A1 A children's party is to be based on the theme of 'BEARS'

Each child will be given a headband with 'Bear Ears' for them to wear at the party, as shown on the right.

Details of part of the headband are given below.


Draw full size the right ear and the right half of the headband on the centre lines given to the right.



The construction of the ellipse must be clearly shown.
[9]

2 A name card for each child is designed to fit onto the headband so that each child has a 'Bear' name.

Complete the name card for JAMES BEAR by adding the four remaining letters.

All the letters must be the same height and style as those shown.


A3 Details are given below of a two part leaflet holder made from 5 mm foamboard.

Part $\mathbf{B}$ is folded and fitted into part $\mathbf{A}$.

(a) Add two slots to the drawing of part $\mathbf{A}$ above so that part $\mathbf{B}$ will fit when it is folded. [2]
(b) In the space provided to the right, draw a full size pictorial sketch of the assembled leaflet holder. [8]

B4 Each year Zenya's height is measured on her birthday.
A table showing her different heights is shown below.

| Age | Height (mm) |
| :---: | :---: |
| 1 | 480 |
| 2 | 620 |
| 3 | 740 |
| 4 | 950 |
| 5 | 1100 |

(a) To a scale of 1:10, draw a bar chart on the axes below to illustrate Zenya's height on each birthday.
(b) A new height chart will use a symbol to represent a child as shown in the drawing below.


Draw this symbol on the centre lines in the space to the right to a scale of 2:1.
[10]
(c) A symbol depicting the calories eaten by a child on their birthday is shown below.


Complete the calorie symbol below the child symbol by graphically enlarging the given drawing above.

The left hand side of the symbol has been drawn for you.

B5 Presentational packaging for a slice of birthday cake is shown below.


The centre section is folded inwards to provide a base and a window.
(a) In the space provided to the right, draw in third angle projection, full size views of the folded packaging in the projection, full size views of the folded packaging in the
direction of $\mathbf{A}$ and $\mathbf{B}$.
[10]
(b) Construct, to the same scale, a one-piece development (net) of the packaging.
(c) Two flaps are added to the packaging, to prevent the cake from falling out, as shown below.


In the space provided, sketch a method of holding the two flaps together without using glue or sticky tape. [4]

