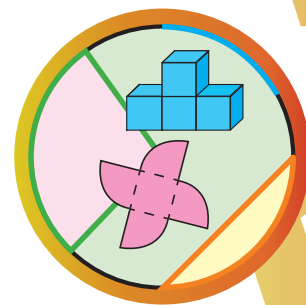


2

MEASUREMENTS



Learning Objectives

- ❖ To know the parts of a circle.
- ❖ To calculate the length of arc, area and circumference of a sector.
- ❖ To calculate the area and the perimeter of combined plane figures.
- ❖ To understand the representation of 3-D shapes in 2-D.
- ❖ To understand the representation of 3-D objects with cubes.



2.1 Introduction

An important aspect in everyone's day-to-day life is 'to measure'. Measuring the length of a rope, the distance between two places, finding the perimeter and area of plots and lands, building the structures under specified measures etc., are a few of the many situations where the concept of 'measure' is used.

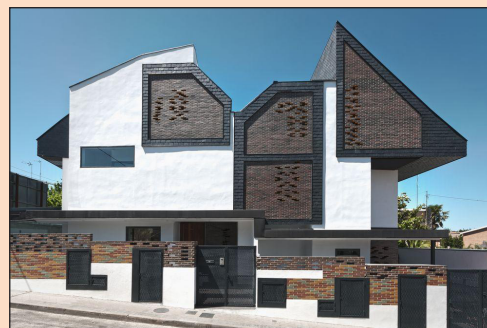
It is said that the biggest invention by man is the **wheel**. The wheel is otherwise called as the '**cradle of invention**'. What is the shape of a wheel? Circle, isn't it? In the things we use, apart from circles, we can also see different shapes like triangles, squares, rectangles etc.,

Measurements play a vital role in everyone's life. Not only the persons who learn proper mathematics in schools, but also the layman uses his logical thinking to apply the concept of measurements when he needs. For example, a carpenter who carves out the wooden wheels of a temple car wants to protect the outer surface by an iron strap. With all his experience, he says that a 22 feet strap will be required for a 7 feet high (diameter) wooden wheel.

MATHEMATICS ALIVE – AREA AND PERIMETER IN REAL LIFE



Sectors are used in manufacturing the dining table



Combined shapes are used in the construction of building