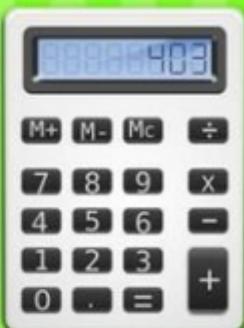


Calculating Density



Name: _____ Date: _____

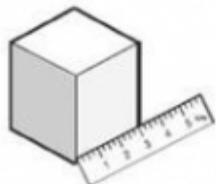
Calculating Density

Work the problems in the space below. You may use a calculator.

$$d = \frac{m}{V}$$

Put # in calculator FIRST
Push the + button SECOND
Put # in calculator THIRD

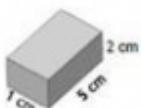
1. Ernie wants to find the density of his unknown cube. The mass of his cube is 108 g.
Calculate the density of Ernie's cube.



Step 1:
Length of the cube: _____ cm
Width of the cube: _____ cm
Height of the cube: _____ cm
Volume of the cube = length x width x height.
Volume = _____ x _____ x _____ = _____

Step 2:
Volume of the cube from step 1: _____ cm³
Mass of the cube from the question: _____ g
 $d = \frac{m}{V}$
 $d = \underline{\hspace{2cm}}$

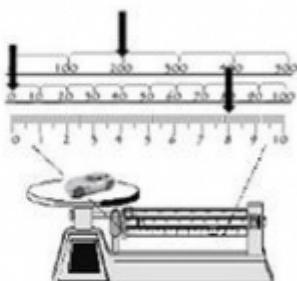
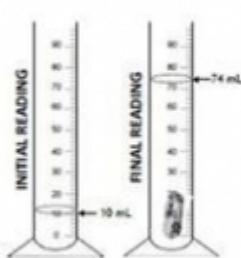
2. Calculate the density if the mass is 150 g.



Step 1:
Length of the cube: _____ cm
Width of the cube: _____ cm
Height of the cube: _____ cm
Volume of the cube = length x width x height.
Volume = _____ x _____ x _____ = _____

Step 2:
Volume of the cube from step 1: _____ cm³
Mass of the cube from the question: _____ g
 $d = \frac{m}{V}$
 $d = \underline{\hspace{2cm}}$

3. Calculate the density.



Step 1 - Find the volume of the irregular solid:

Initial reading: _____ mL

Final reading: _____ mL

Volume = Final reading - Initial reading

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Volume mL _____ mL

Step 2 - Find the mass of the irregular solid:

Read the TBB. What is the mass of the car?

_____ g

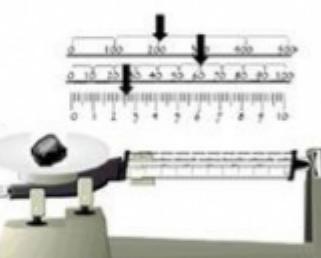
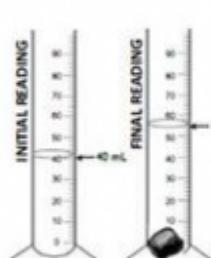
Step 3 - Calculate the density

$$d = \frac{m}{V}$$

$$d = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}}$$

4. Calculate the density.



Step 1 - Find the volume of the irregular solid:

Initial reading: _____ mL

Final reading: _____ mL

Volume = Final reading - Initial reading

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Volume mL _____ mL

Step 2 - Find the mass of the irregular solid:

Read the TBB. What is the mass of the car?

_____ g

Step 3 - Calculate the density

$$d = \frac{m}{V}$$

$$d = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}}$$