

ACTIVITY NO. – 9 BOXES AND SKETCHES

SUBJECT	MATHEMATICS
CLASS	V
CHAPTER/UNIT	BOXES AND SKETCHES
TOPIC	NETS OF CUBE AND CUBOID
TIME	30 MINUTES
NATURE OF ACTIVITY	INDIVIDUAL

What will I learn(Learning Outcome)?

The students will be able to construct nets of cube and cuboid using real life objects.

Skills: Analyzing, Visualizing , Creativity.

What I have to do?

To make nets of cube and cuboid by tracing the boxes of real life objects

What do I require?

A cuboidal box like shoe box /matchbox , A cubical box like chalk box , pencil, white chart paper, sketch pen , ruler and adhesive.

What do I need to know?

Difference between 2 – D and 3 – D shapes , properties of square and rectangle.

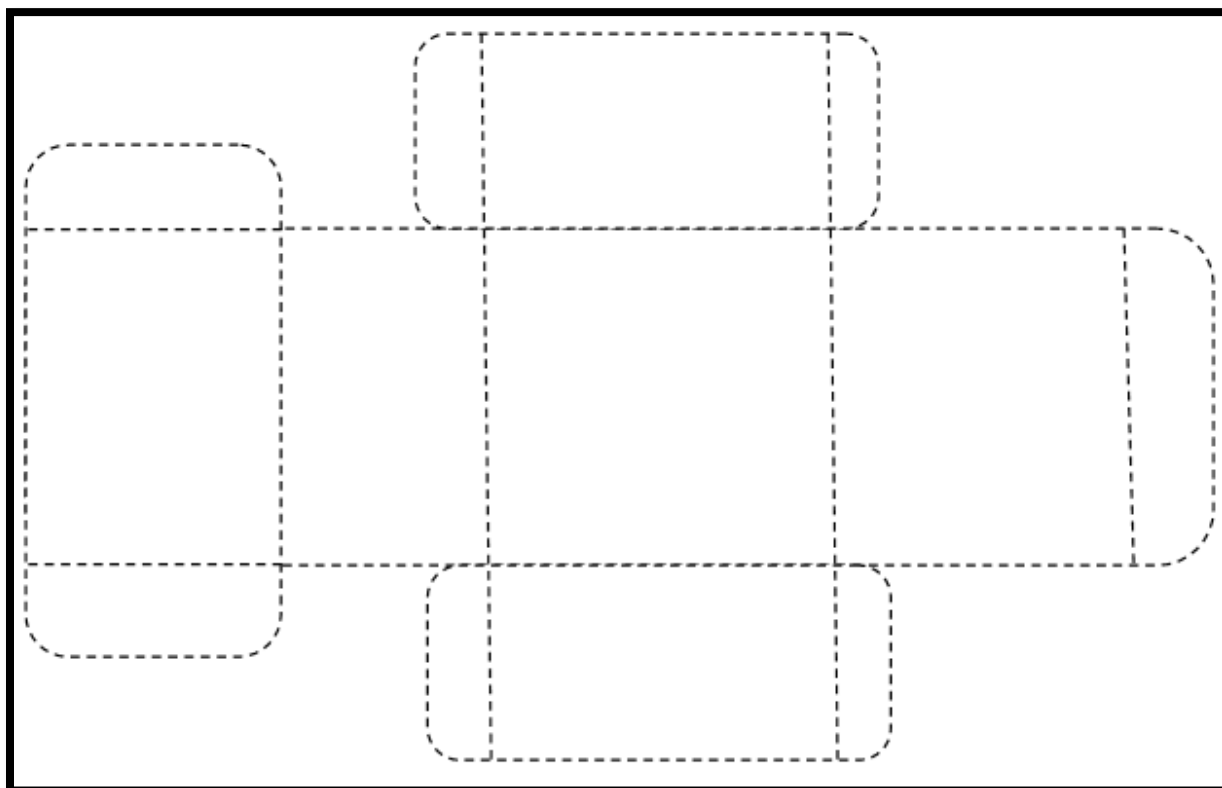
➤ Teacher's Activity :

The teacher will recall the difference between 2- D and 3- D shapes emphasizing on properties of a rectangle and square.

How will I proceed ?

➤ Student's Activity:

- 1) Take a white chart paper and a cubical box , for example : A chalk box.
- 2) Open the folds of the box and flatten it out.
- 3) Place it on the white chart paper and draw its boundary as well as lines along the folds as shown below in Fig.1.



(Fig. 1)

4) The shape obtained is a net of a cube (box).

5) Now, repeat the same process with a different box (say match box) , to obtain the net of a cuboid.

What have I observed ?

<u>Name of the box used</u>	<u>Number of rectangles</u>	<u>Number of squares</u>
Chalk box		
Match Box		

What have I learnt?

Cuboidal net has 3 pairs of identical rectangles whereas cubical net has all identical squares.

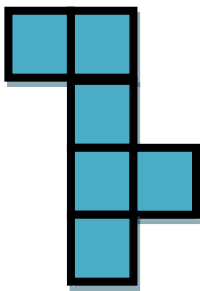
What am I curious to know?

Can I make nets to make different packing boxes?

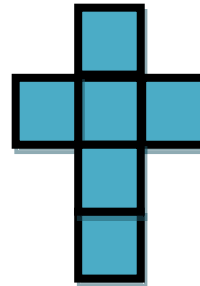
Let me evaluate myself

Q1) Which of the following nets cannot be used to make a perfect a cube ?

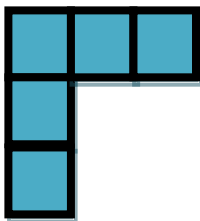
(1)



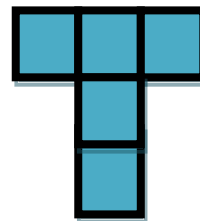
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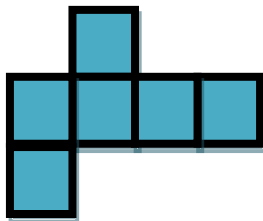
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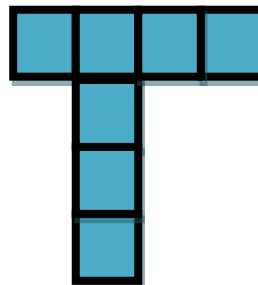
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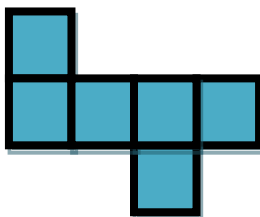
(5)



(6)



(7)



Q2) Use the squared paper given below and draw one net of a cuboid.

