

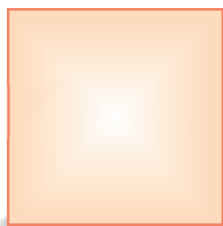


Shapes

Look at the shapes given below. These are square, triangle, circle and rectangle.



Triangle



Square



Rectangle



Circle

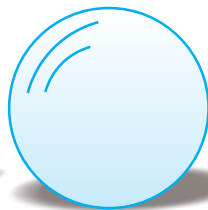


Solid Shapes

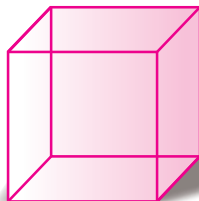
There are some solid shapes whose names are as follows :



Cylinder



Sphere



Cube



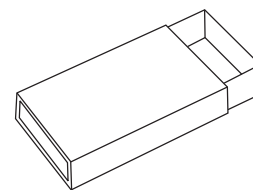
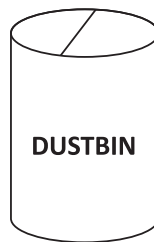
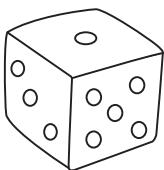
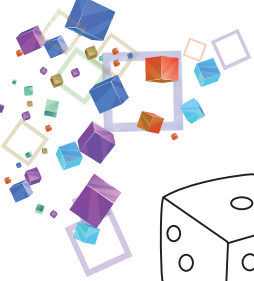
Cuboid



Cone

Use this table and colour the given blank shapes.

Shape	Sphere	Cuboid	Cube	Cone	Cylinder
Code	Green	Blue	Red	Orange	Yellow



Shapes that Roll and Slide








Take a  and push it along the floor. Does it roll or slide?

Take a  and push it along the floor. Does it roll or slide?

Take a coin . Can you roll it?

Can you slide it?

Find out whether these objects roll or slide or both.

Objects	Roll	Slide	Both
1. 			3
2. 			
3. 			
4. 			
5. 			
6. 			
7. 			



Facts to Know

- ❖ Every solid has a fixed shape like cubical shape, spherical shape, conical shape, cuboidal shape or cylindrical shape.
- ❖ Liquids do not have a fixed shape. They 'take' the shape of container.





Straight Lines and Curved Lines



A piece of string held tightly, will give you a **straight line**.

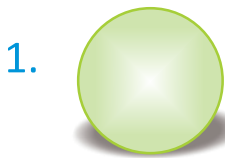


A piece of string held loose, will give you a **curved line**.



Exercise 10.1

A. Write the names of the following shapes.



B. Write the names of the following solid shapes.





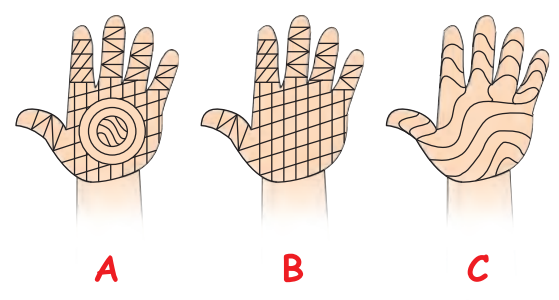
C. Cross the odd one out.

- 1.
- 2.
- 3.



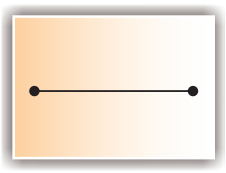
D. Which mehendi design has

1. Only straight lines?
2. Only curved lines?
3. Both straight and curved lines?

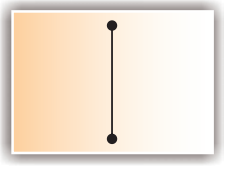


Sleeping/Standing/Slanting Lines

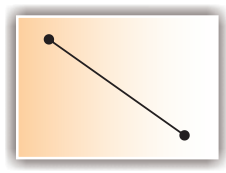
There are three types of straight lines.



Sleeping line



Standing line

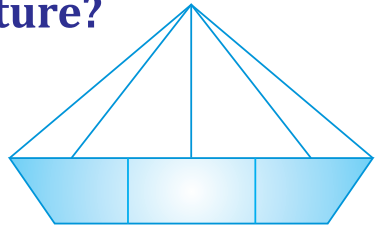


Slanting line

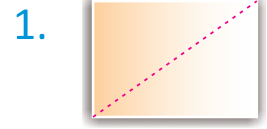
Exercise 10.2

A. How many of each do you see in the given picture?

1. Slanting lines
2. Standing lines
3. Sleeping lines



B. Draw the lines.



Draw one slanting line on the square.
Make 2Δ



Draw two sleeping lines on the square.
Make 3 □



Draw 2 slanting lines on the square.
Make 4Δ



Patterns

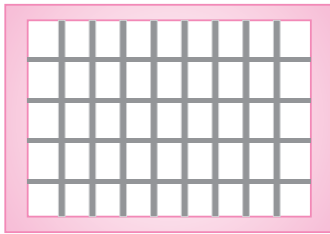


We see many patterns in everyday life, we see patterns in art, clothes, materials, nature, buildings and everywhere. Repeated patterns increase the beauty of the objects.

1. We use patterns in Rangoli.



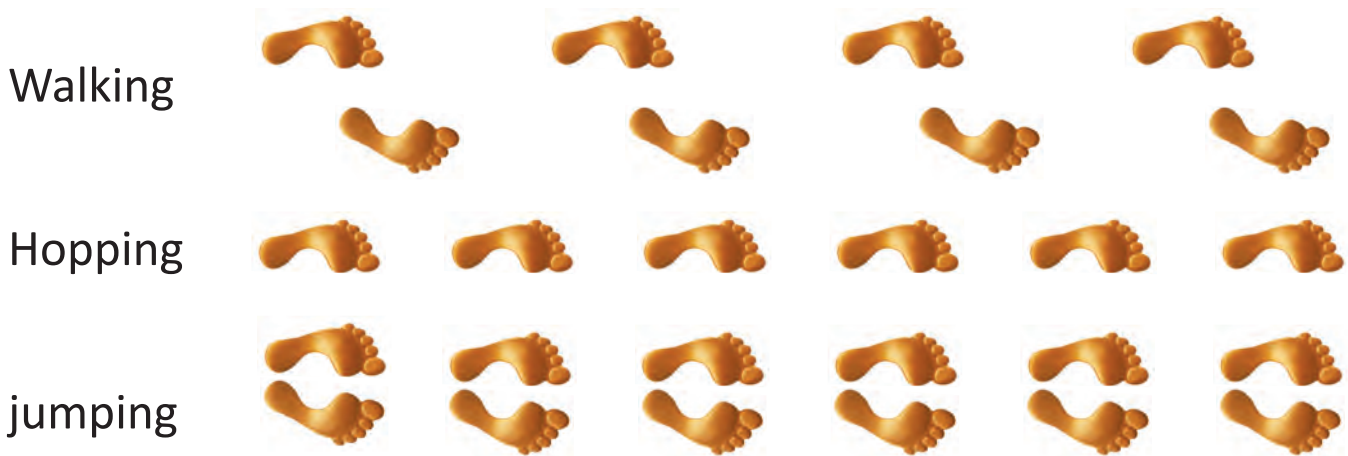
2. We use patterns in window grill.



3. We can see patterns in flowers and leaves.



Roma was making patterns with her footprints on the sand.





Divya was making patterns on a paper with her palm prints. These are some of the designs she made.

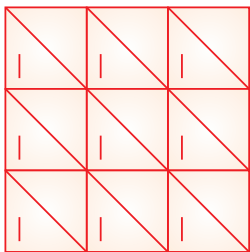


The flooring in Rohan's house has been made with one kind of tile like this.

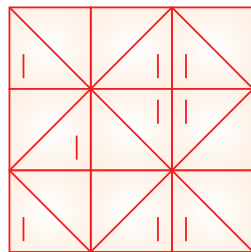


But each room in the house has a different design using just that one kind of tile.

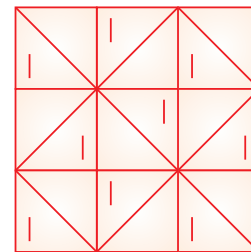
Colour the 1s in the squares with green to find the different designs.



Bedroom floor



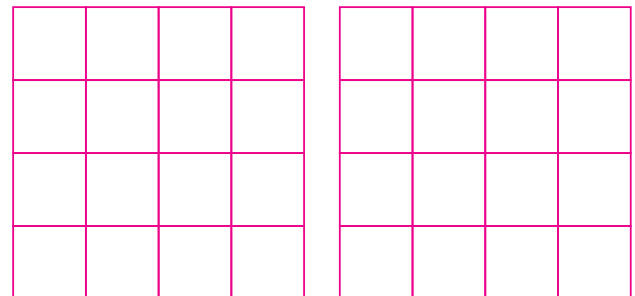
Hall floor



Kitchen floor

Try this:

Colour the squares in different ways to make different patterns. Use only 2 colours in each.





Exercise 10.3

A. Complete these patterns.

1. R B R B R

2.

3. B B B B B

B. In the given series, look at the patterns and find the next one.

1. = =

2.

3.

Points to Remember

- ❖ Every solid has a fixed shape.
- ❖ Liquids do not have a fixed shape.
- ❖ Liquids take the shape of its container.
- ❖ Patterns are used to increase the beauty of an object.





EXERCISE

A. Multiple Choice Questions (MCQs)

Tick (✓) the correct option:

1. The shape ' Δ ' is called a

(i) cone

(ii) triangle

(iii) rectangle

(iv) square

2. The shape '' is known as

(i) square

(ii) cuboid

(iii) rectangular

(iv) cube

3. In pattern $\rightarrow \uparrow \leftarrow \downarrow$, find the next one.

(i) \uparrow

(ii) \rightarrow

(iii) \leftarrow


(iv) \downarrow

4. In pattern   , find the next one.

(i) 

(ii) 

(iii) 

(iv) 

5. Liquids have shape of

(i) rectangle

(ii) triangle

(iii) square

(iv) no fixed shape

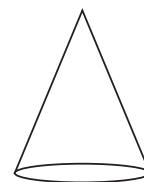




B. Match the following. Also colour the shapes.

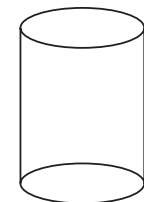
1. Cube

(i)



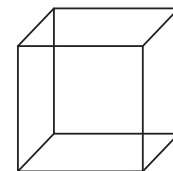
2. Cuboid

(ii)



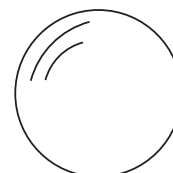
3. Cylinder

(iii)



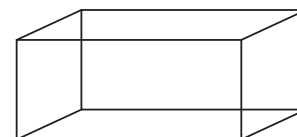
4. Cone

(iv)

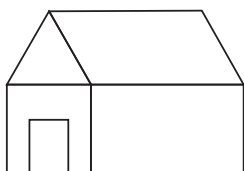


5. Sphere

(v)



C. How many of each do you see in the given picture?



1. Standing lines

2. Sleeping lines

3. Slanting lines

D. Complete the patterns.

1.

2.

3.





HOT

Here, a cuboid is given. Count the number of straight lines, number of vertices and number of surfaces.

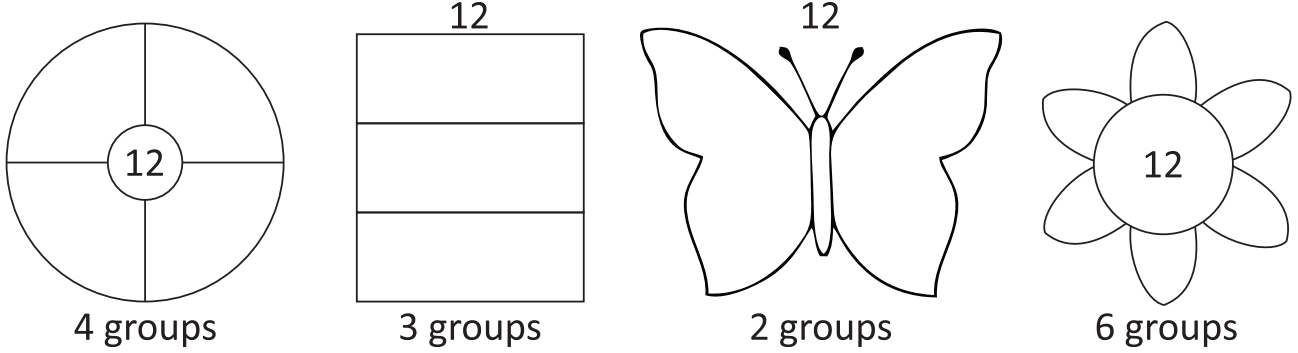


Lab Activity

Objective : To learn patterns.
Materials Required : Bindi packets with small bindis

Activities :

- ❖ This activity should be done in pairs.
- ❖ One student keeps 12 bindis ready.
- ❖ The partner will stick one bindi each in the 4 parts of the first figure.
- ❖ They will take turns in sticking the bindis one each, till 12 bindis are stuck.
- ❖ They will note down the number of bindis in each part.



- ❖ The partner will then take another set of 12 bindis and take turn in sticking one bindi at a time in each part of the second figure.
- ❖ The same will be done for the next 2 figures, taking more sets of 12 bindis.

Record the Activity :

Number of bindis	12	12	12	12
Number of parts	4	3	2	6
Number of bindis in each part				