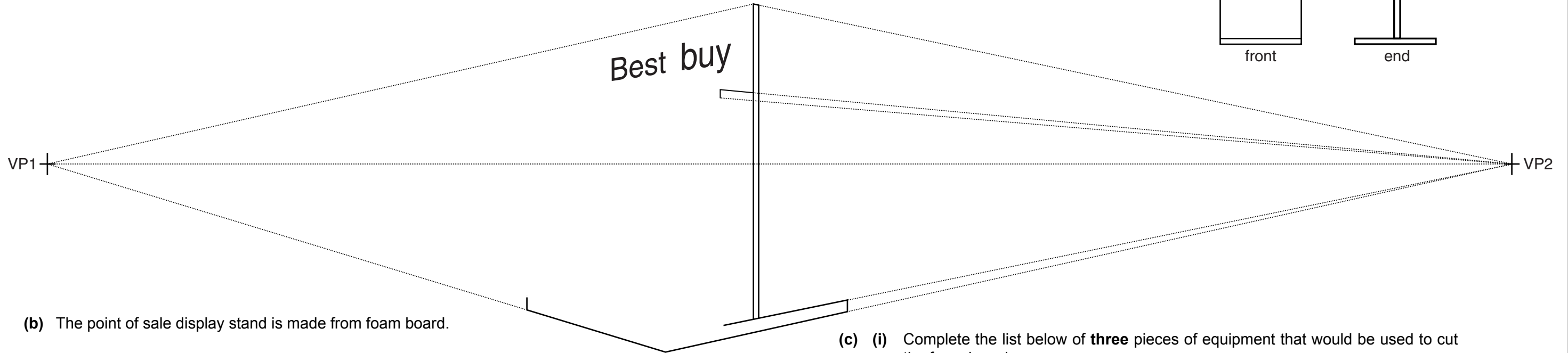
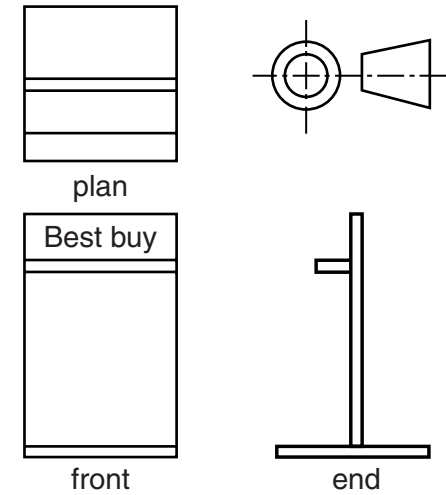
Draw a bar chart to show the sales of the different size boxes. Use labels to enhance the appearance of the drawing. [4]



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

**B4** Orthographic views of a point of sale display stand are shown on the right.

(a) Complete the estimated two-point perspective drawing below of the point of sale display stand. [15]



(b) The point of sale display stand is made from foam board.

(i) Draw and label a sectional view of foam board. [3]

(c) (i) Complete the list below of **three** pieces of equipment that would be used to cut the foam board.

1. Cutting mat
2. .... [1]
3. .... [1]

(ii) Use a sketch and notes to explain how to use a stencil to apply lettering to the point of sale display stand. [3]

(ii) State **two** properties of foam board that make it suitable for the point of sale display stand.

1. .... [1]

2. .... [1]

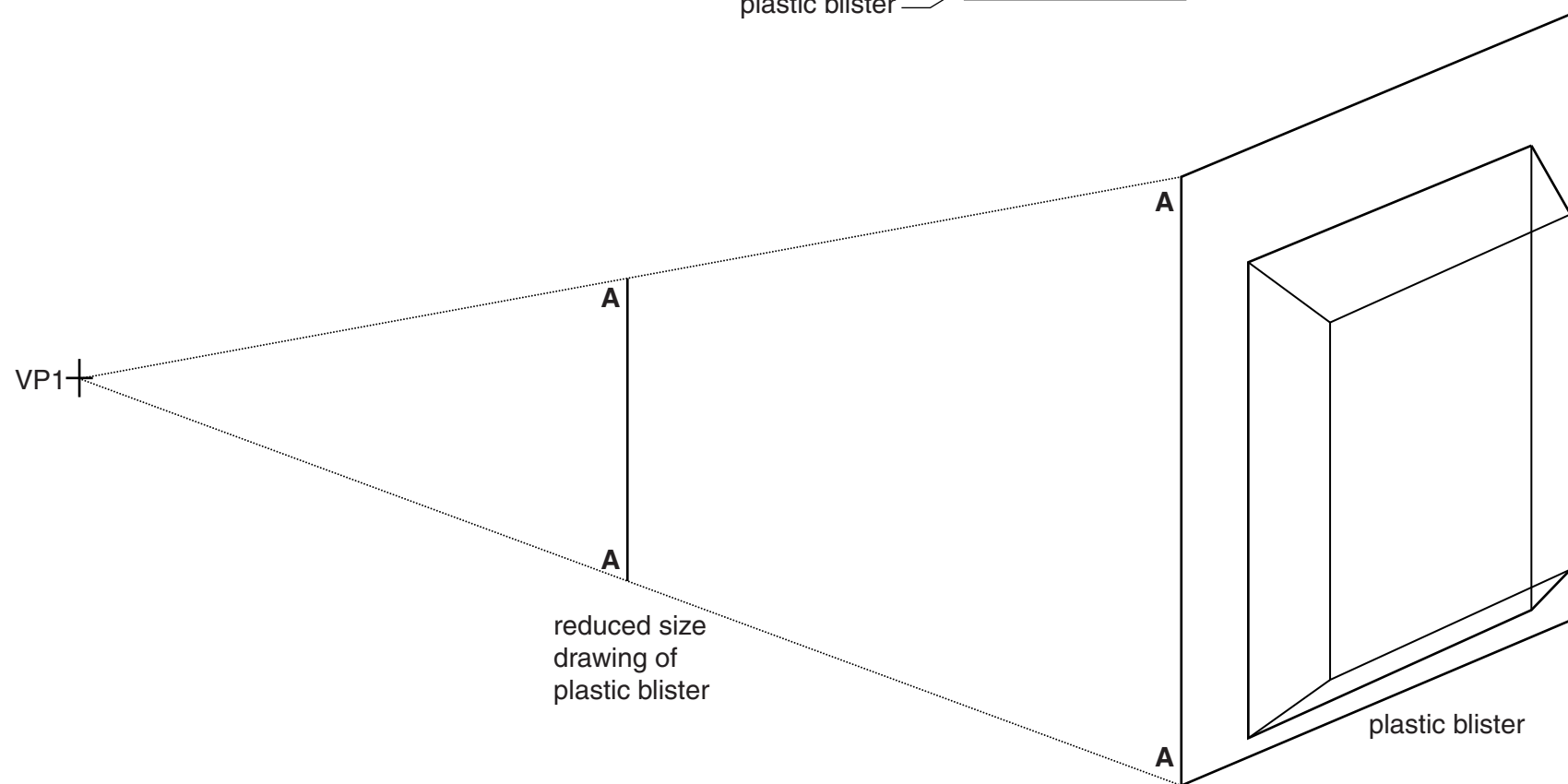
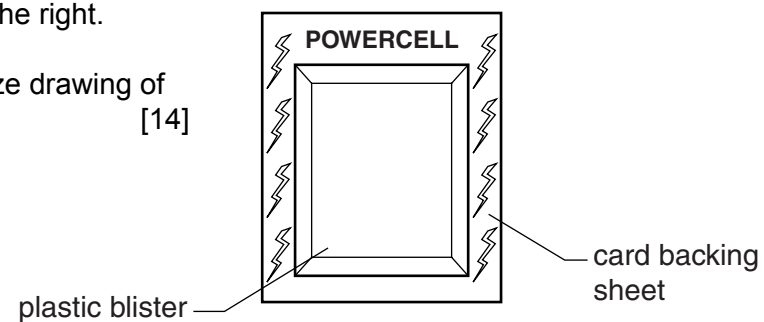
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**B5** A sketch of a blister package for batteries is shown on the right.

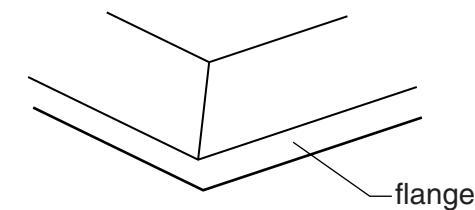
**(a)** Complete the drawing below to show a reduced size drawing of the plastic blister. [14]



**(b)** The design on the card backing sheet is printed by lithography. Use sketches and notes to describe the process of lithography.

[7]

**(c)** Explain why the flange is needed on the plastic blister.



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.....

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..... [2]

**(d)** Use a sketch and notes to show a modification to the card backing sheet that will allow the blister package to hang on a rack. [2]

