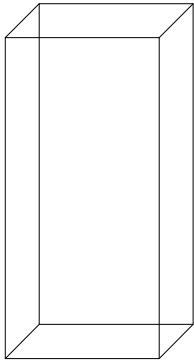


Date: KEY

### 5.1 View of 3 Dimensional Objects

Vocabulary:



Vertex: a point where the edges of an object meet \*

Edge: a line segment where the faces of an object meet \*

Face: a flat or curved surface of an object

\* there are some vertices and edges which do not meet

It is hard to draw a 3 dimensional (3D) object on 2 dimensional surfaces like paper.

To accurately describe a 3D object, we often break it into 3 views:

top , side , front

**A minimum of 3 views are needed to describe a 3D object**

these definitions.

Draw the top, front and side views of the tissue box. Label each view.

They occur in objects with curved surfaces such as cones and cylinders.



WL-715

TOP



FRONT

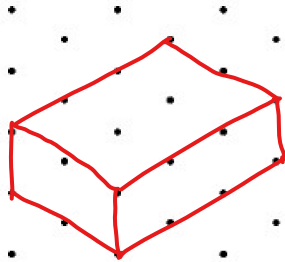


SIDE



Although front, side and top views are useful for describing a shape accurately, sometimes we want to see a 3d shape.

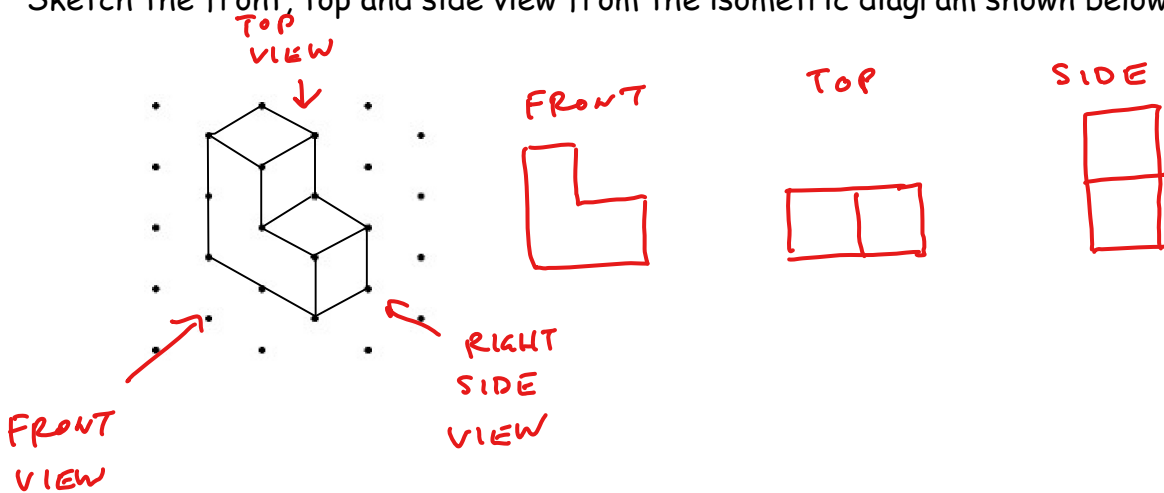
These are called "isometric views"



⊕ ISOMETRIC DRAWINGS SHOULD NEVER (VERY, VERY RARELY) HAVE HORIZONTAL LINES. ALL LINES ARE VERTICAL OR DIAGONAL!

"ISO"      "METRIC"  
 ↑            ↑  
 SAME      MEASURE  
             (LENGTH)

Sketch the front, top and side view from the isometric diagram shown below:



Sketch the isometric diagram from the top, front and side views shown:

