**Visualising Solid Shapes**

**1.** Recognizing 2D and 3D objects.

**2.** Recognizing different shapes in nested objects.

**3.** 3D objects have different views from different positions.

**4.** A map is different from a picture.

**5.** A map depicts the location of a particular object/place in relation to other objects/places.

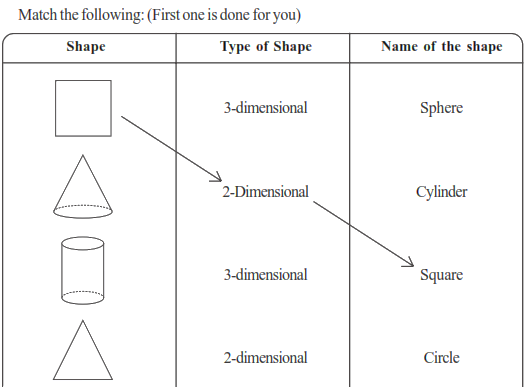
**6.** Symbols are used to depict the different objects/places.

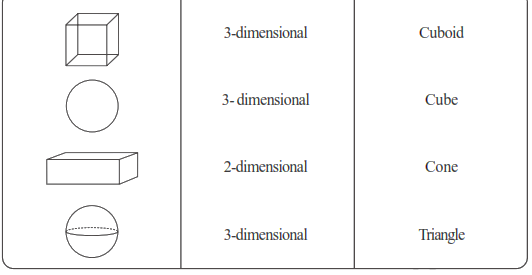
**7.** There is no reference or perspective in a map.

**8.** Maps involve a scale which is fixed for a particular map.

**9.** For any polyhedron, F + V – E = 2, where ‘F’ stands for number of faces, V stands for number of vertices and E stands for number of edges. This relationship is called **Euler’s formula**.

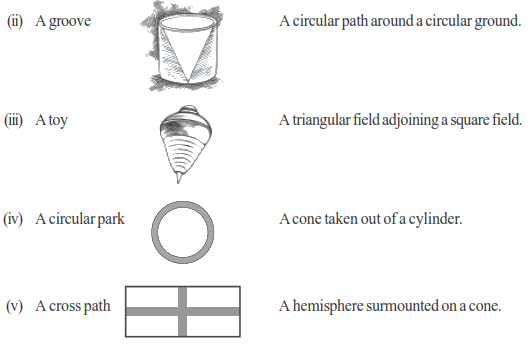
LEVEL – 1

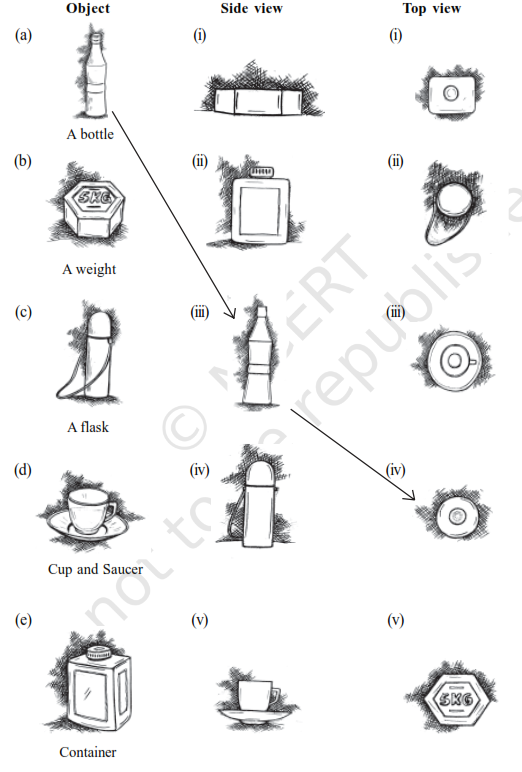
1. 



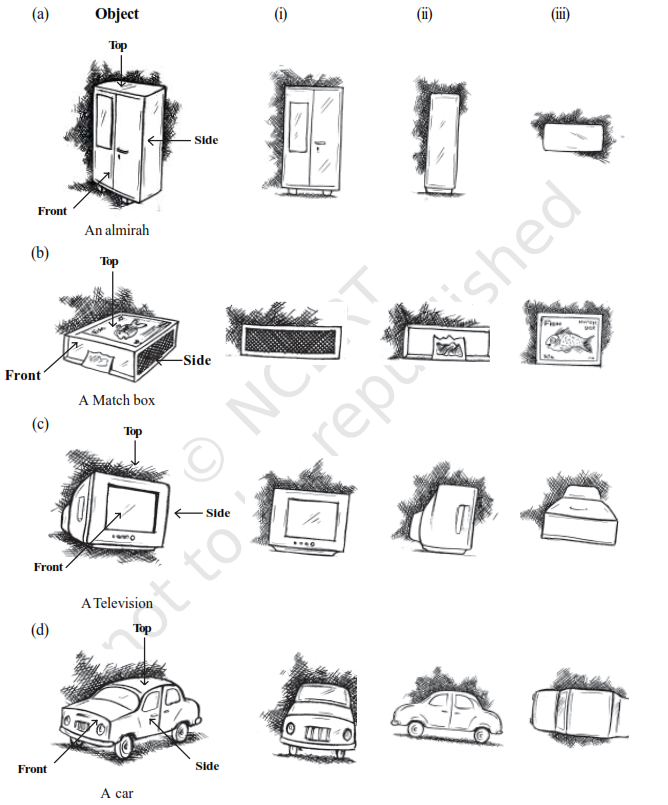
1. Match the following



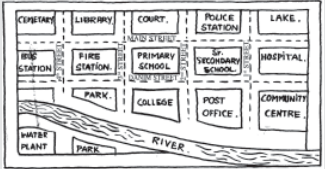


1. Match the following
2. For each of the given solid, the three views are given. Identify for each solid the corresponding top,

front and side views.



LEVEL – 2

1. Look at the Map

(a) Colour the map as follows: Blue-water, Red-fire station, Orange-Library, Yellow-schools, Green-

Parks, Pink-Community Centre, Purple-Hospital, Brown- Cemetery.

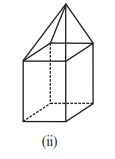
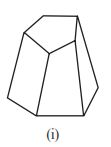
(b) Mark a Green ‘X’ at the intersection of 2nd street and Danim street. A Black ‘Y’ where the river meets the third street. A red ‘Z’ at the intersection of main street and 1st street.

(c) In magenta colour, draw a short street route from the college to the lake.

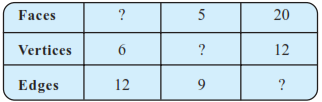
1. Draw a map of the route from your house to your school showing important landmarks

LEVEL – 3

1. Verify Euler’s formula for these solids.



1. Using Euler’s formula find the unknown.



1. Can a polyhedron have 10 faces, 20 edges and 15 vertices?

