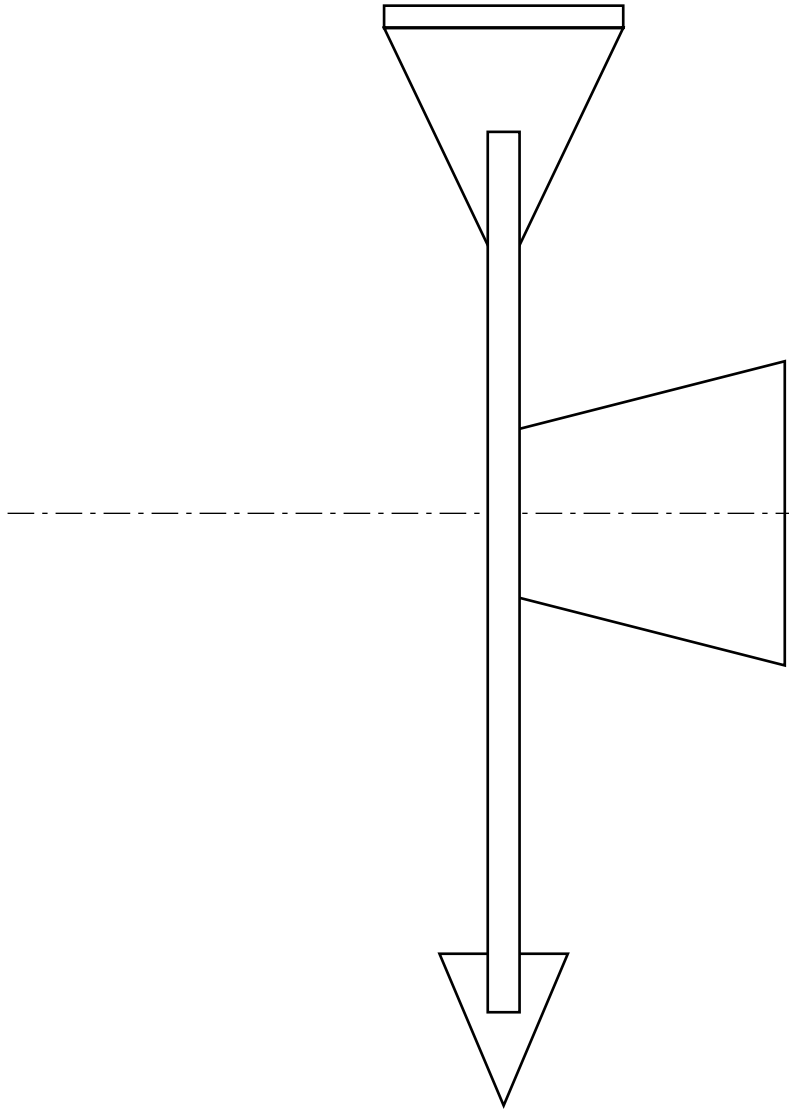
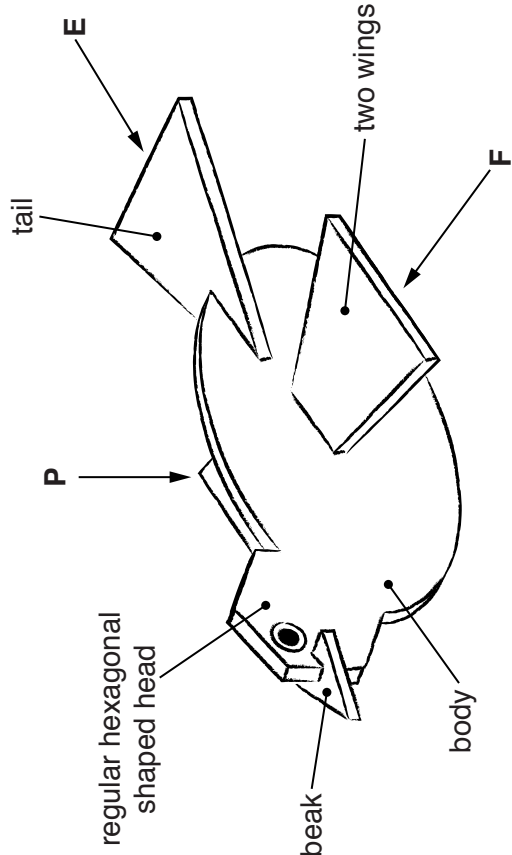


2 A sketch of a bird made from foam board is shown on the right.

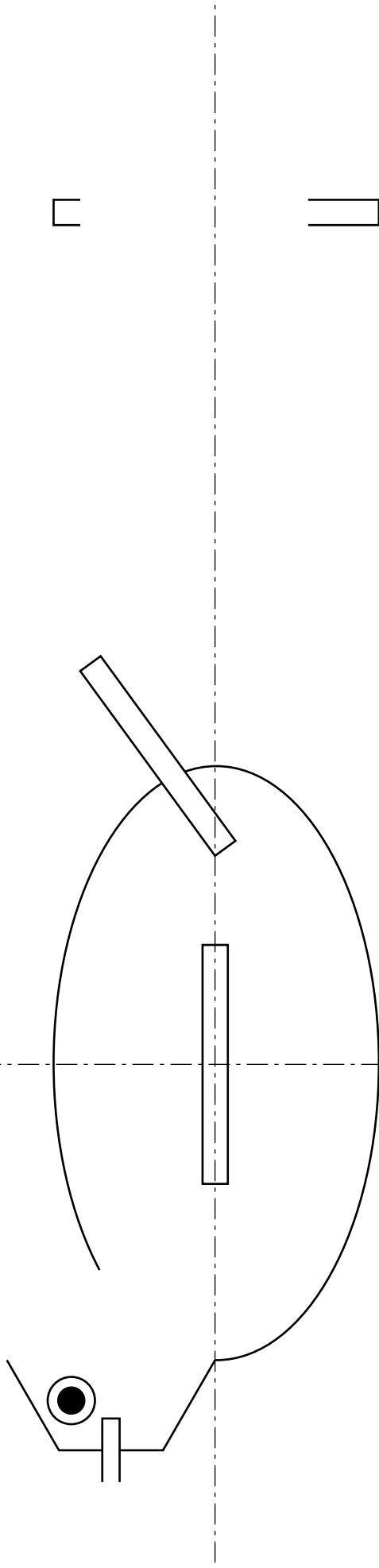
- (a) In the space below finish the orthographic drawing of the bird by completing:
- (i) the plan in the direction of P;

(ii) the front view in the direction of F;

(iii) the end view in the direction of E.
- (b) Add the projection symbol in the box provided.



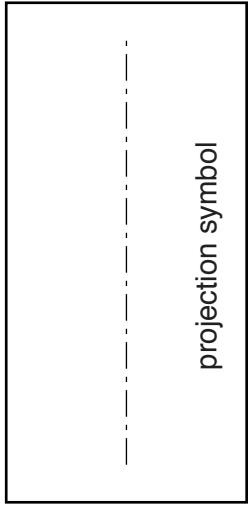
plan



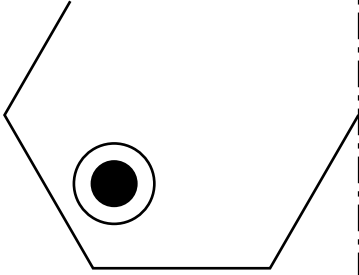
front view



end view



- (c) On the centre lines below complete the full size drawing of the body of the bird by constructing an ellipse with major axis 180 and minor axis 80.

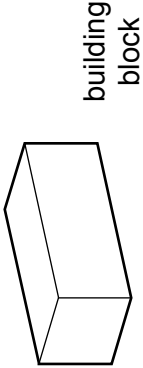


- (d) Complete the table below to show the names of the shapes used for the wings, beak and the head of the bird.

.....	
.....	
regular hexagon	

- (e) (i) Name an adhesive that could be used to join the two wings to the body.
.....[1]
- (ii) In the space below use a sketch to show a method of slotting the tail into the body.
[2]

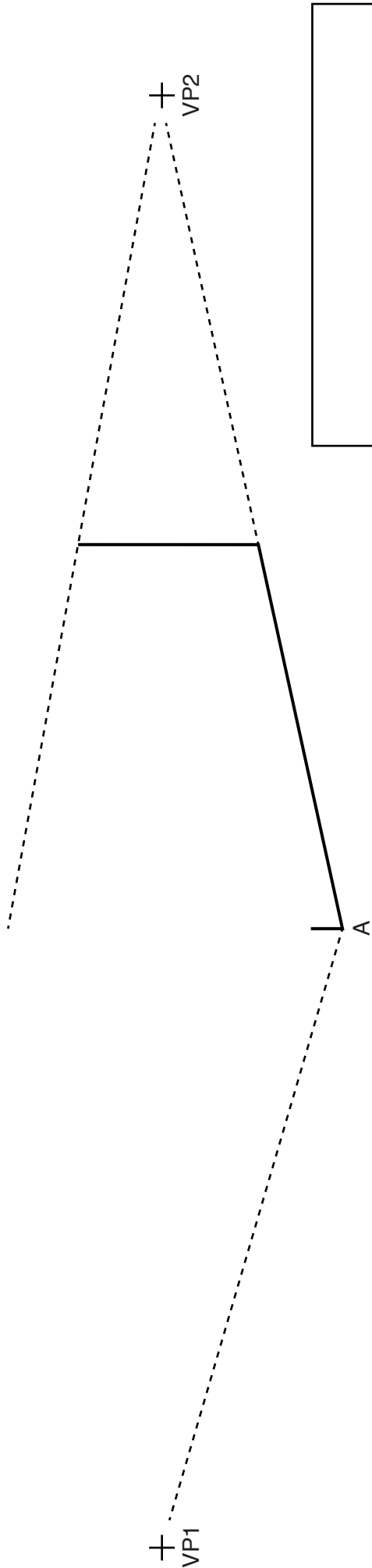
5 The set of four steps shown in the orthographic views on the right are made from ten of the blocks shown below.



building block

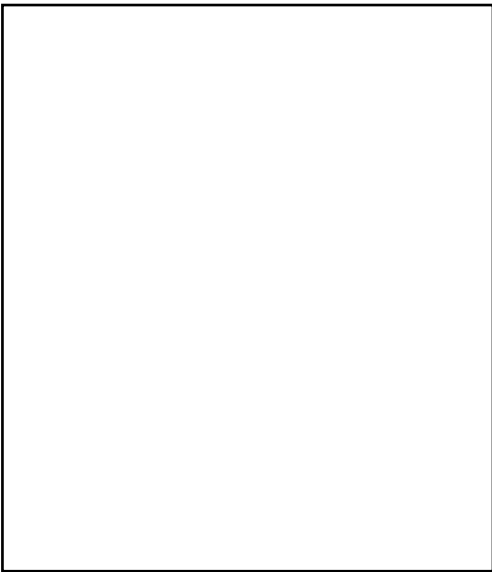
(a) Complete the estimated two point perspective drawing of the steps below.

[10]



(b) In the box on the right sketch a design that uses 15 blocks to create a set of five steps.

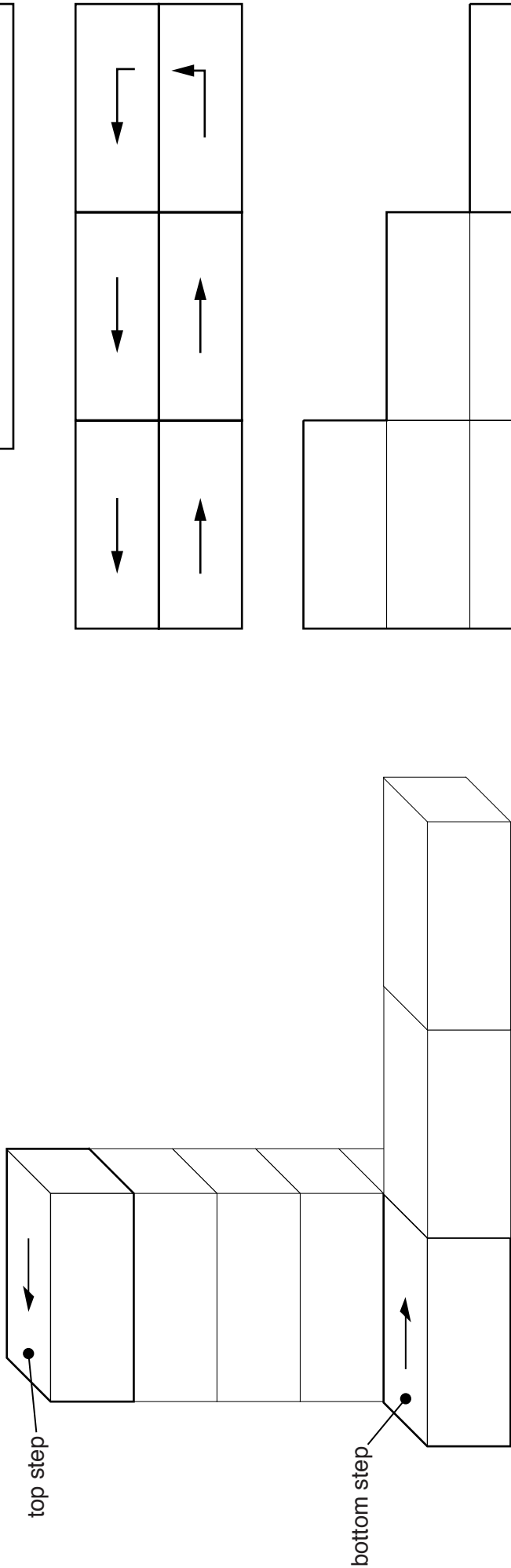
[2]



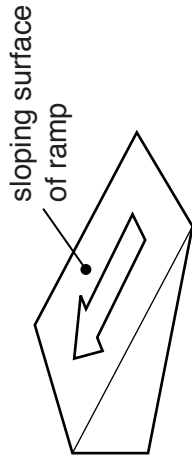
(c) The set of five steps shown in the orthographic views on the right below are made from eighteen building blocks.

Complete the oblique drawing of the steps below.

[8]

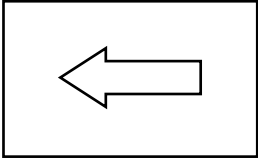


(d) A sketch of a ramp is shown below.

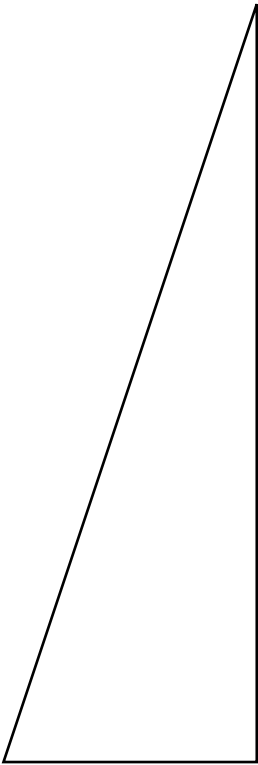


Draw the true shape of the sloping surface of the ramp, including the arrow, by projecting it from the side view.

[5]



end view

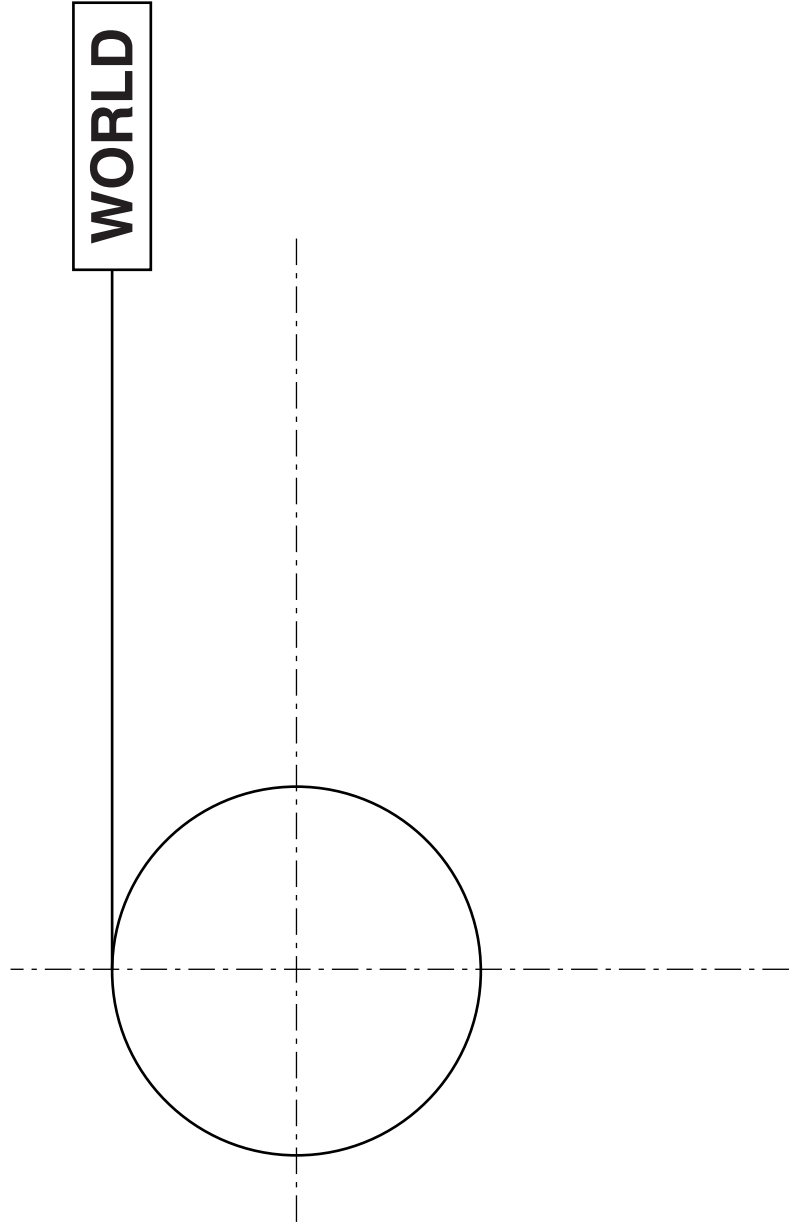
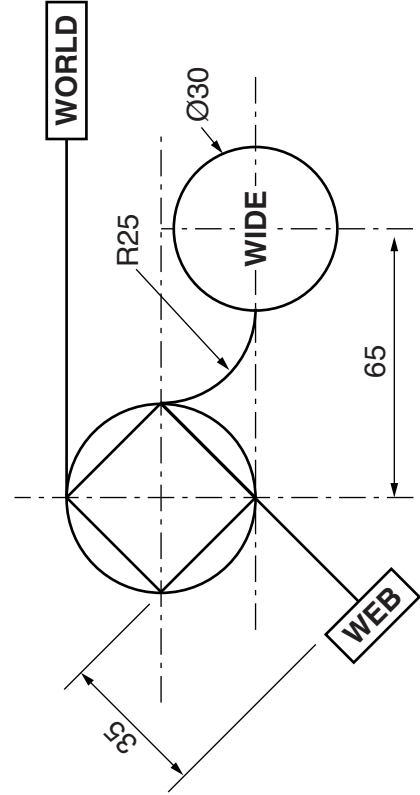


side view

6 A design for a logo for a recruitment agency is shown on the right.

(a) Complete the drawing of the logo below.

[10]



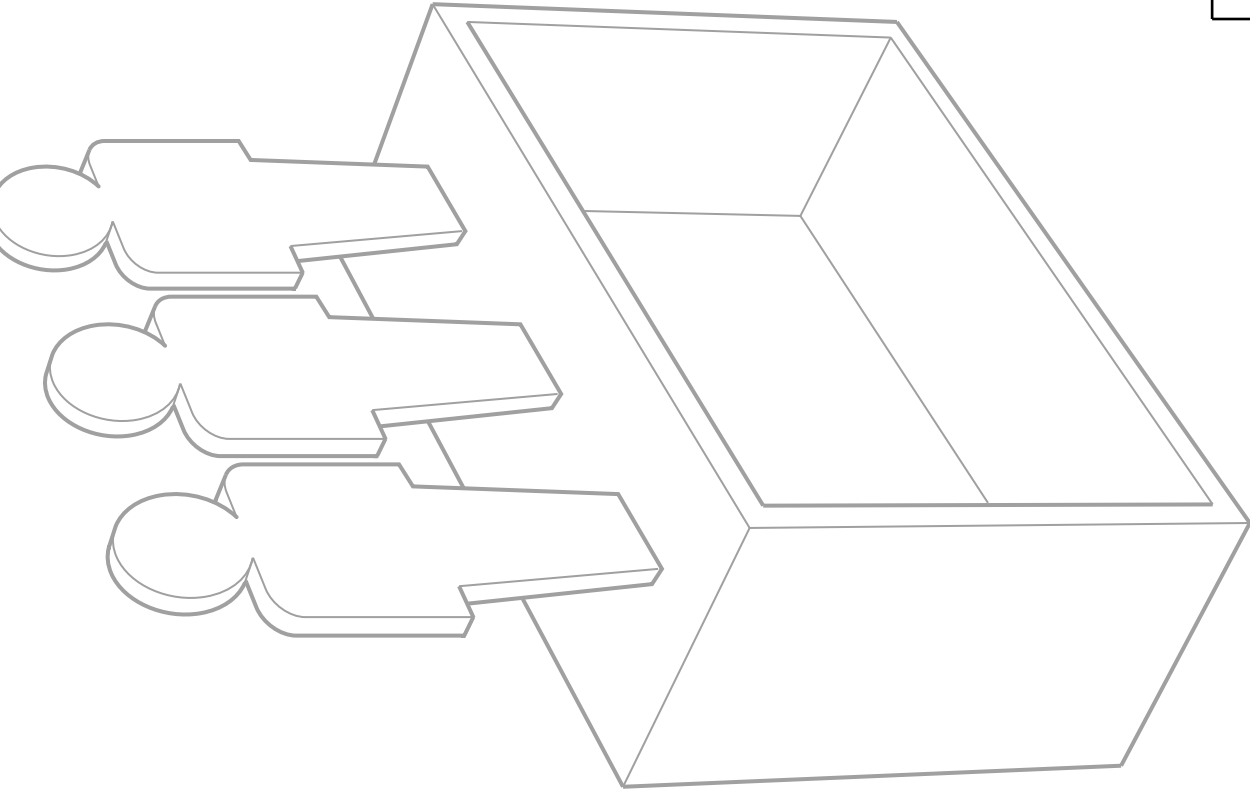
(b) The five stages in a recruitment process are:

1. Advertise job
2. Read applications
3. Invite candidates
4. Interview
5. Offer job.

(c) The display below is to be used by the recruitment agency.

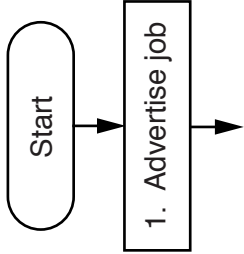
Add sketches and notes to the drawing below to show how a plate cam could be used to make the middle person move up and down as a handle is turned.

[6]



(i) Complete the flow chart below to show the stages in the recruitment process.

[7]



(ii) Describe where and why a decision box would be added to the flow chart.

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