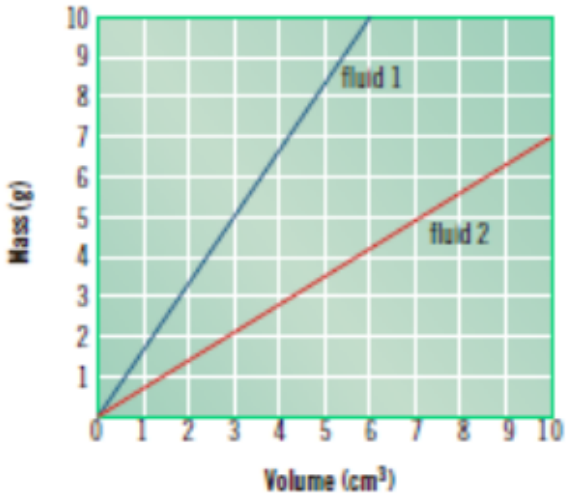
Mr. Gunstenson
Science 8

FD 8.1 Question Set #3:

1. Define density and explain how you can measure it.
2. Calculate the density of:
   a. 27.1 g of mercury with a volume of 2.0 mL.
   b. 5.25 g of silver that displaces 0.5 mL of water.
   c. 28.5 g of lead that displaces 2.5 mL of water.
3. If you had 100 mL of each solid substance in question 2, which one would have the greatest mass?
4. The density of ice is 0.92 g/mL. Can you explain why ice floats
5. What happens to the density of a fluid as it warms up? Explain your thoughts using the Particle Theory.
6. In the graph below, which fluid has the highest density and which has the lowest? How do you know?



7. Which is denser—10 g of shampoo or 10 kg of the same shampoo? Explain.
8. Which is denser—water at 15°C, 4°C, or 60°C? Explain.
9. Using your understanding of the Particle Theory of Matter, how do you think the densities of gases would compare to liquids and solids?