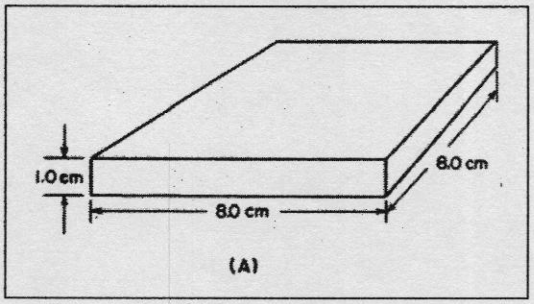
DENSITY (1)*

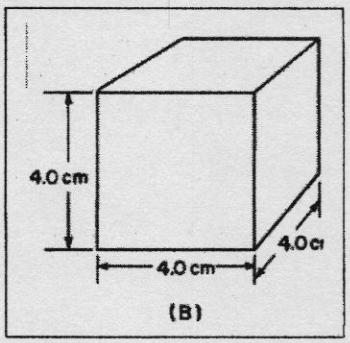
1. A mineral has a mass of 50g and a volume of 10 cm^3. Calculate the density of this mineral.

2. Determine the density of the Block A below, which has a mass of 128g and dimensions as shown in the diagram below.



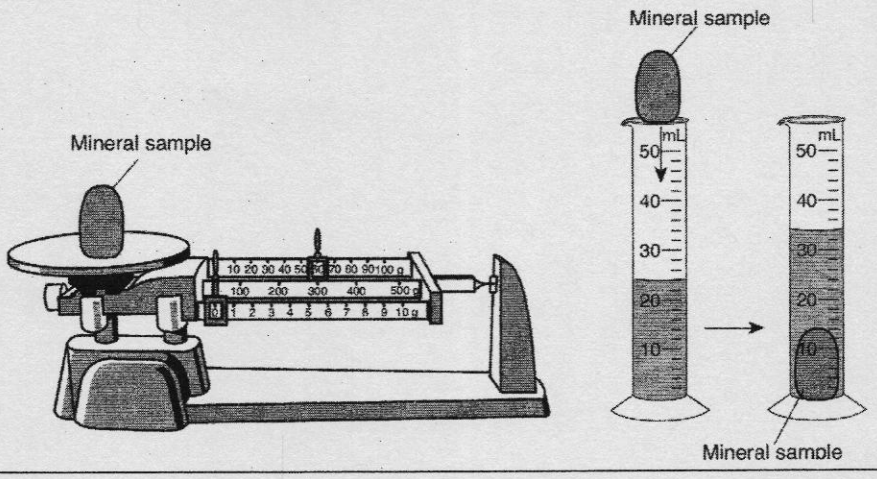
(V= L X W X H)

3. Determine the mass of the Block B below, which has a density of 3 g/cm^3 and dimensions as shown in the diagram below.



(V= L X W X H)

4. Determine the density of the mineral sample shown below.



Mass= _____ g

(Obtain measurement from the triple beam balance)

Volume= _____ ml

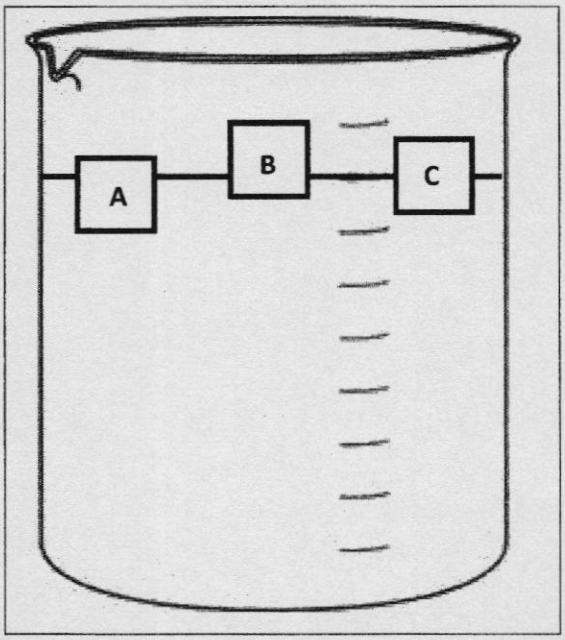
(REMEMBER TO FIND THE VOLUME OF THE MINERAL SAMPLE: V_{after} - V_{before})

Density=

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

DENSITY APPLICATION*

1. The diagram below shows a beaker filled with water. Three objects A, B & C were placed in the beaker, which all appear to float on water.



HINTS:

- **Although all 3 objects float on water, different portions of each object are exposed above water.**
- **What does that reveal about the density of each object as compared to each other?**

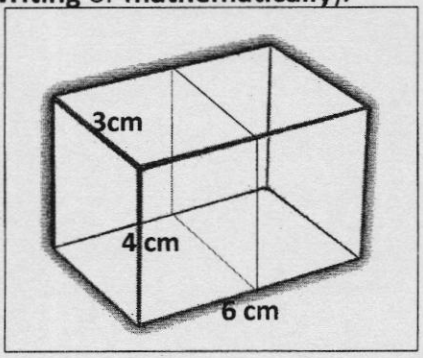
Determine the object with the least density out of the three. _____

Justify your selection: _____

_____

_____

2. The object below has a mass of 144g and a volume of $72cm^3$. If a student decides to cut the object in half, what would you anticipate the density of each half to be? Explain your answer (You may select to do this in **writing** or **mathematically**).



Objects's dimensions:
Length= 6 cm
Height= 4 cm
Width= 3 cm