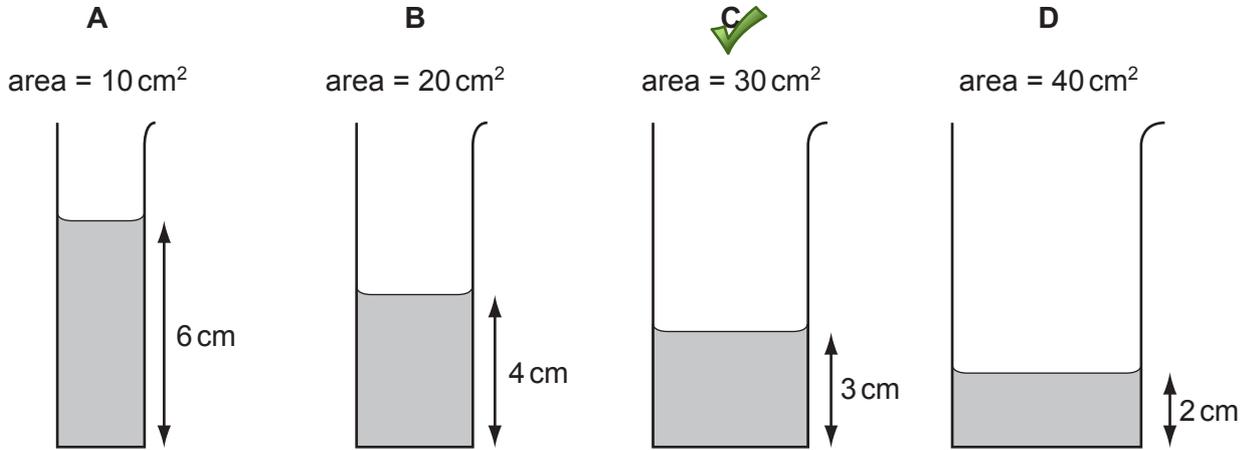


# MEASURING VOLUME

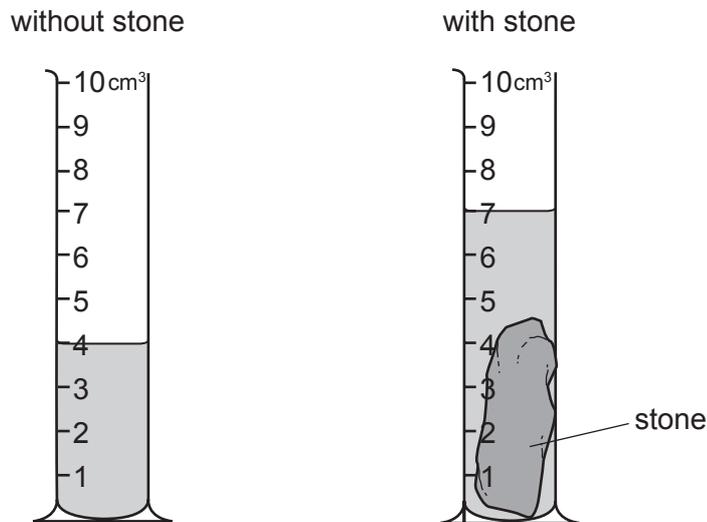
1 Some water is poured into four tubes of different cross-sectional areas.

Which tube contains the largest volume of water?



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2 The diagrams show an experiment to determine the volume of a stone.

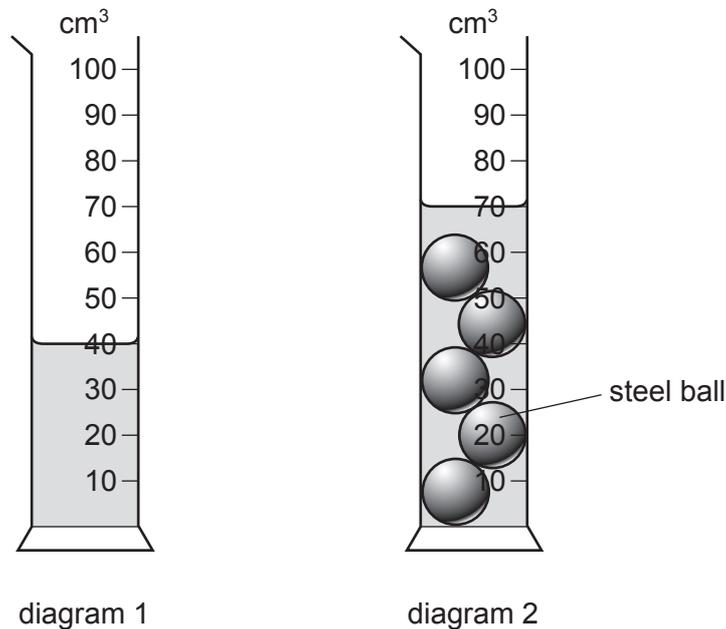


What is the volume of the stone?

- A**  $3 \text{ cm}^3$       **B**  $4 \text{ cm}^3$       **C**  $7 \text{ cm}^3$       **D**  $11 \text{ cm}^3$

3 Diagram 1 shows a measuring cylinder containing water.

Five identical steel balls are now lowered into the measuring cylinder. Diagram 2 shows the new water level in the cylinder.

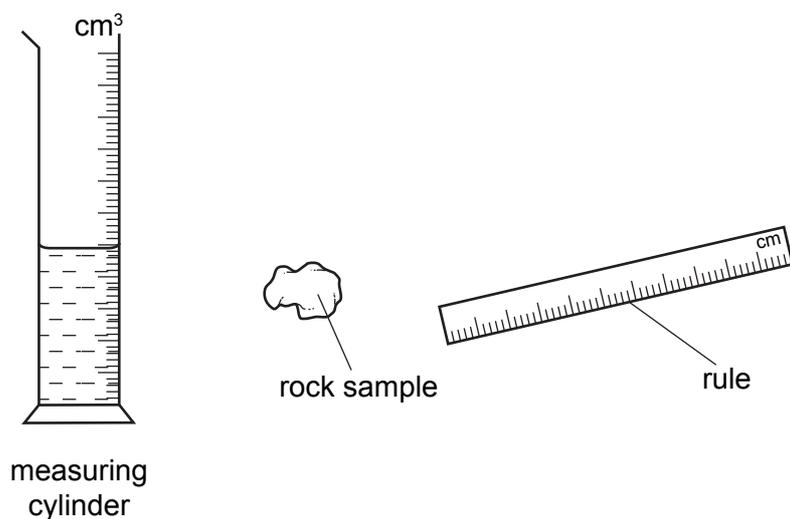


What is the volume of each steel ball?

- A 6 cm<sup>3</sup>      B 14 cm<sup>3</sup>      C 30 cm<sup>3</sup>      D 70 cm<sup>3</sup>

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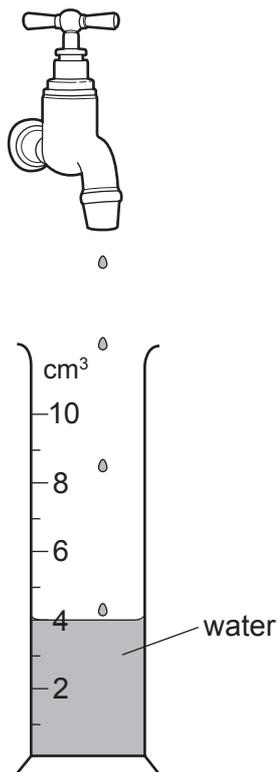
4 A scientist needs to determine the volume of a small, irregularly shaped rock sample. Only a rule and a measuring cylinder, partially filled with water, are available.



To determine the volume, which apparatus should the scientist use?

- A both the measuring cylinder and the rule  
 B neither the measuring cylinder nor the rule  
 C the measuring cylinder only  
 D the rule only

- 5 Drops of water are dripping steadily from a tap (faucet). The diagram shows a measuring cylinder which has collected 120 drops of water.



How many drops in total will have been collected when the measuring cylinder reads 10 cm<sup>3</sup>?

- A 48                      B 60                      C 180                       D 300
- 

- 6 A stone has a volume of 0.50 cm<sup>3</sup> and a mass of 2.0 g.

What is the density of the stone?

A 0.25 g/cm<sup>3</sup>

B 1.5 g/cm<sup>3</sup>

C 2.5 g/cm<sup>3</sup>

D 4.0 g/cm<sup>3</sup>

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- 7 Two cylinders are made of the same metal. Both cylinders have the same cross-sectional area but one is longer than the other.



cylinder 1



cylinder 2

Which quantity is the same for both cylinders?

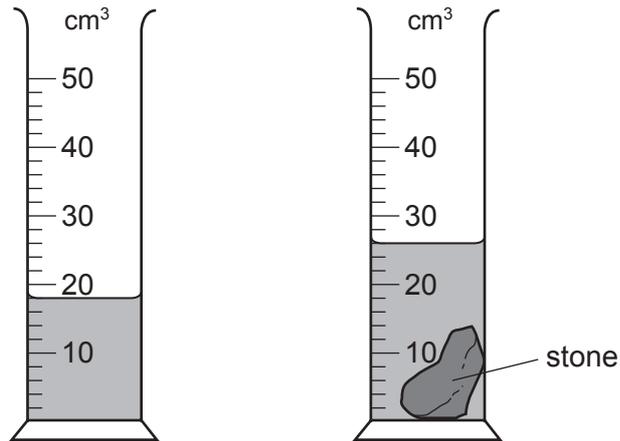
A density

B mass

C resistance

D volume

8 The diagram shows a measuring cylinder used to measure the volume of a small stone.



What is the volume of the stone?



A 8 cm<sup>3</sup>

B 9 cm<sup>3</sup>

C 14 cm<sup>3</sup>

D 26 cm<sup>3</sup>

