

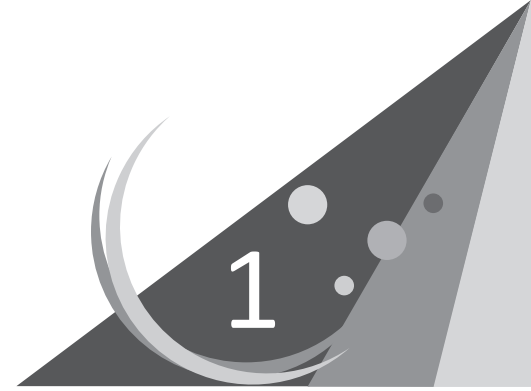
**MATHEMATICS-2**

**SEMESTER**

**2**

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## LESSON PLAN

### SPECIFIC OBJECTIVES

The students will

- know about solid shapes.
- recognise the shadows of different objects.
- learn about plane shapes.
- be able to make the sketch of plane shapes using solids.
- be able to find out the number of faces, edges and corners of a given solid.

### CONTENTS EXPLAINED INSIDE THE CHAPTER

- Solid Shapes (pages 66–68)
- Shadow of Solids (pages 69–70)
- Plane Shapes (page 70)
- Sketching of Plane Shapes (pages 70–72)

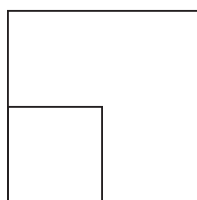
### TEACHING AIDS

A variety of solid objects like chalks, dusters, cell, cap, ball, etc., a torch or a candle and a matchbox, sheets of paper and a pencil, a cube, a cuboid, a sphere, a cylinder, a cone and a prism made up of wood, glass or plastic.

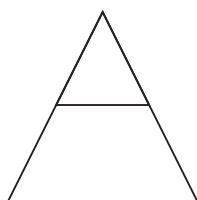
### TEACHING STRATEGY

- First, the teacher should put different types of things on her table and then invite the students in a groups to sort out them as cuboid, cylinder, cone and sphere. Then, she should ask the students to practise 'Let Us Recall'.
- Next, the teacher should explain the term '**Face**', **Edge** and **Corner** of the solids like cube, cuboid, cylinder, cone, sphere and prism. For creating more interest, involve the students in performing the Maths Lab Activity given at the end of the chapter. After that, she should go to pages 66–68 for text and exercise.

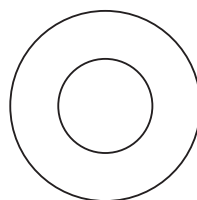
- Further, the teacher should talk about the dark region formed behind the solid object against the source of light, i.e., **shadow** of the solids. She can perform an activity using the torch or the candle to show it in the class. Then, she should go to the pages 69–70 for text and exercise.
- Now, the teacher should ask the students about plane shapes which they have learnt in class 1 and then she should assist them in obtaining the sketch of these shapes on the plain sheet of paper using different solids. She should also talk about their features. Then, she should move to pages 70–72 for text and exercise.
- Before asking the students to solve the puzzle, the teacher should make few difficult plane shapes on the blackboard and let them find out the number of simple figures in them. For example,



2 squares



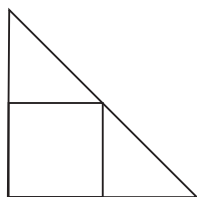
2 triangles



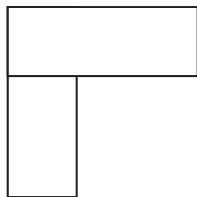
2 circles



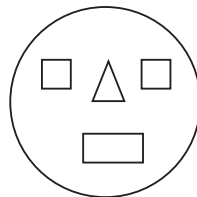
1 square  
2 rectangles



1 square  
3 triangles



2 rectangles



2 squares, 1 circle,  
1 triangle and 1 rectangle

## EXPECTED LEARNING OUTCOMES

Students are able to

- recognise cubical, spherical, cylindrical and conical objects in their surroundings.
- find out the number of faces, edges and corners of the given solid.
- identify the shadow of different objects.
- understand the features of simple plane shapes and draw the sketches of plane figures.
- count the number of plane shapes hidden in a complex figure.