CHAPTER: Where To Look From

Grade: **3**
Board: **CBSE**
Book: **NCERT**

1.

Chapter Summary and Placement

<Read through the following to understand how this chapter is connected with the previous and next grades and also the important concepts covered in it.>

1. This chapter introduces the students to understanding of shapes and symmetries.
2. Knowledge of this chapter is very important in understanding how 2-dimensional pictures can represent 3-dimensional objects as seen from different perspectives.

2.

LEARNING OUTCOMES

<On completion of the chapter, students will be able to:>

1. Observe and learn how things look different from different angles.
2. Enjoy free play with shapes on a dot grid to help develop an understanding of shapes and mirror halves.

3. TEACHING PLAN

Follow this section for getting ideas on teaching the content covered in the chapter. The subtopic given in the first column with the matching learning outcome can be explained using instructions and resources listed subsequently

Subtopic and Learning Objective #1

Subtopic:
Top-view and Side-view

LO:
Observe and learn how things look different from different angles.

1.To make the student observe and understand how things look different from top-view and side-view

Teacher Activity

1. Ask the students to keep their water bottles on the side next to their chair. Ask them if they can see the full bottle or just the top of the lid? Ask them to draw a rough sketch of the view in their notebooks. Explain that it is called top-view.
2. Next ask them to keep the water bottles on their desk. Ask them if they can see the full shape of the bottle? Explain that it is called side-view.
3. Explain that same things look different when viewed from different sides

Check for understanding:
Draw side view of the following:
1. Boat 2. Duck 3. Mountain 4. Glass

Activity 1 can be performed to make class visualize how objects become flat when traced on paper.

Resources Suggested

Blackboard, pen and paper, water bottle

Activity 1

Name of the activity- Tracing Time
Type of activity – Individual
Use it for – Making the students understand different views
Materials – Different objects, paper and pencil
Procedure:
Instructions to the teacher

1. Take the class to the ground.
2. Ask them to collect any 3 things which they can take back to the class.
3. Let them hunt for 3 more things around the classroom.
4. Ask them to discuss their collections with others as they go around
5. Now ask the children to keep one object at a time on the paper and trace it.
6. Explain that this is another way of looking at objects around them. Let them observe how objects become flat shapes when traced on paper.

Subtopic and Learning Objective #2

Sub topic: Drawing on the Dot Grid

LO:
Enjoy free play with shapes on a dot grid to help develop an understanding of shapes and mirror halves.

1. To make student draw simple geometric shapes on a dot grid.

Teacher Activity

1. Make a dot grid on the board. Join the dots and make simple figures like a square, a rectangle and a triangle. Ask the students to make the same in their notebooks.

2. Now draw the simple rangoli patterns given on page 4 of the textbook. Explain the use of straight lines and curved lines in the rangoli patterns.

Check for understanding:
On a dot grid, draw the following:
a) ice cream cone b) kite c) fish d) sun

Resources Suggested

Blackboard, pen and paper

Subtopic and Learning Objective #3

Sub topic: Mirror-halves

LO:
Enjoy free play with shapes on a dot grid to help develop an understanding of shapes and mirror halves.

1.To make the student understand mirror halves

Teacher Activity

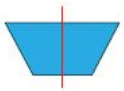
1. Draw a half a circle on the board. Keep a small mirror on the side. Call the students one by one and show how the second half of the circle is reflected in the mirror.

2. Now draw a square. Divide the square into two equal halves by drawing a dotted line. Keep the mirror on the dotted line. Show how the second half of the square is reflected in the mirror.

3. Explain that when shapes can be folded so that the sides meet perfectly, then they are said to have mirror halves.

4. Explain that there may be more than one different way to fold shapes and get their mirror halves.

One way to fold



Two Way to fold



Teacher Activity

Multiple (more than two) ways to fold



Check for understanding:

a. Draw a figure that can be folded only one way to get mirror half.
b. Draw a figure that can be folded two ways to get mirror half.
c. Draw a figure that can be folded multiple ways to get mirror half.

Activity 2 can be performed to make class explore mirror halves of alphabets and numbers.

Resources Suggested

Blackboard, pen and paper, mirrior

Activity 2

Name of the activity- How many mirror halves
Type of activity – Individual
Use it for – Explore mirror halves of alphabets and numbers
Materials – Pencil, paper and crayons
Procedure:
Instructions to the teacher:

1. Ask students to write the letters A-Z in big size and at some distance on a sheet of paper.
2. Ask them to look carefully and do the following:
    a. Shade those letters yellow which have no Mirror Halves
    b. Shade the letters red which can be folded one way to get mirror halves and also draw the dotted line.
    c. Shade the letters green which can be folded two ways to get mirror halves and also draw the dotted lines.
3. Ask students to write the numbers between 0 - 9 in big size and at some distance on another sheet of paper.
4. Ask them to look carefully and do the following:
    a. Shade the numbers yellow which have no Mirror Halves
5. Shade the numbers red which can be folded one way to get mirror halves and also draw the dotted line.
6. Shade the numbers green which can be folded two ways to get mirror halves and also draw the dotted lines.

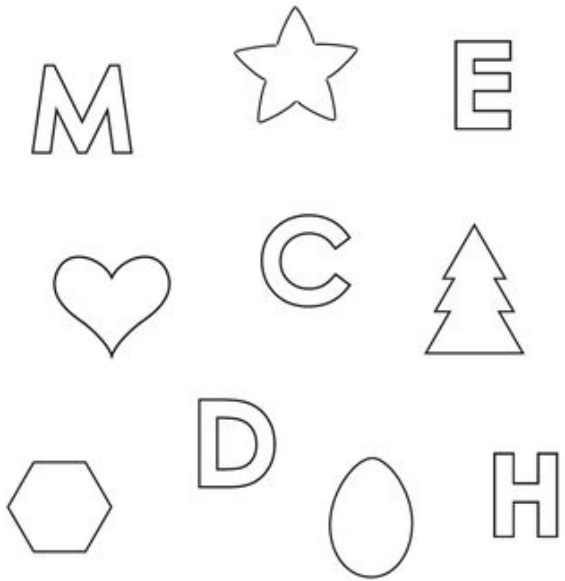
4. WORKSHEETS

Print or copy the worksheet questions on the blackboard and ask the students to attempt them. They can be given as homework or a class test as well.

Worksheet 1

Use it like: test after the chapter is complete, homework

Using a dotted line, can you divide the following pictures into two similar halves?



Worksheet 2

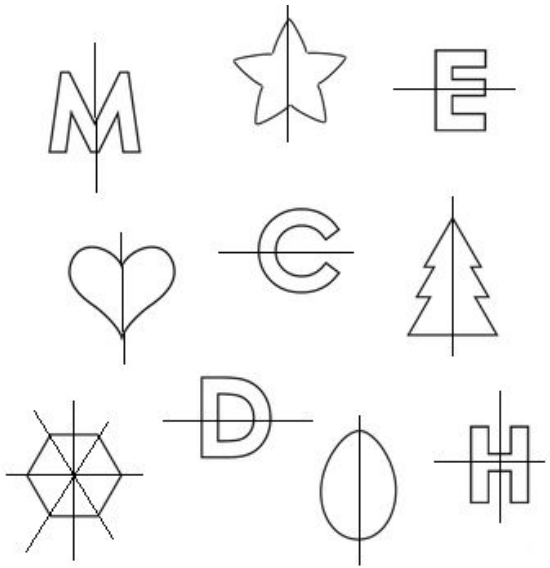
Look at the pictures and Circle the side view



5. SOLUTIONS

This section gives you sample answers for activities and questions listed above.

Worksheet 1



Worksheet 2



6. EXTRA RESOURCES

Carry out the following suggested activities/ tasks if you have the time and resources to do them

Teacher can use these videos if time and facilities permit:

1. https://www.youtube.com/watch?v=zyb0VwwIueQ Top-view and Side-view
2. https://www.youtube.com/watch?v=f_5d0s413kA Drawing on the Dot Grid
3. https://www.youtube.com/watch?v=4VtDqbk5F1E Mirror-halves
4. https://www.youtube.com/watch?v=vblCR5zsr84 symmetry
5. https://www.youtube.com/watch?v=6qNB2LsgC8Y symmetrical shapes