CHAPTER: What is long ? What is Round?

Grade: **2**
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. Knowledge of this chapter is very important for shape and spatial understanding
2. This chapter encourages the students to observe objects in the environment and get a qualitative feel for their geometrical attributes.
3. Students observe and describe the way shapes affect movements like rolling and sliding and stacking.

2.

LEARNING OUTCOMES

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

1. Classify, sort and describe the objects on the basis of their physical features such as edges, corners, faces, smooth or rough surfaces etc.
2. Identify the basic 3-D shapes in the environment by their geometrical attributes.
3. Observe and describe the way shapes affect movements like rolling and sliding.

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:
GUESS IT'S NAME

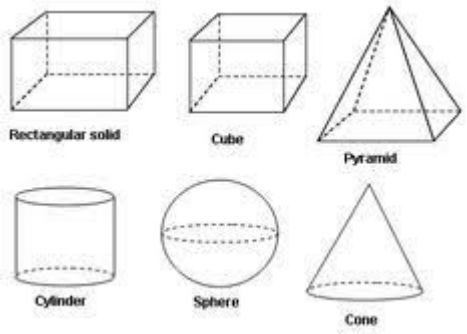
LO:
Classify, sort and describe the objects on the basis of their physical features such as edges, corners, faces, smooth or rough surfaces etc.

1.To make the student Identify the basic 3-D shapes and describe the properties of these shapes

Teacher Activity

Arrange for a cloth sack or a bag. Ask each student to bring one small object from home. Collect and keep everything in the sack. Now take out one thing at a time and discuss the shape and features of each object. Make note of the following and write on the board:

a. No. of edges
b. No. of faces
c. No. of corners
d. Round or flat
e. Smooth or rough



Check for understanding:

Draw the basic 3-d shapes on the board.

Take out one object at a time from the sack and ask the students to identify the matching 3-d shape.

Activity 1 can be performed to make the class guess the name of the object based on its description

Activity 1

Name of the activity- Guess its name
Type of activity – Group
Use it for – Making the students identify the basic 3-D shapes based on their description
Materials – Collection of small objects and a sack
Procedure:
Instructions to the teacher

1. Divide the class into four teams, A, B. C, D.
2. Put your hand inside the sack and describe the object. The description should include if it flat or round, smooth of rough, has edges and corners etc.
3. Let team A guess the name of the object. If they guess correctly, they get 5 point. Else the question goes to next team, then next etc. Whichever team finally guesses gets bonus 3 points.
4. Continue playing the game till the teams have guessed all the objects in the sack.
5. The team with the highest score will be the winner.

Resources Suggested

Collection of small and simple objects, a small bag, chalk and blackboard

Subtopic and Learning Objective #2

Sub topic:
What is long? What is round?

LO:
Identify the basic 3-D shapes in the environment by their geometrical attributes.

1. To encourage the students to identify objects around them by their geometrical attributes

Teacher Activity

1. Ask the students to sing the song from the textbook. *What is long? What is round? Look around…Look around….*
2. Ask the students to stand up one by one and name two things — one long and one round. Ask them not to repeat things which others have named.

Check for understanding:

a. Name three vegetables that have long shape.
b. Name three fruits that have round shape.

Resources Suggested

Blackboard , pen and paper

Subtopic and Learning Objective #3

Sub topic: What rolls? What slides?

LO:
Observe and describe the way shapes affect movements like rolling and sliding.

1. To make student observe the way shapes affect movements like rolling and sliding.
2. To make students identify the shapes that can be stacked one over another and which cannot be.

Teacher Activity

a. Roll a pen on the table. Repeat with the chalk piece, coin and a ball. Explain that when an object turns over and over again, we say it is rolling. All the round-shaped objects like coins, balls etc roll.

   Now roll the duster on the table. When it doesn't roll, slide it across the table. Repeat with a textbook and a pencil box. Explain that the objects like boxes and books that have faces, edges and corners, slip on surface without rolling and are said to be sliding.

b. Take 10 notebooks and stack them one over another. Repeat this with 10 pencil boxes with flat surfaces. Now try to stack up 10 round water bottles. When the stack falls, explain that shapes with broader bases are more stable. Discuss how things like soaps, tea boxes, tins, etc. are stacked in shops but balls and eggs are not.

Check for understanding:

a. Name 3 things which do not roll.
b. Name 3 things which do not slide.
c. Name 3 things which both roll and slide.

Activity 2 can be performed to make the class understand which shapes can be stacked one over another and which cannot be.

Resources Suggested

Few round objects and few non-round objects, Blackboard, chalk, pen and paper

Activity 2

Name of the activity- The tallest tower
Type of activity – Group
Use it for – To understand that shapes with broader bases are more stable
Materials –Collection of different shaped small items
Procedure:
Instructions to the teacher:

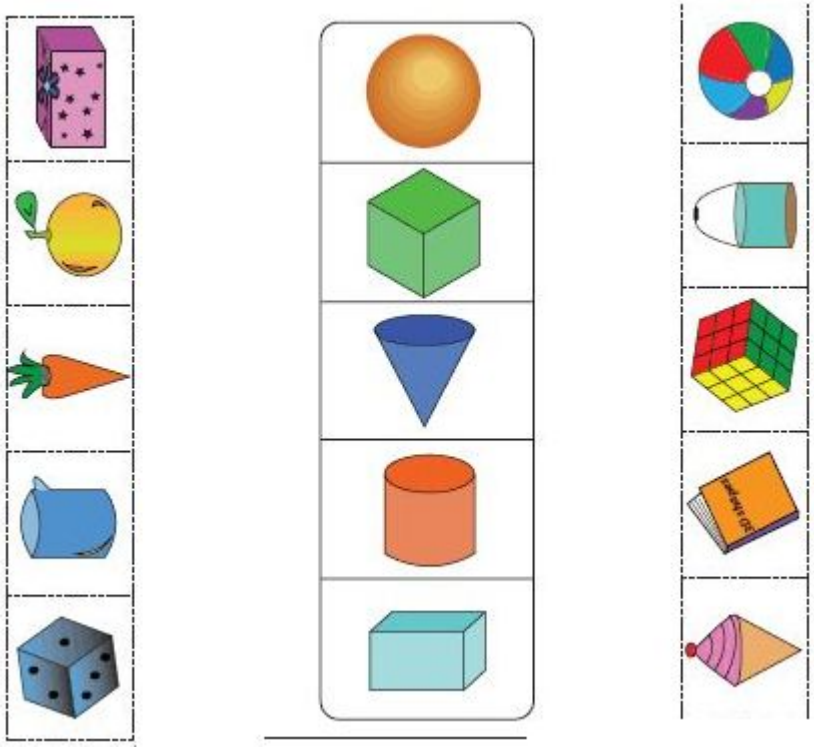
1. Divide the students in groups of 5.
2. Give following items to the groups
    a. Only text books
    b. Only match boxes
    c. Only tins
    d. Only balls
    e. Only rolled newspapers
    f. Only stones
    g. Only shoes
3. Give a mix of the objects mentioned above to the rest of the groups.
4. Now instruct the groups to start stacking up their items to make towers.
5. At the end of the activity, discuss why some groups were able to make very tall towers and others could not stack up even two items.

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

1. Match the object to the shapes



Worksheet 2

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

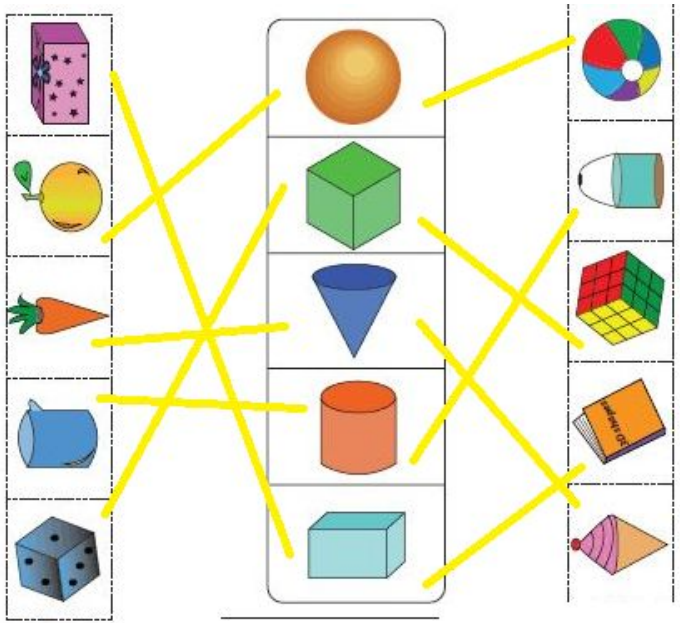
Colour objects that roll red, objects that slide green and objects that both slide and roll yellow.



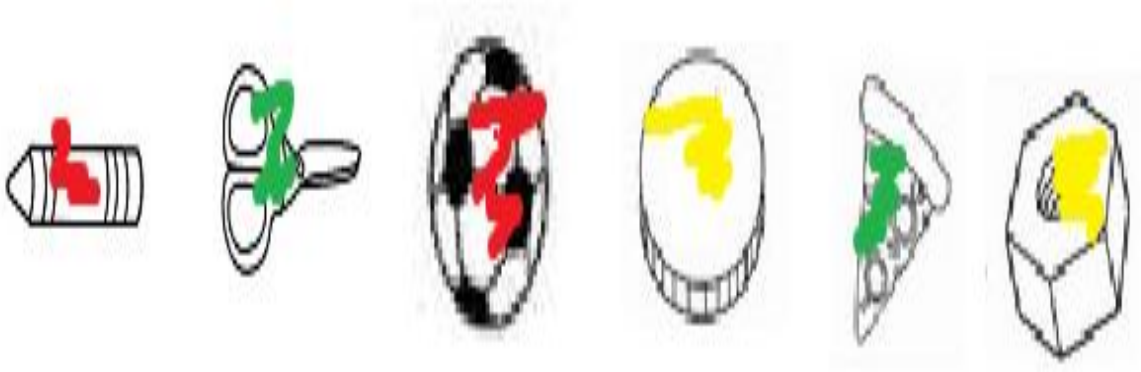
5. SOLUTIONS

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=2cg-Uc556-Q 3d shapes
2. https://www.youtube.com/watch?v=b2reZGadaho long or round
3. https://www.youtube.com/watch?v=AcsUQIxJKjY slide and roll
4. https://www.youtube.com/watch?v=vlfWvI1oO7Y slide and roll