TEST REVIEW: DENSITY

1. Write the equation for density.

2. Define volume.

3. Define mass.

4. Define weight.

5. Which of the above three properties can change from place to place in the Universe? 

6. What is the density of water? 

7. What is the density of anything that floats in water? 

8. What is the density of anything that sinks in water? 

9. With what metric unit do we measure:
   a) mass 
   b) length 
   c) volume 
   d) time 

10. Do all materials have the same density? 

11. When you cut a material in half, what happens to the value of its density? 

12. a) Describe how to measure the volume of an irregularly-shaped rock. Be sure to name the laboratory equipment you would use.


13. Determine if the following statements are true or false.

a) Density is unaffected by size. T / F
b) Density is unaffected by shape. T / F
c) Density is unaffected by volume. T / F
d) Density is unaffected by temperature. T / F
e) Density is unaffected by pressure. T / F

14. How would you determine if a stone were a real diamond or merely a cubic zirconium?


15. List the following phases of matter in order of increasing density: liquid, gas, solid.

a) ______________________

b) ______________________

c) ______________________

16. How do you calculate the volume of a cube?


17. How do you calculate the volume of a right rectangular prism (a box)?


18. If you plotted mass versus volume for a particular material on a graph, what would the curve look like? (Hint: Make a graph like this for water and look at it.)