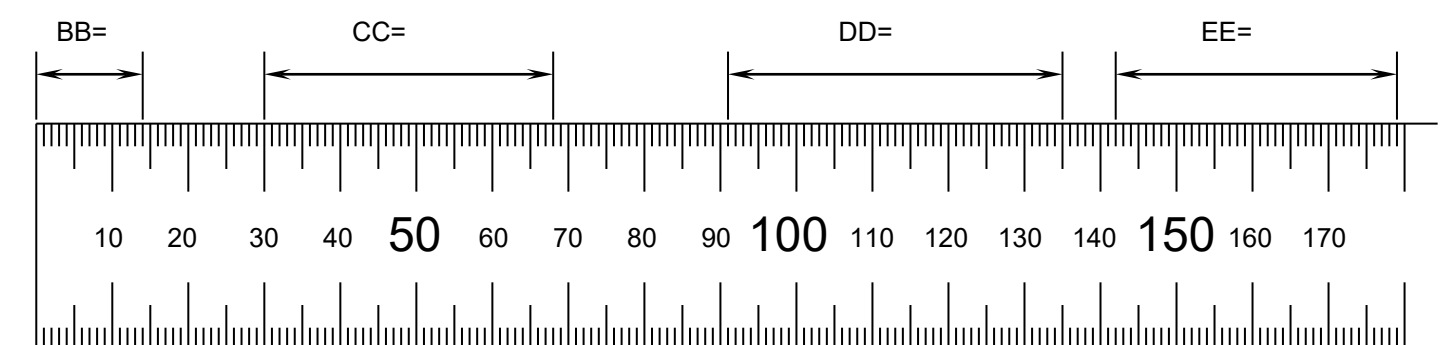
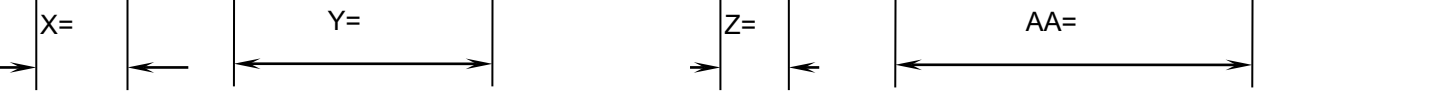
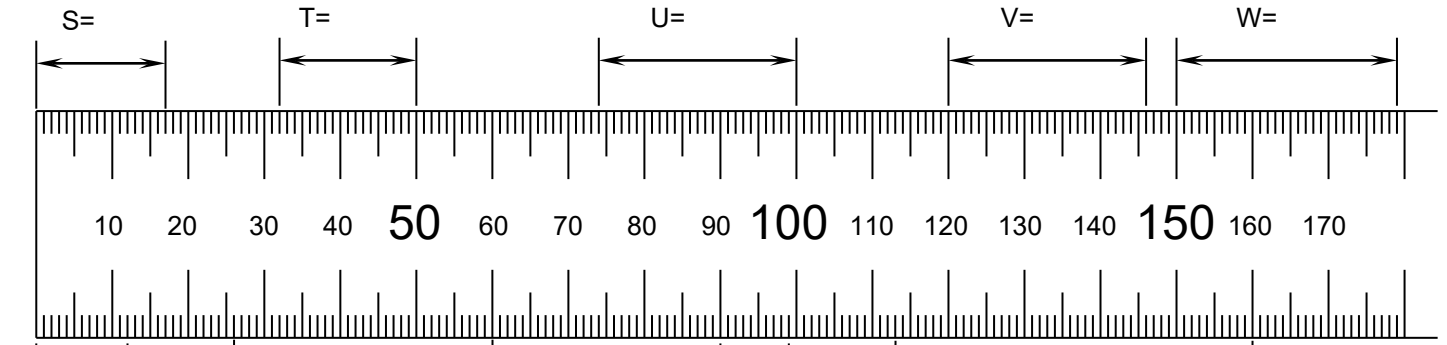
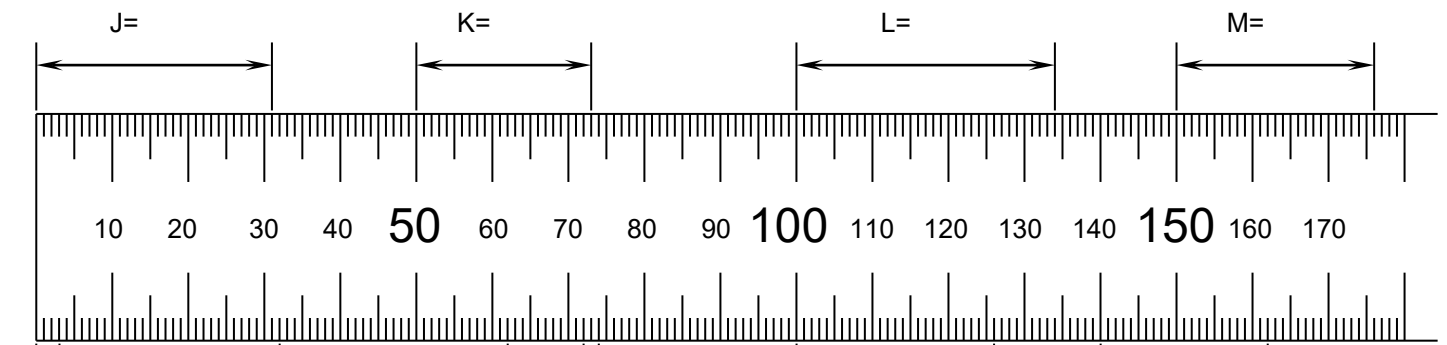
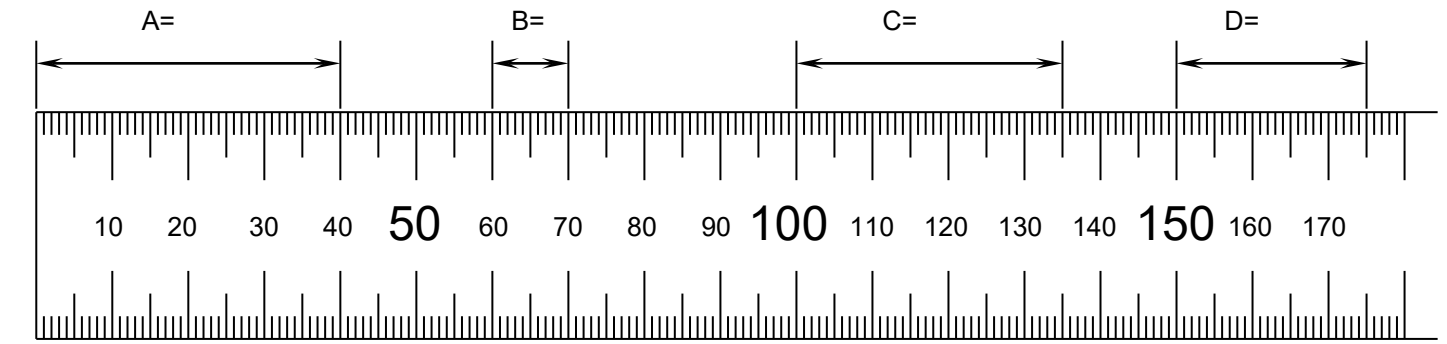


Drawing and Measuring Exercises

Measuring Exercise 1

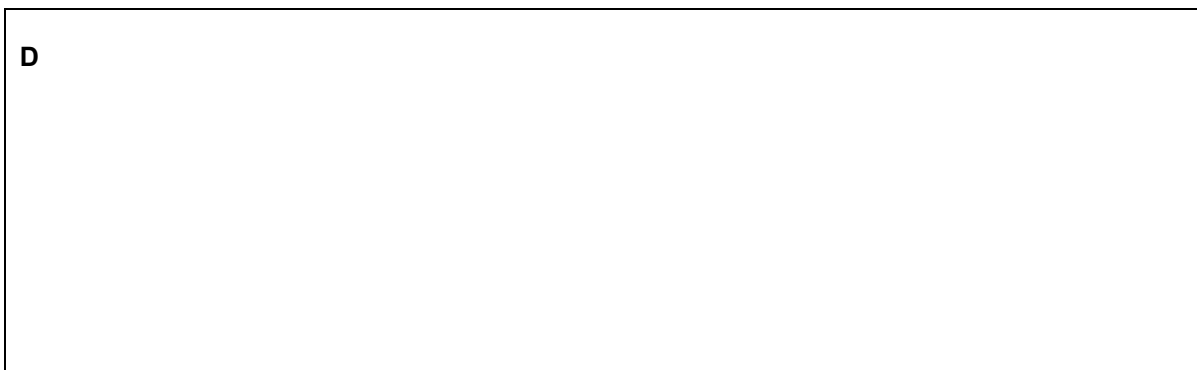
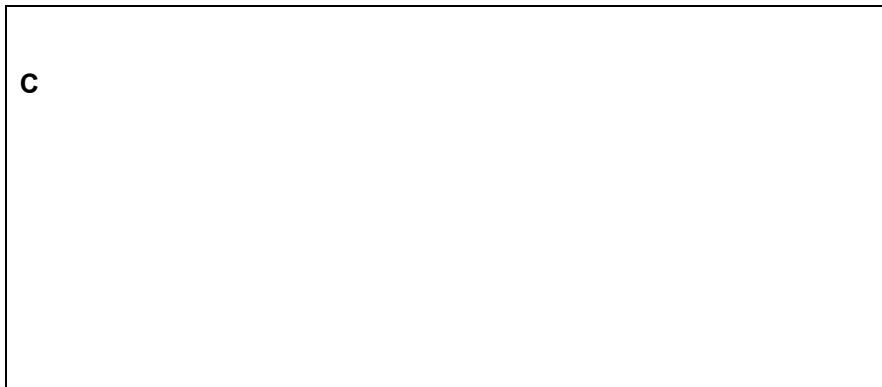
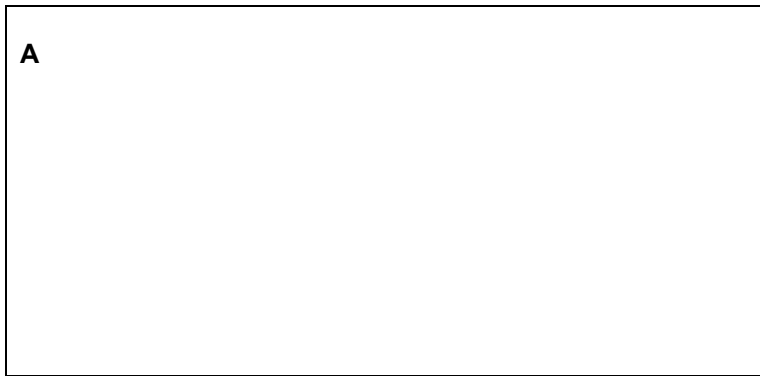
Write the values for each of the measurements shown in millimetres.



Measuring Exercise 2

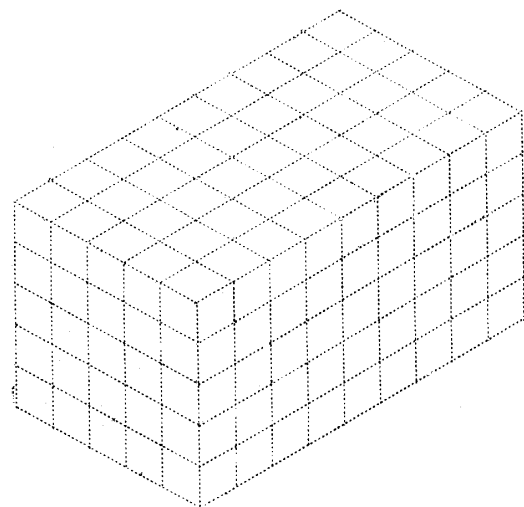
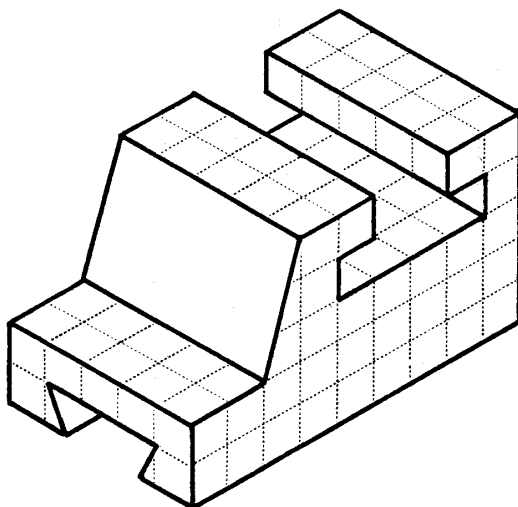
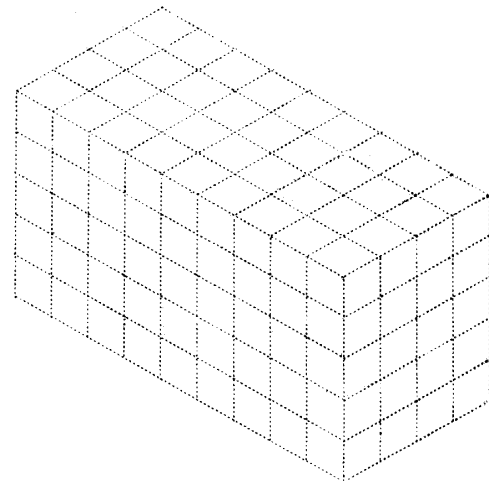
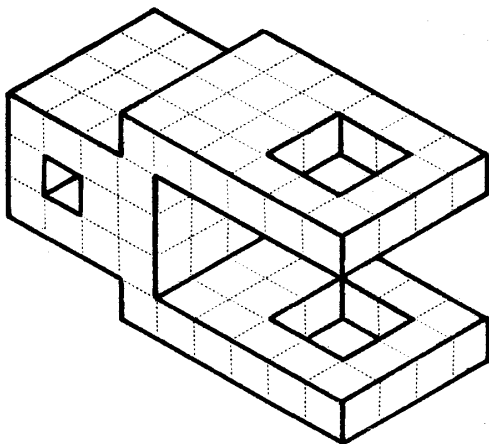
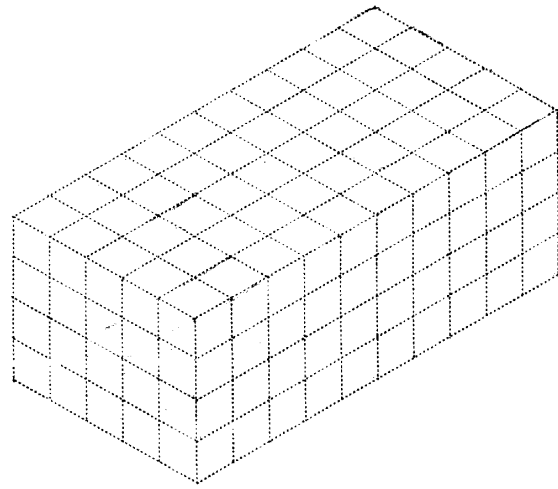
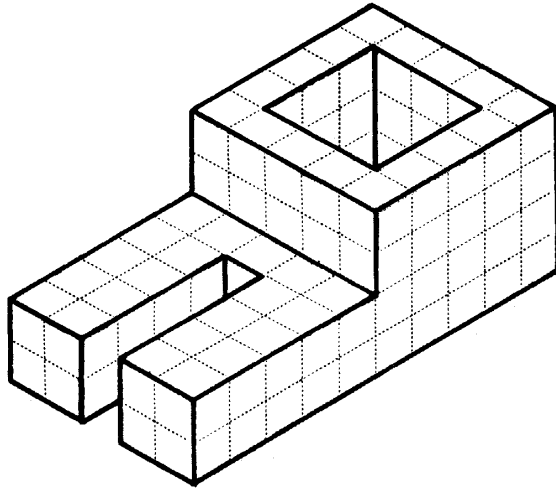
Measure each of the blocks shown and write the sizes in millimetres in the table.

Block	Length (Largest)	Width (Middle)	Thickness (Smallest)
A			
B			
C			
D			



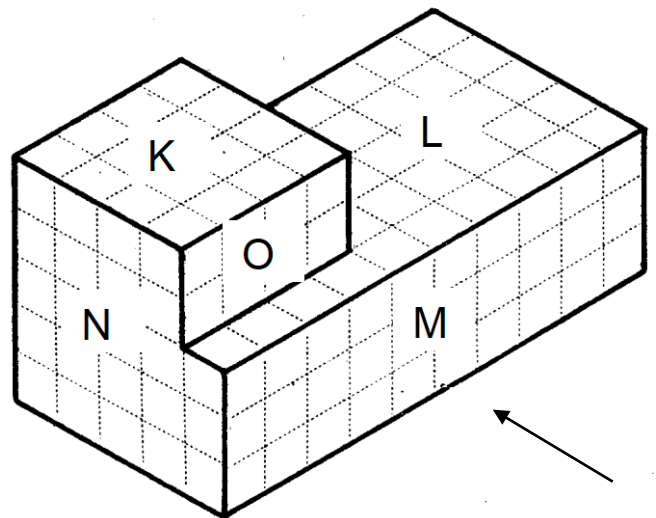
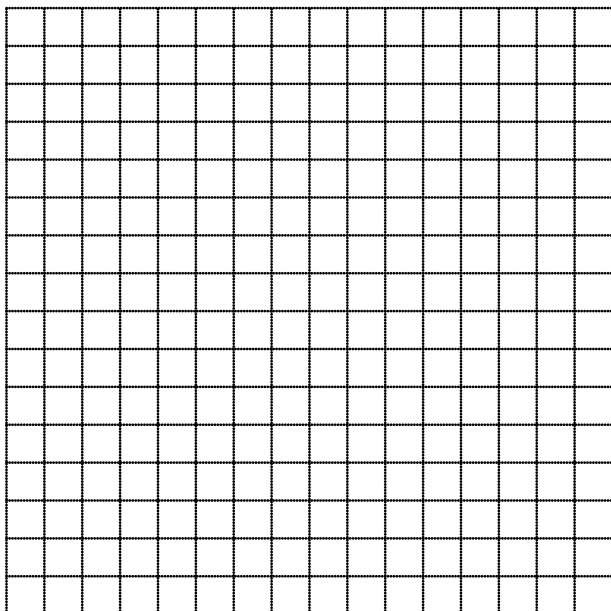
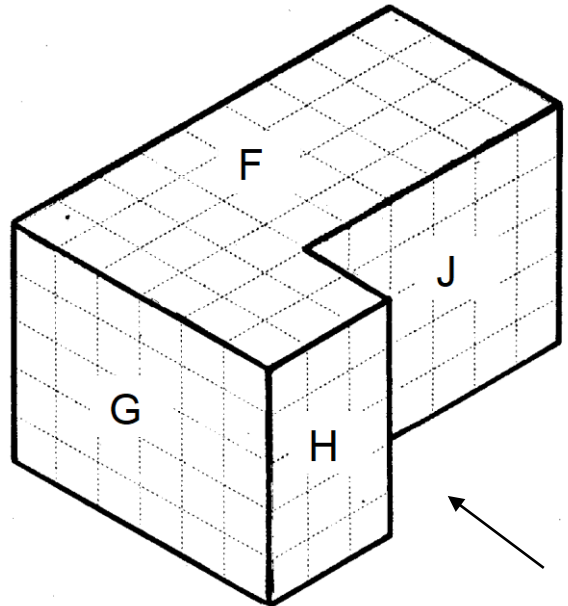
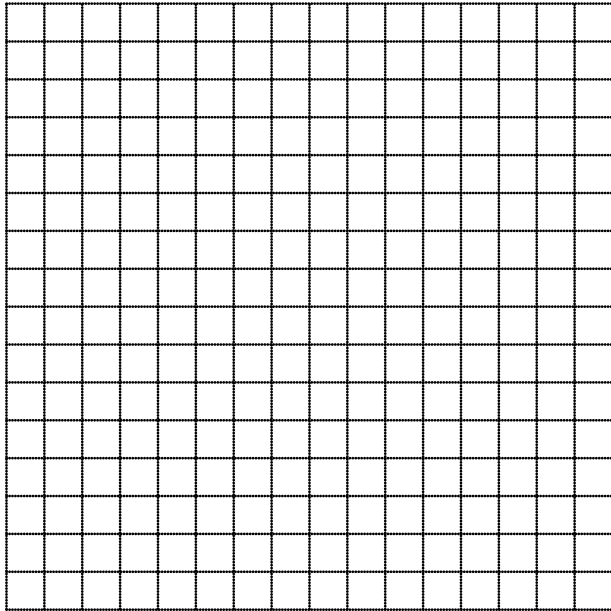
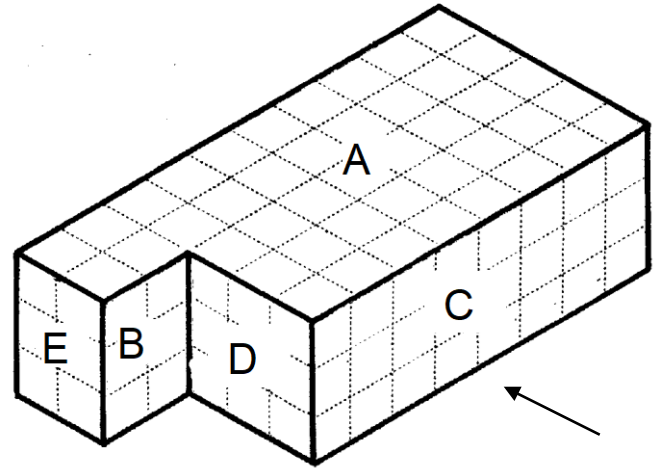
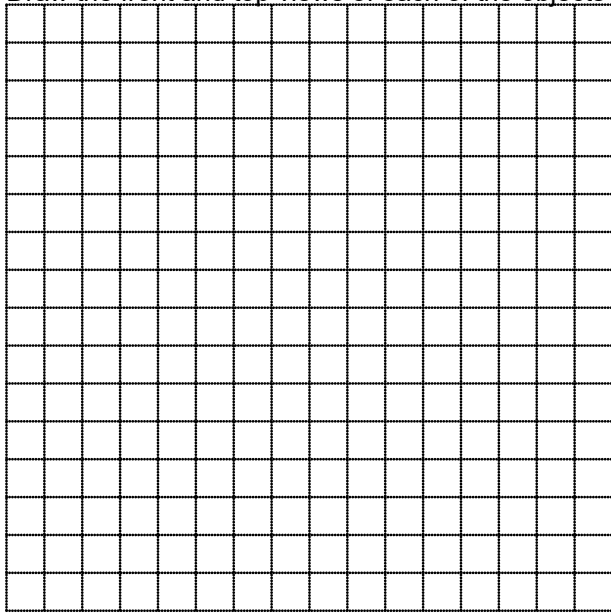
Drawing Exercise 1

Copy the isometric drawings shown onto the grids provided. Use a pencil and a ruler.



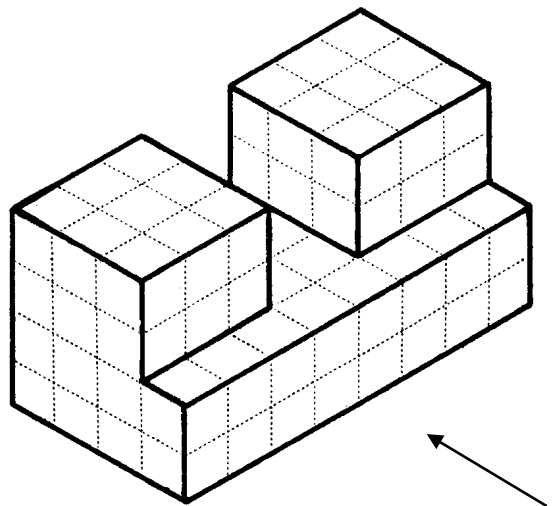
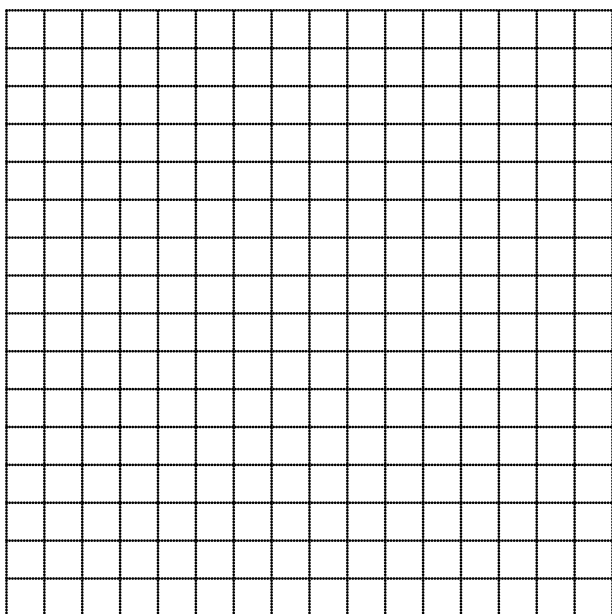
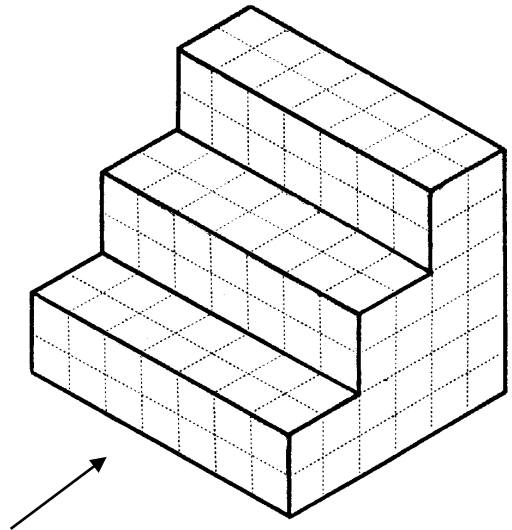
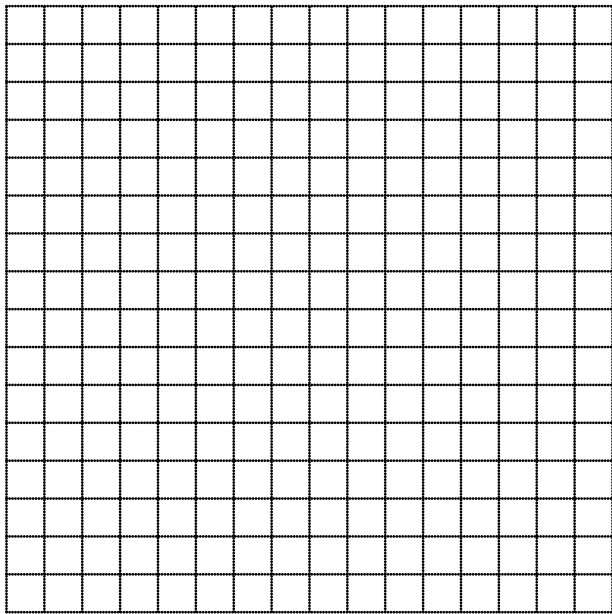
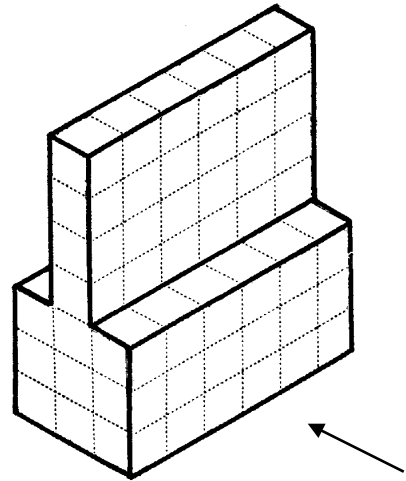
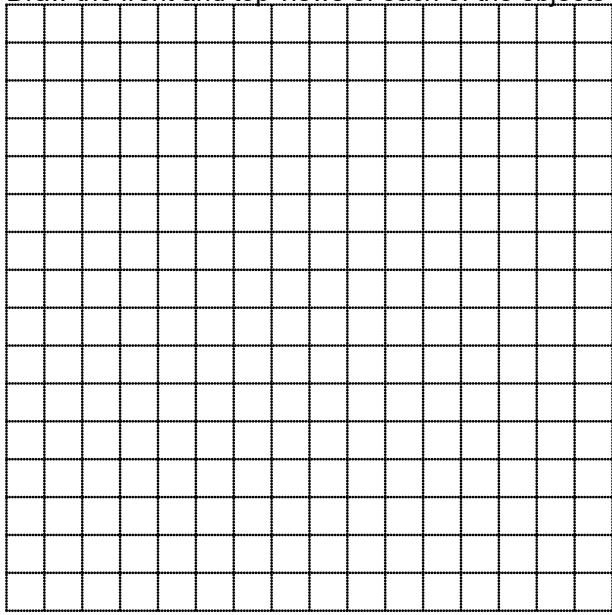
Drawing Exercise 2

Draw the front and top views of each of the objects shown. Label each view. Use a pencil and a ruler.



Drawing Exercise 3

Draw the front and top views of each of the objects shown. Label each view. Use a pencil and a ruler.



Drawing Exercise 4

Label the faces on the Orthogonal Views with the letters shown on the corresponding faces in the Isometric View

Drawing Exercise 5

Copy the isometric drawings shown onto the grids provided. Use a pencil and a ruler.

Drawing Exercise 6

Copy the Isometric Drawings shown onto the Oblique Drawing grids provided. Use a pencil and a ruler.

Measuring Exercise 3

Measure each of the dimensions indicated and write the sizes in the table.

FEATURE	SIZE
Number of circles on pitch circle	
Angle A	
Diameter of Circle B	
Pitch Circle Diameter C	
Small Circle Diameter D	

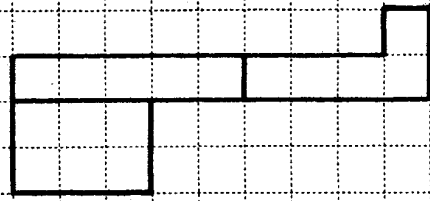
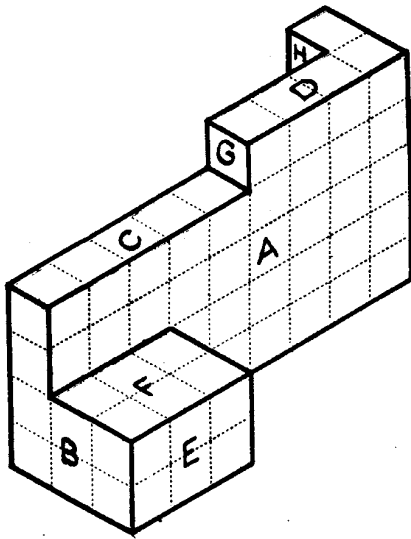
FEATURE	SIZE
Number of circles on pitch circle	
Angle E	
Angle F	
Diameter of Circle G	
Diameter of Small Circle H	
Pitch Circle Diameter I	

FEATURE	SIZE
Number of circles on pitch circle	
Angle J	
Angle K	
Angle L	
Small Circle Diameter M	
Large Circle Radius N	
Pitch Circle Diameter O	

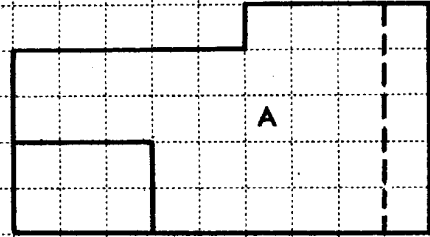
FEATURE	SIZE
Number of circles on pitch circle	
Angle P	
Angle Q	
Large Circle Radius R	
Small Circle Radius S	
Pitch Circle Diameter T	

Drawing Exercise 7

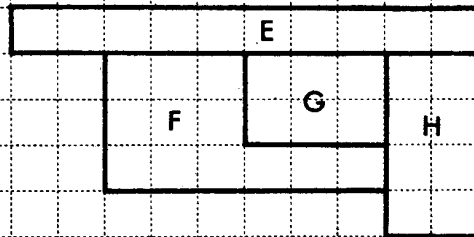
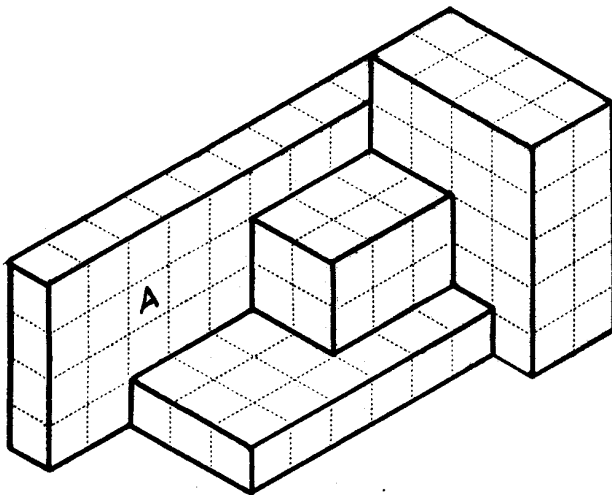
Label the faces on the Isometric Drawings so they correspond to the letters on the Orthogonal Views. Use a pencil.



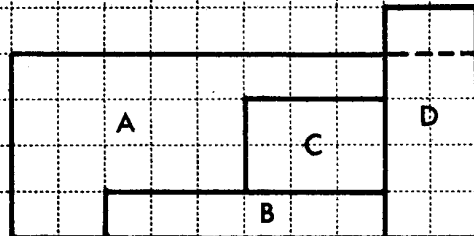
TOP VIEW



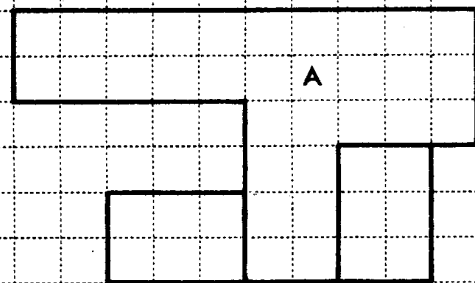
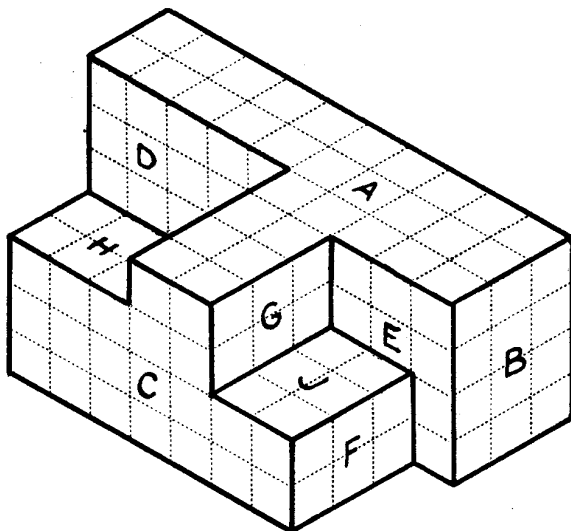
FRONT VIEW



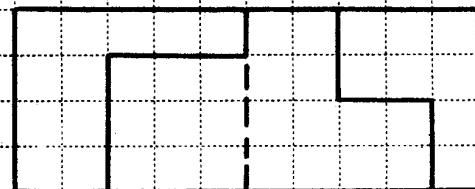
TOP VIEW



FRONT VIEW



TOP VIEW



FRONT VIEW

Measuring Exercise 4

Measure each of the dimensions indicated, calculate the real size in millimetres and write the real sizes in the tables.

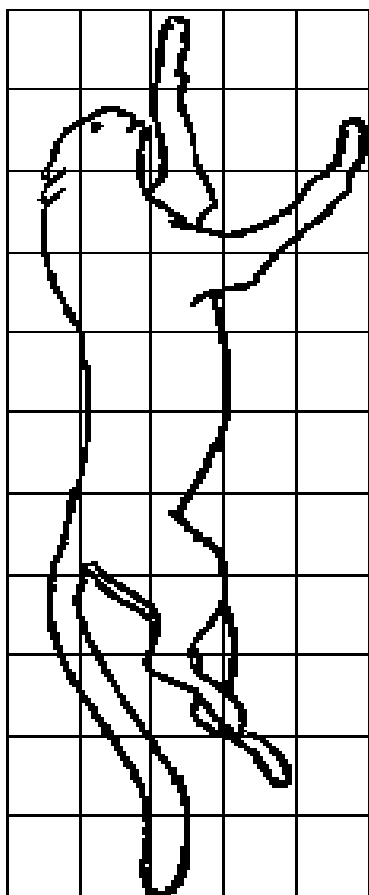
Scale 1:4	
1mm on the drawing = 4mm real size	
Length	
Width	
Thickness	

Scale 1:2	
1mm on the drawing = 2mm real size	
Diameter of circle D	
Pitch Circle Diameter E	
Distance between centres F	
Diameter of Small Circle G	

Scale 1:2					
1mm on the drawing = 2mm real size					
CUTTING LIST					
Part	Description	L	W	T	No Req'd
A					
B					
C					

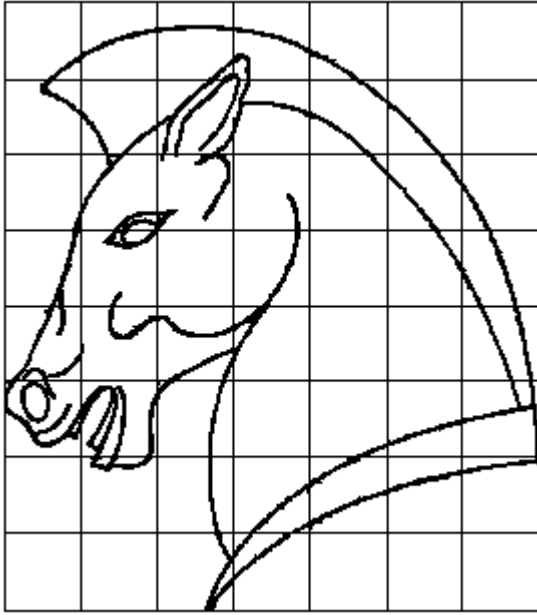
Drawing Exercise 9

Enlarge the Cheetah using a grid enlargement method so that it is 220mm long.



Drawing Exercise 10

Enlarge the Horse Head using a grid enlargement method so that it is 140mm wide.



Drawing Exercise 11

Enlarge the Lion using a grid enlargement method so that it is 120mm wide.

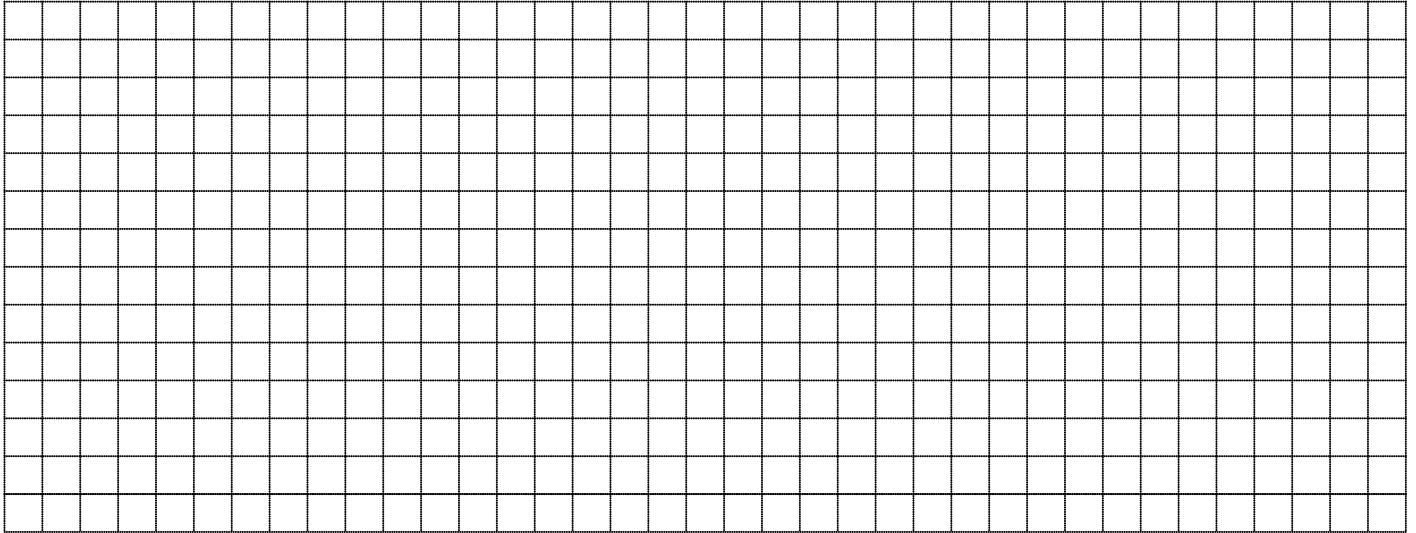


Drawing Exercise 12

Plan and draw the DEVELOPMENT of a MATCHBOX.

- * then draw it again on a piece of coloured paper
- * cut the coloured paper out and fold it together (use no glue).
- * glue the base of coloured paper model onto the worksheet making sure to match the faces.

Matchbox Sliding Section



Matchbox Cover Section



Drawing Exercise 13

Plan and draw the DEVELOPMENT of a SMALL CARDBOARD CONTAINER make sure to add allowances for assembly. Then:

- * draw it again on a piece of coloured paper
- * cut the coloured paper out and fold it together to test it (use no glue).
- * glue **one face** of the of coloured paper model onto the worksheet making sure to match the faces.

