Lesson on Density, Mass and Volume Name _____

GO TO

http://cwis.nyu.edu/pages/mathmol/modules/water/density_intro.html

Scroll down

1) Find the volume of the cube shown. Be careful, the cube is larger than 3cm! Round your answer to the nearest tenth. Write your answer here _____. Check your answer.

2) Do you know how to change cubic centimeters to cubic inches? ____ One cubic centimeter is .06102 cubic inch. (I couldn't get their measurement converter to work!) Remember 1 in. = 2.54 cm.

3) How much water was displaced. Be sure you click on each figure and be careful reading exact measurement! _____

4) What are some reasons to account for the small differences in using the two methods shown to calculate volume? _____
_____
_____

Click to find the mass of the cube.

5) What is the mass of the cube? _____

Click on Density

6) What is the formula for density? _____

7) Find the density of the block using the above formula? _____

8) What is the density of the other block? _____

Now, look at the table provided on the web page and on the next page of this handout and answer:

9) What is each block made of? Block 1: _____and Block 2: _____

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Substance	Density (G/CM^3)
Air	.0013
Wood (oak)	.85
Water	1.00
Ice	.93
Aluminum	2.7
Lead	11.3
Gold	19.3
Ethanol	.94
Methanol	.79

Now, click on the Challenge Questions.

10) If the side of a square is doubled, the area will be changed by a factor of ____

11) If the side of a square is doubled, the volume will be changed by a factor of ___

12) For homework: Make a graph of length of the side of a square vs. the area of the square (plot length of side on the x-axis (in cm.) and area in cm2 on the y-axis.