Net of Solid Figure

Understanding the Topic

- A net of a solid figure is a flat 2D pattern made up of all the faces of a 3D shape.
- When folded correctly, it forms the original solid figure.
- Nets help us see and understand the shape of solids like cubes, cuboids, cones, cylinders, and pyramids.

What a Net Shows

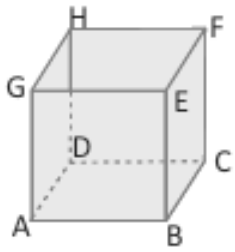
The number and shape of faces.

How the faces are joined.

How the solid looks when opened flat.

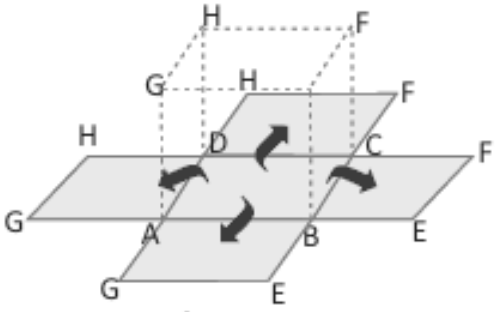
Common Solids and Their Nets

1. Cube/ Cuboid – 6 equal squares/6 rectangles



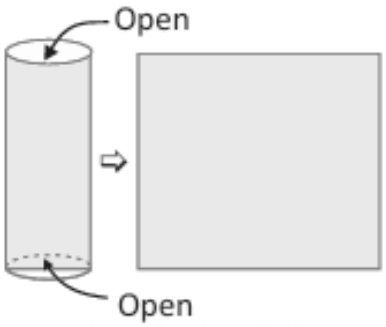
3-D figure

(A cube opened from top)

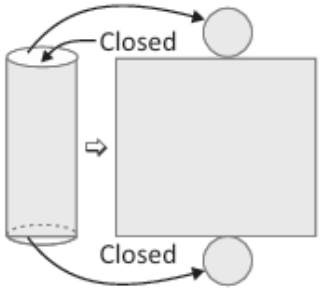


2-D figure

2. Cylinder – 2 circles and 1 rectangle

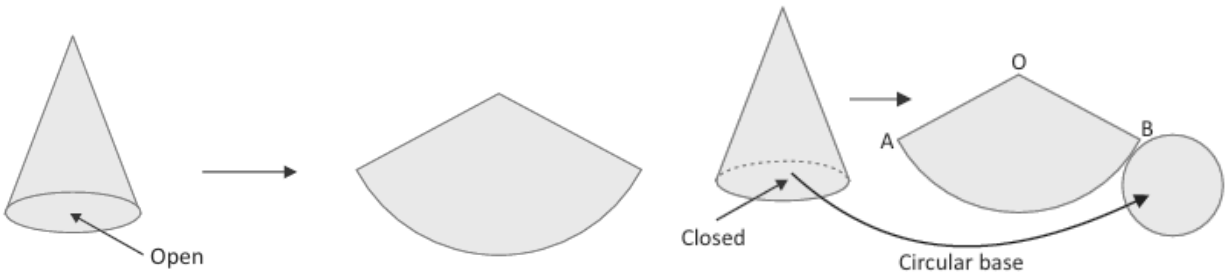


Net of a cylindrical object open at both ends



Net of a cylindrical object closed from both ends.

3. Cone – 1 circle and 1 sector shape (curved triangle)



Net of a cone which has open base.

Net of a cone which is closed from base.

Examples with Solutions

1. Cube Net (Easy)

Question: What shapes make the net of a cube.

Solution: 6 equal squares connected in a cross pattern.

2. Cuboid Net (Moderate)

Question: How many faces does a cuboid have and what shape are they.

Solution: 6 faces total all rectangles

3 pairs of rectangles with opposite sides equal

3. Cylinder Net (Moderate)

Question: What is the net of a cylinder

Solution: 2 circles (top and bottom) and 1 rectangle (side surface).

4. Cone Net (Moderate)

Question: What is the net of a cone

Solution: 1 circle (base) and 1 curved triangle (side surface).

5. Pyramid Net (Moderate)

Question: A square pyramid has a square base What does its net look like.

Solution: 1 square and 4 triangles joined to each side of the square.

Summary Points

- A net is a flat layout of all faces of a solid figure.
- When folded it becomes a 3D shape.
- Helps in understanding shapes clearly.

- Cube has 6 square faces in its net.
- Cuboid has 6 rectangles in its net.
- Cone and cylinder include circles and curved shapes.
- Useful in packaging design and geometry learning.
- Each solid has a unique net.
- All faces must be correct in shape and size to form the solid.
- Drawing and folding nets improves spatial thinking.