

Determining the Volume of Solid Objects

Whenever we make calculations, it is so important to show how we arrived at our result.

On this page, and for the rest of the year, whenever you make a calculation you must "show all work" by following these 3 steps:

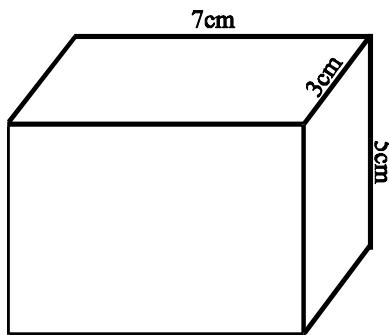
1. Write out the formula
2. Substitute numbers into equation (plug in numbers)
3. Solve equation and label with correct units (round appropriately when asked)

1. What is the volume of an object that is 12.5 centimeters long, 3.0 centimeters wide, and 10.0 centimeters high?

Calculations: (round your final answer to the nearest tenths place)

$$\begin{aligned}\text{volume} &= l \times w \times h \\ &= 12.5 \times 3.0 \times 10.0 \\ &= 375.0 \text{ cm}^3\end{aligned}$$

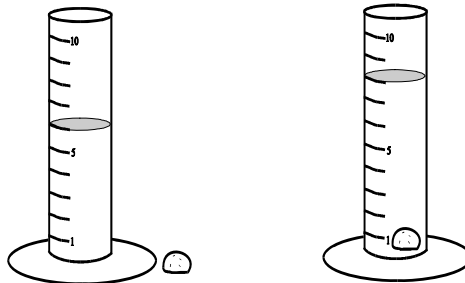
2. What is the volume of the object below?



Calculations: (round your final answer to the nearest whole number)

$$\begin{aligned}\text{volume} &= l \times w \times h \\ &= 7 \times 3 \times 5 \\ &= 105 \text{ cm}^3\end{aligned}$$

3. What is the volume of the irregular-shaped pebble?
(no calculations necessary here)



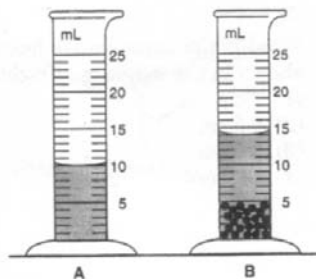
without object: 6 mL
with object: 8 mL

volume = 2 mL

4. What is the total volume of the lead pellets?
(no calculations necessary here)

Remember to read the meniscus correctly!

FROM THE BOTTOM!!!



without object: 10 mL
with object: 14 mL

volume = 4 mL