

Basic Geometrical Concepts



Lesson
11

Use Cordova Smart Class Software on the smart board in class to make learning enjoyable. [Digital Learning — NEP Guidelines]

Learning Outcomes

After completing this chapter, the students will be able to :

- define point, line, line segment, ray.
- find shapes that can be used for tilings.
- understand shapes around them.
- identify a circle and its parts.
- draw 3-D shapes using nets.
- draw top/front/side view of simple objects.

We are already familiar with shapes around us.

Triangle, rectangle, square, circle are two-dimensional shapes.

Cuboid, cube, cylinder, cone, sphere are three-dimensional shapes. Let us revise.

Use Cordova Smart Class Software on the smart board in class to do all the Exercises.



Exercise-1



(According to NEP Guidelines
(Remembering, Understanding))

1. Fill in the blanks :

(a) A square has4..... vertices.

(b) A triangle has3..... sides.

(c) A rectangle has4..... sides.

(d) A circle hasNo..... vertices.

2. Complete the table given below :

Shape →	Cube	Sphere	Cone	Cylinder	Cuboid
No. of edges	12	0	1	2	12
No. of vertices	8	0	1	0	8
No. of plane faces	6	0	1	2	6
No. of curved faces	0	1	1	1	0



Exercise-2

(According to NEP Guidelines)
(Remembering, Understanding)

1. Choose the correct options.

(a) How many end points does a line segment have?

(i) 0

(ii) 1

(iii) 2

(iv) countless

(b) How many line segments are there in the given figure?



(i) 8

(ii) 7

(iii) 9

(iv) 12

(c) Consider the following statements.

I. A ray has two end points.

II. A line has indefinite length.

Which of the statements is/are true?

(i) I is true.

(ii) II is true.

(iii) Both I and II are true.

(iv) None of these

2. Name the ray, line segment and line in the following :

