Rosary School \ Marj Elhamam

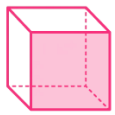
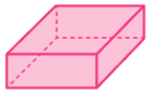
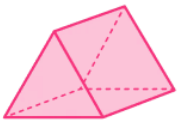
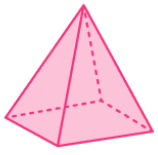
Name : _____ Date : / 11 / 2025

Subject: study sheet (4) / chapter (4) Grade : 5 ( )

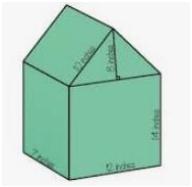
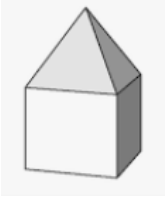
3D Shapes, Volume and Capacity

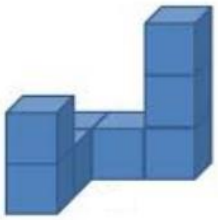
4.A Identify, Describe and Sketch Compound 3D Shapes

3D shapes are solid shapes that have 3 dimensions: **length, width** and **height (depth)**.

3D shape Name	Number of faces	Faces shapes	Number of edges	Number of vertices	Real life Example	3D shape figure
Cube	6	6 squares	12	8	Dice	
Cuboid	6	6 rectangles	12	8	Boxes	
Triangular Prism	5	2 triangles and 3 rectangles	9	6	Tobleron Chocolate	
Square – based Pyramid	5	1 square and 4 triangles	8	5	Egyptian Pyramid	
Triangular – based Pyramid	4	4 triangles	6	4	Some type of dice	

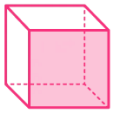
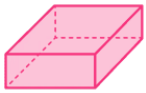
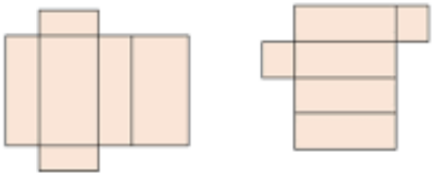
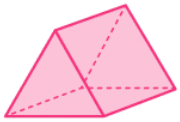
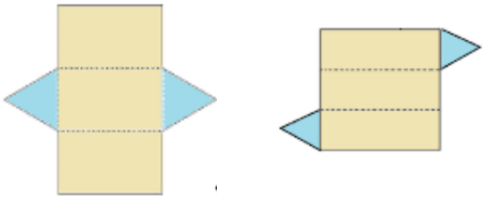
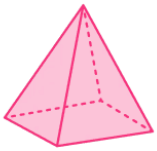
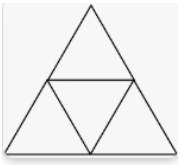
Compound 3D shapes: Shapes made by joining two or more 3D shapes together.



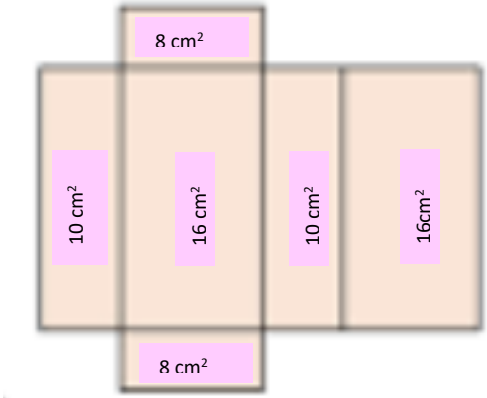
4.B Identify and Sketch Nets of 3D Shapes

A net is a 2D pattern that can be folded into a 3D shape. It shows all the faces of the shape laid flat.

3D shape Name	Net Example	3D shape figure	3D Nets
Cube	6 connected squares		
Cuboid	6 connected rectangles		
Triangular Prism	2 triangles and 3 rectangles		
Square – based Pyramid	1 square and 4 triangles		
Triangular –based Pyramid	4 triangles		

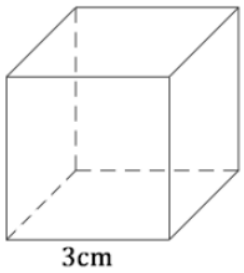
- You can find the surface are of any 3D shape by adding the area of faces in the 3D shape.

1.



Surface area = 10+16+10+16+8+8 = 68 cm^2

2.



Surface area = 6 × (3× 3) =54 cm^2

4.C Understand the Difference Between Volume and Capacity

1. What is Volume?

Volume is the **amount of space an object takes up**.

- It can refer to **solid objects or liquid**.
- We usually measure volume in **cubic units** like:
  - cubic centimeters (cm^3)
  - cubic meters (m^3)
- For example:
  - A box with length 3 cm, width 2 cm, and height 2 cm has a volume of: $3×2×2=12\ cm^3$

2. What is Capacity?

- **Capacity** is the greatest **amount of liquid a container can hold**.
- It tells us how much space is inside a container.
- We measure capacity in **liters *(l)*** and **milliliters *(ml)***.
- **1 *l* = 1000 *ml***

Simple way to remember:

Volume = space the object *takes up*
Capacity = space the object *can hold*

Teachers:- Rand Haddadin, Rand Haddad, Qusie Hijazeen