NOTE-Parents *are expected to ensure that the child reads scientific description about measurement and measuring volume of liquids. Child may follow any ICSE physics book of class7th*

LINK – *https://youtu.be/BL9xEALd5HU*

Read the passage carefully and answer the following questions.

Chapter 1 – Physical Quantities and Measurement

Topic 1 - Volume and Measuring the volume of liquids

The space occupied by an object is called its volume. The volume of liquids is expressed in liters (L) and milliliters (mL). Measuring cylinder is used to measure the volume of the liquid. A hollow body has inner and outer volume. Inner volume or capacity is measured in terms of the liquid it can hold. The volume of liquid which container can hold is called capacity. Capacity has same unit as volume. Containers with fixed capacity have some disadvantages as they cannot be used to measure smaller volumes. To measure volume with greater accuracy, a graduated container is used. Measuring cylinders and measuring cups are two commonly used graduated containers.

Volume of some bodies of regular shape

BODY	VOLUME
1. Sphere	$4/3 \, \pi r^3$, r = radius ,pi =3.14
2. Cube	a^3 , a = side
3. Cuboids	lbh
4. Cylinder	$\pi r^2 h$, h = height

Conversion $1m^3 = 1m \times 1m \times 1m = 1{,}000{,}000 cm^3$
              $1L = 1000 cm^3$,$1mL = 1cm^3$

QUESTIONS - 1. Define volume.

2. Give two examples from daily life where you observe measuring of liquids.

3. What does 'a 'stand for in the formula of cube (a^3) ?

4. Write two examples of graduated containers .

 5.What is the unit of capacity of a container ?

FILL IN THE BLANKS -

1. Formula for measuring volume of cylinder is _____.

2._____ is used to measure volume of liquids.

3. $1m^3$ = _____.

4. Liter is denoted by the symbol _____.

5. What is the value of π = _____.