MEASURING VOLUME

1   A measuring cylinder contains some liquid.
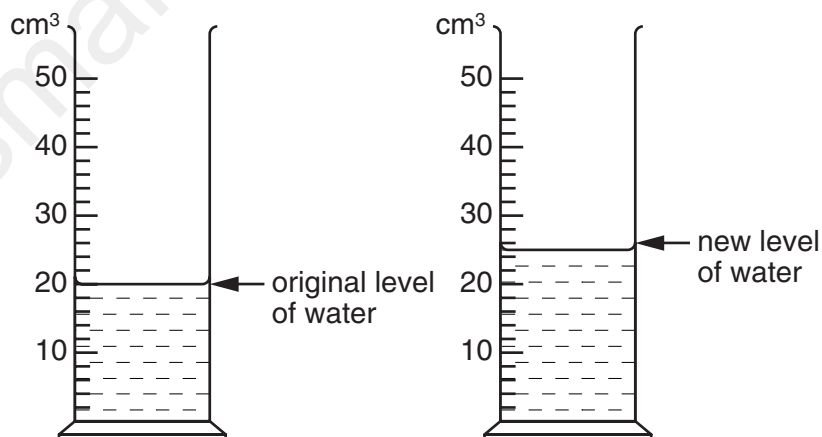
cm³
10 —
9 —
8 —
7 —
6 —
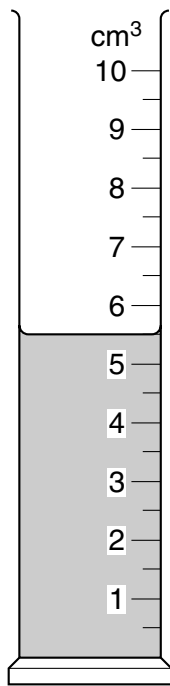
5 —   What does the reading of the measuring cylinder scale give?

4 —   **A**   the density of the liquid

3 —   **B**   the height of the liquid

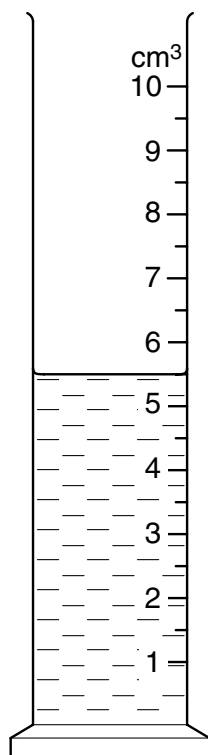2 —   **C**   the mass of the liquid

1 —   ✓   the volume of the liquid

2

A student lets 100 drops of water fall into a measuring cylinder which already contains some water.

cm³
50 —
40 —
30 —
20 —   ← original level of water
10 —

cm³
50 —
40 —
30 —
20 —   ← new level of water
10 —

What is the volume of one drop?

✓   0.05 cm³   **B**   0.25 cm³   **C**   5.0 cm³   **D**   25 cm³

3   The diagram shows a measuring cylinder.

cm³
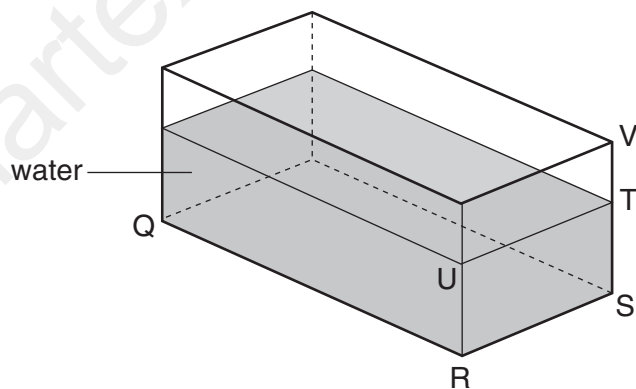10
9
8
7
6
5
4
3
2
1

What volume of liquid does the cylinder contain?

A 5.5 cm³   **B** 5.7 cm³   **C** 6.5 cm³   **D** 6.7 cm³

4

1   A glass tank contains some water.

water

Q V T U S R

The length QR and the width RS of the tank are known.

What other distance needs to be measured in order to be able to calculate the volume of the water?

A ST   **B** SV   **C** TU   **D** TV

5 Which of the following is **not** necessary when using a measuring cylinder to measure the volume of a quantity of water?

   A   making sure that the measuring cylinder is vertical

   B   making sure that your eye is level with the liquid surface

   C   reading the bottom of the meniscus

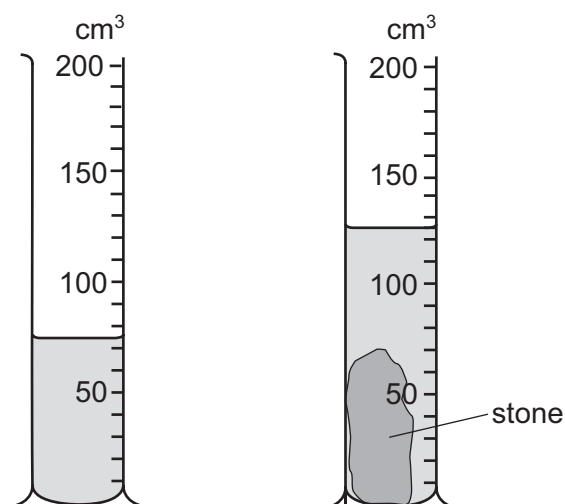   **D**   using the largest measuring cylinder possible

6   A measuring cylinder is used to measure the volume of a liquid.
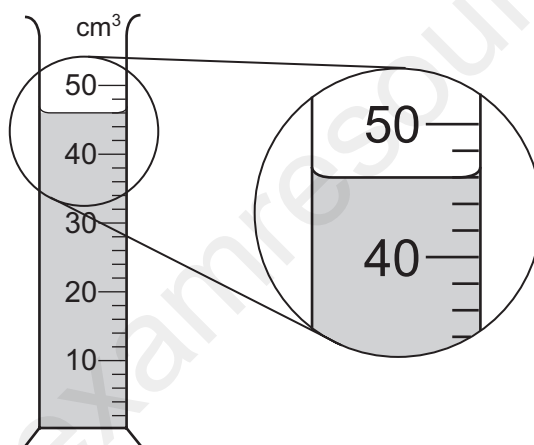
What is the volume of the liquid?

   A   43 cm^3 **B**   46 cm^3 **C**   48 cm^3 **D**   54 cm^3

7 A measuring cylinder contains some water. When a stone is put in the water, the level rises.

What is the volume of the stone?

A ✓ 50 cm³   **B** 70 cm³   **C** 75 cm³   **D** 125 cm³

8 A liquid has a density of 0.80 g / cm³.

Which could be the volume and mass of this liquid?

	volume / cm³	mass / g
A	2.0	16
B	8.0	10
C ✓	10	8
D	16	2