Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_ Block:\_\_\_\_\_\_\_

Density Practice- Due Friday 9/18- Show your work to earn full credit!

1. What is the density of a piece of wood that has a mass of 25.0 grams and a volume of 29.4 cm3?
2. A  piece of wood that measures 3.0 cm by  6.0 cm by 4.0 cm has a mass of 80.0 grams. What is the density of the wood? Would the piece of wood float in water? Hint: density of water is 1 g/mL.
3. A cup of gold colored metal beads was measured to have a mass 425 grams. By water displacement, the volume of the beads was calculated to be 48.0 cm3. Given the following densities, identify the metal.

Gold: 19.3 g/mL

Copper: 8.86 g/mL
Bronze: 9.87 g/mL

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| 1. I threw a plastic ball in the pool for my dog to fetch. The mass of the ball was 125 grams. What must the volume be to have a density of 0.500 g/mL. ( I want it to float of course!)
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1. ****The volume of a solution was measured in a graduated cylinder (shown right). If the mass of solution is measured to be 60.75 grams, what is the density of the solution?
2. An ice cube measuring 5.80 cm by 5.80 cm by 5.80 cm has a density of 0.917 g/mL. What is the mass?
3. The density of aluminum is 2.70 g/mL. If the mass of a piece of aluminum is 244 grams, what is the volume of the aluminum?
4. 450 grams of gasoline has a density of 0.665 g/mL. What is the volume of gasoline?
5. A block of aluminum occupies a volume of 15.0 mL and weighs 40.5 g. What is its density?
6. What is the mass of the ethyl alcohol that exactly fills a 200.0 mL container? The density of ethyl alcohol is 0.789 g/mL.