

and 1 edge.

Example: a conical birthday cap



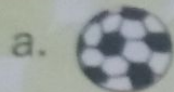
Ch-1

My Practice Time 1

1. Complete the following sentences.

- Two solid shapes with the same number of faces and corners are cube and cuboid.
- Cylinder is a solid shape with two circular bases.
- A cone has only one vertex.
- A cuboid has 6 faces, 12 edges and 8 corners.
- A cylindrical object has 3 faces and 2 edges.
- When two edges meet, they form a corner.
- Two faces meet to form a/an edges.

2. Identify the solid shapes that the following objects represent.



Sphere



Cylinder



Cube



Cone



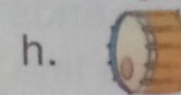
Cuboid



Cube



Cone



Cylinder

3. State whether the following statements are true or false.

a. A cube has 6 faces, 8 corners and 12 edges.

T

b. A sphere has 2 faces, 2 corners and 2 edges.

F

c. is a cube.

F

d. A cone has a flat and a circular surface.

T

e. A cuboid has 1 flat face.

F

4. Give four examples of solid shapes from real life and draw them in your notebook.

Here, you can see that 'tans' have been used to make the shape of a horse.

Now, make tangram images of a house, cat and a camel using tangram pieces.



My Practice Time 2

1. State whether the following statements are true or false.

a. A line can be extended in both the directions.

✓

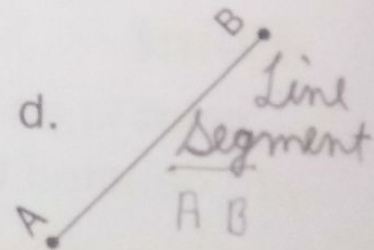
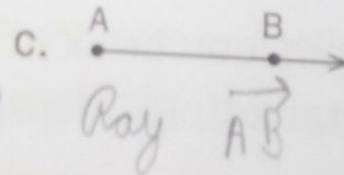
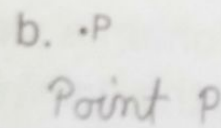
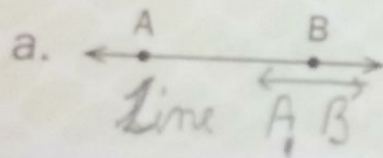
b. $\overset{A}{\bullet} \text{---} \overset{B}{\bullet}$ represents a ray.

✗

c. A ray has only one end point.

✓

2. Identify and name the following.

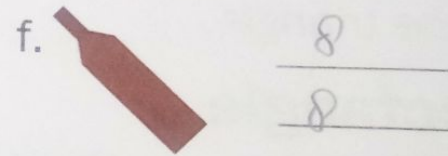
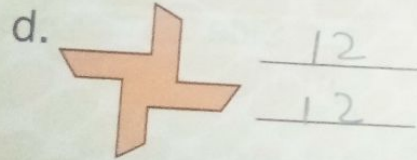
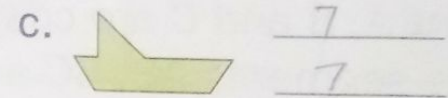
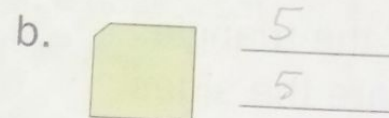
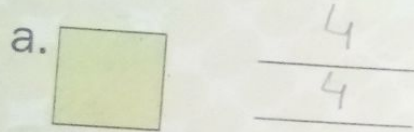


The line joining any two points on the circumference and passing through the centre is called the **diameter** of the circle.

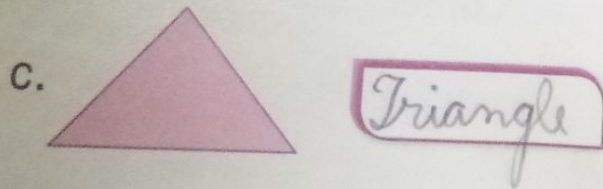
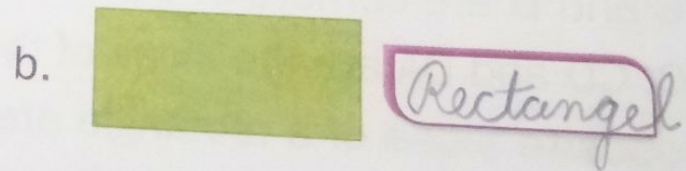
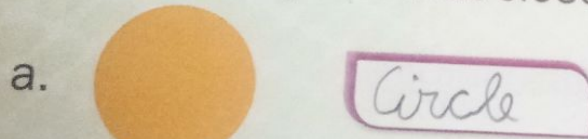
Circumference

My Practice Time 3

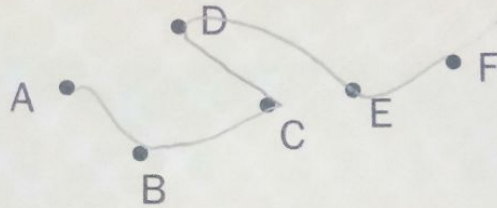
1. Write the number of sides and the number of corners for the given figures.



2. Name the objects that closely resemble these shapes.



3. Draw curved lines by joining the points shown here.

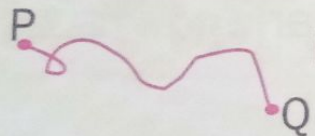


4. Fill in the blanks.

a. Radius is the line joining the centre to any point on the circumference of a circle.

b. All four sides of the square are equal in length.

c. Plane shapes have length and breadth only.

d.  is a curved line.

Maths in My Life

Do you know that lots of efforts and calculations are done by architects for designing the shape and size of the buildings? Architects rely on mathematical principles and geometry for making creative shapes and designs.

Can you find out some of the geometrical instruments that architects use to

Also use a pattern to make your own secret messages.

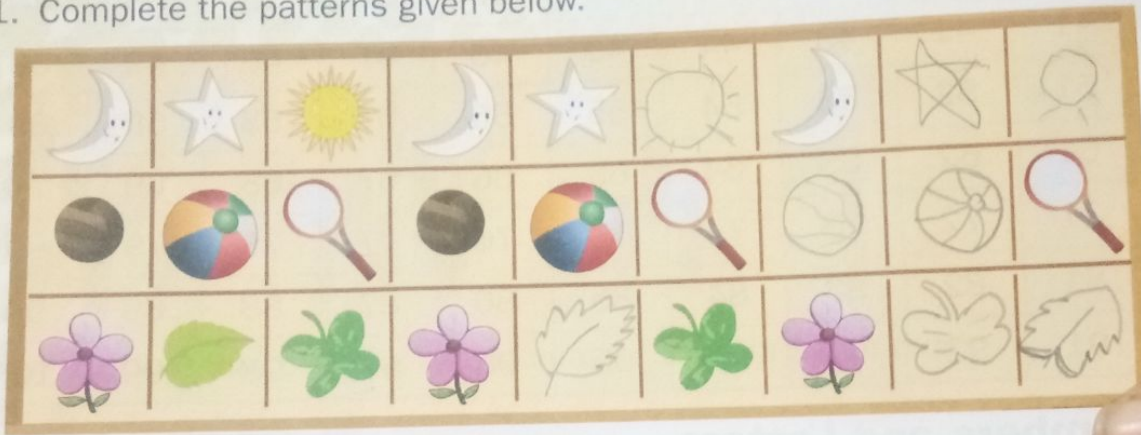
1. _____

2. _____

Ch - 2

My Practice Time 1

1. Complete the patterns given below.



2. Tick (✓) the image shown in the box that will come next in the pattern.

a.



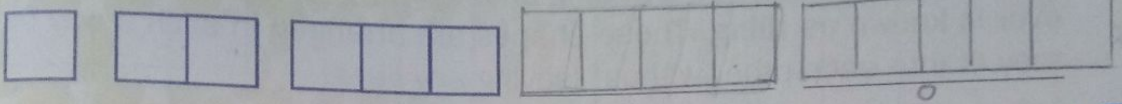
b.

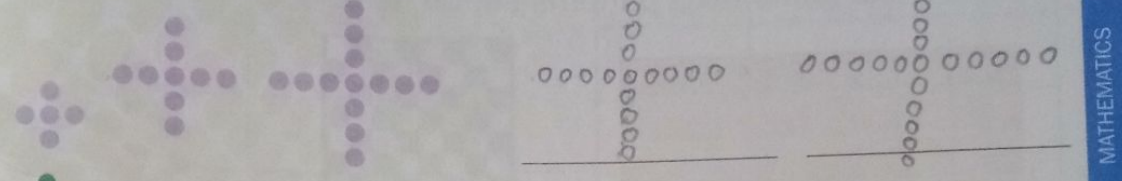


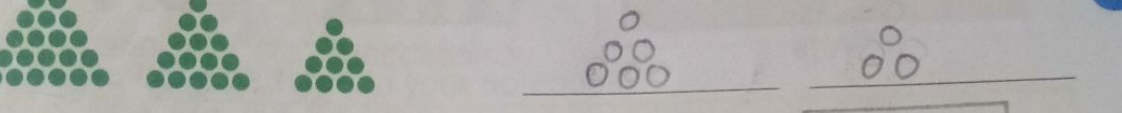
c.

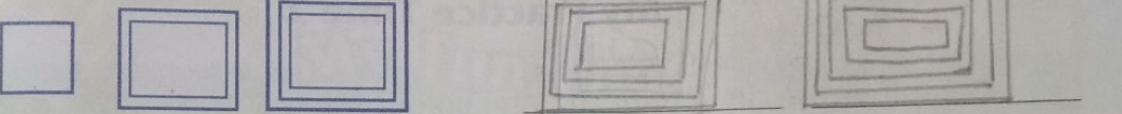


3. Extend the given patterns.

a. 

b. 

c. 

d. 

4. Observe the pattern used in each row and complete the same.

- a. 80, 75, 70, 65, 60, 55, 50, 45
- b. 0, 2, 6, 12, 20, 30, 42, 56
- c. 1, 3, 6, 10, 15, 21, 28, 36
- d. 5, 10, 15, 20, 25, 30, 35, 40
- e. 108, 99, 90, 81, 72, 63, 54

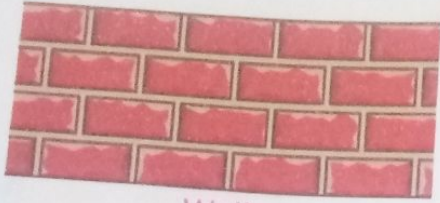
5. Complete the following patterns using letters and numbers.

- a. AD EH IL MP QT
- b. H1 J3 L5 N7 P9
- c. A15 B30 C45 D60 E75
- d. 13A 16C 19E 22G 25I

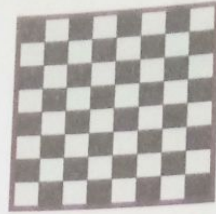
Tiling

Beautiful patterns made by using one kind of shape repeated over and over is known as **tiling**. These shapes are arranged in such a way that they fit into each other without leaving any gaps.

Let us look at some tiling patterns shown here.



Wall



Chessboard

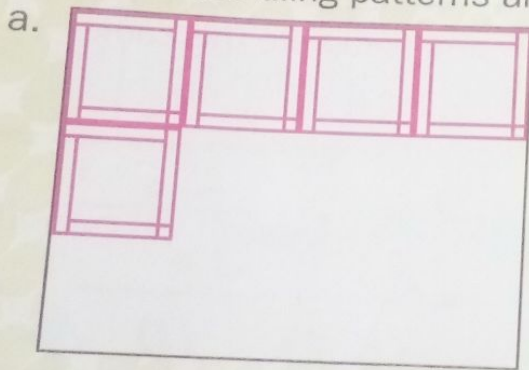


Honeycomb

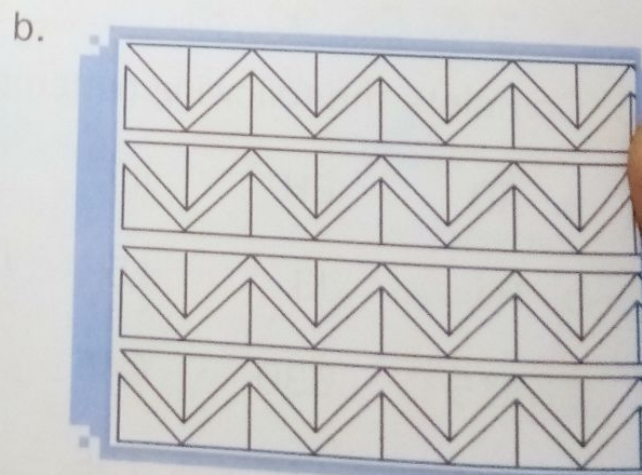
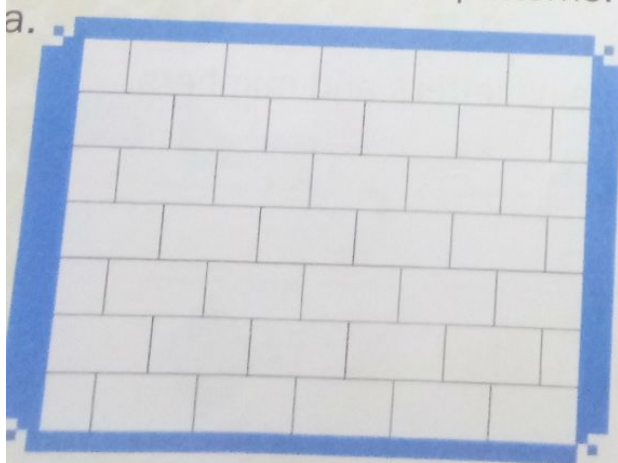
My Practice Time 2

Do your self

1. Complete the tiling patterns and colour them accordingly.



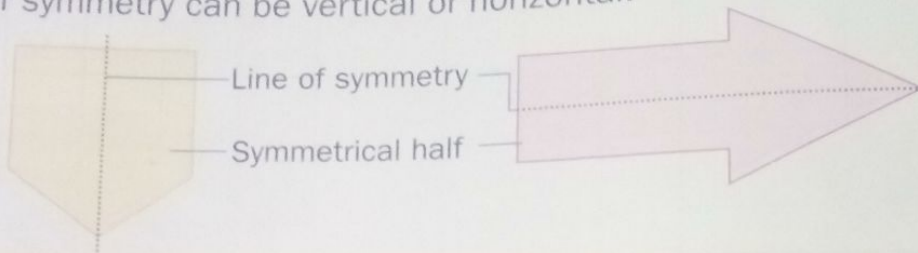
Colour the tiles to make patterns.



Line of Symmetry

When a line divides a picture into two equal halves then the picture is said to be symmetrical. The line is called the **line of symmetry**.

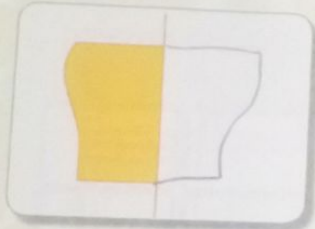
The line of symmetry can be vertical or horizontal.



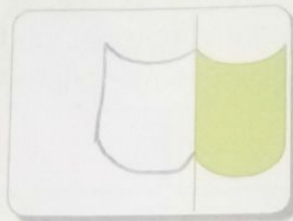
My Practice Time 3

1. Complete the following pictures so that the right and the left side look symmetrical.

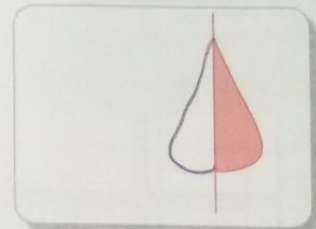
a.



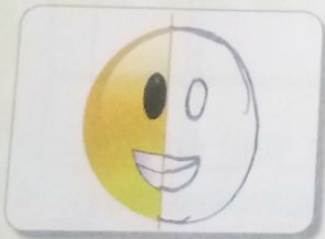
b.



c.



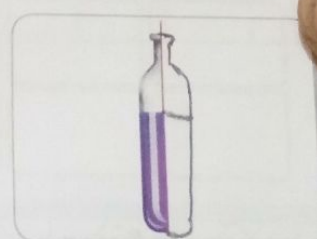
d.



e.

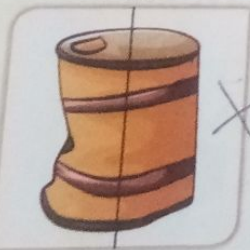


f.

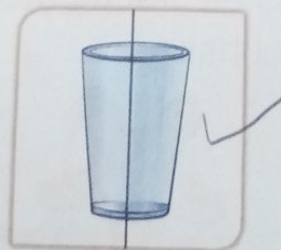


Tick (✓) the images which are symmetrical.

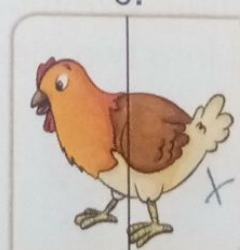
a.



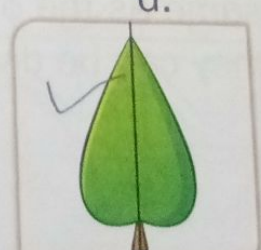
b.



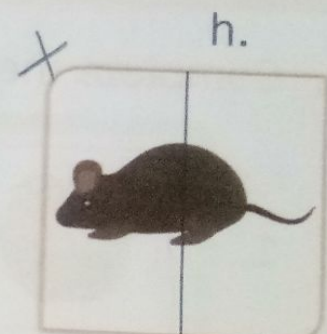
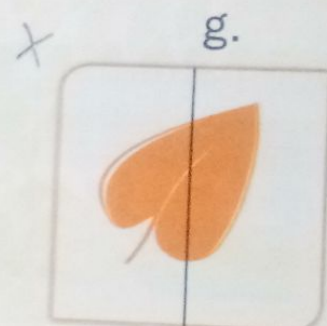
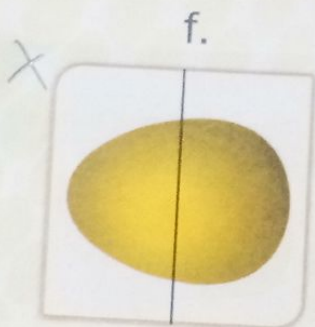
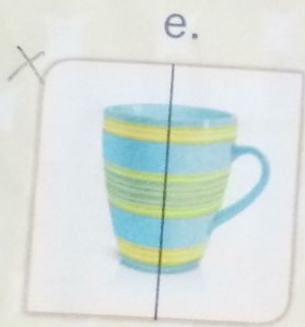
c.



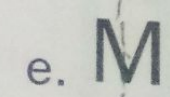
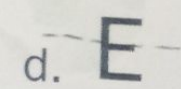
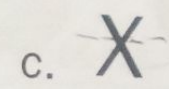
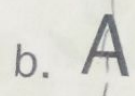
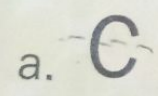
d.



e picture is said



3. Draw the line of symmetry for the following English letters.



My Learning Beyond

As discussed in the chapter, patterns are seen in nature also. One of the examples is the spotted pattern on the coat of leopards. They have a black and gold pattern on their coat. This pattern not only makes them beautiful but also helps them to hide in the wild.

