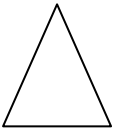


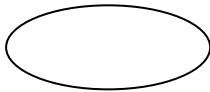
Chapter 12: Shapes and Patterns

a) Recalling the Shapes

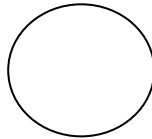
Match the following shapes to the objects similar to them.



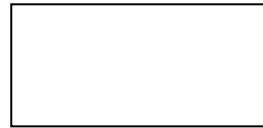
Triangle



Oval



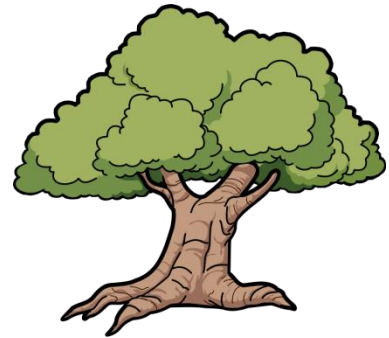
Circle



Rectangle



Square



This is a triangle.

It has 3 sides and 3 corners.



This is a rectangle.

It has 4 sides and 4 corners.

Opposite sides are equal



A square has 4 equal sides and 4 corners.



A circle has no sides and no corners.

These are all flat shapes and also called as 2-D shapes.

Exercise 12.1:

1) Write the number of sides and corners for each shape:

a)  _____ sides.
_____ corners.

b)  _____ sides.
_____ corners.

c)  _____ sides.
_____ corners.

d)  _____ sides.
_____ corners.

c) Introduction to 3-D shapes.

Some objects are solid or hollow you could hold in your hand. They have three dimensions like length, width and height.

Example: Cube, cuboid, cylinder, cone and sphere.

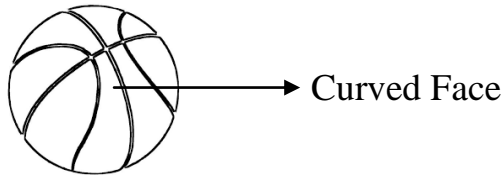
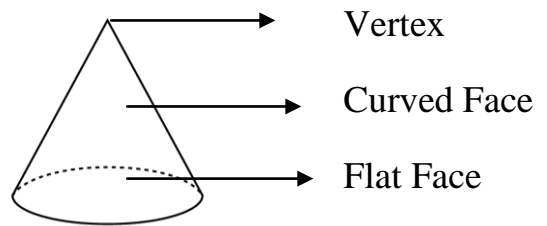
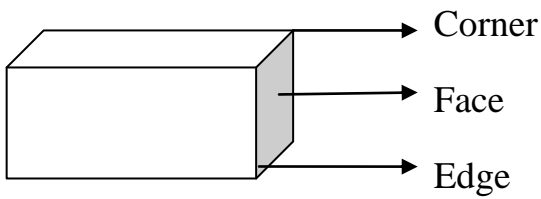
Their sides or faces may look like flat shapes such as square, triangle or circle.



Let's learn
more about
3-D shapes

The outside of
a solid is called
its face

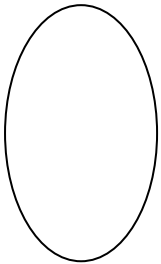
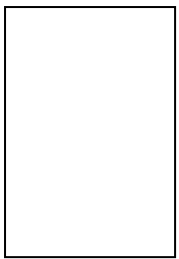
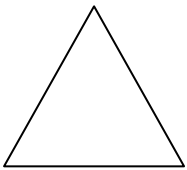
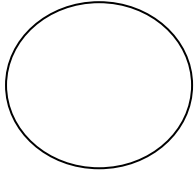
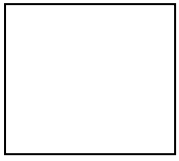
Two faces
meet to make
an edge.



Shapes	Faces	Edges	Corners/ Vertices
Cube	6	12	8
Cuboid	6	12	8
Sphere	1	0	0
Cone	2	1	1
Cylinder	3	2	0

Exercise 12.2:

Match the Following:



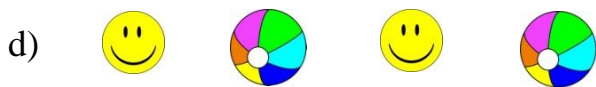
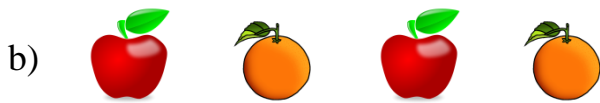
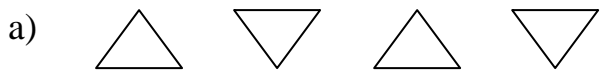
d) Patterns:

A systematic arrangement of numbers, shapes or other elements is called pattern.

We find patterns everywhere, such as in drawings, nature, building etc.

Exercise 12.3:

Complete the Pattern:



Train Your Brain



1) Identify the pattern and complete it:

a) ZZ YY XX _____

b) AZ BY CX _____

c) P1 P2 P3 _____

d) ABC CDE EFG _____

e) AAB BBC CCD _____

2) Complete the sequence and colour them:

- a)    
- b)    
- c)    
- d)    

3) Join the dots and continue the pattern:

4) Observe the pattern and continue the sequence:

- a) 130, 150, 170, 190, _____
- b) 360, 365, 670, 375, _____
- c) 589, 579, 569, 559, _____
- d) 243, 246, 249, 252, _____
- e) 80, 70, 60, 50, _____

5) Make a number pattern of your choice:

g) Number and Picture Patterns:

Patterns can be made by using numbers and pictures.

Patterns formed by using numbers are called number patterns.

Example: 22, 33, 44, 55, 66.

40, 50, 60, 70, 80.

A pattern formed by using pictures is called picture pattern.



Exercise 12.4:

Complete the pattern:

1) 52, 62, 72, _____, _____, _____.

2) 120, 130, 140, _____, _____, _____.

3) 95, 100, 105, _____, _____, _____.

4)  _____, _____, _____.

5)  _____, _____, _____.

