

Properties of Matter HW

Name _____

Date _____

Period _____

Define these general properties of matter:

1) mass - _____

2) weight - _____

3) volume - _____

4) density - _____

True or False (If the statement is false, rewrite the statement to make it true.)

5) _____ The density of water is 1 g/mL.

6) _____ Volume of liquids is found using a graduated cylinder.

7) _____ You weigh less on Pluto because you are further from the center of the Earth.

8) _____ $1 \text{ cm}^3 = 1 \text{ mL}$

9) _____ Volume is the amount of matter in an object.

10) _____ Smaller objects always have less mass than larger objects.

11) _____ The more loosely packed the particles in an object, the more dense it is.

Matching – Draw a line to match each item on the left with the best choice on the right.

- | | |
|----------------------|--|
| 1) volume of liquids | A) measured in cm^3 |
| 2) mass | B) mass divided by volume |
| 3) weight | C) changes, depending on where you are in the universe and the amount of gravitational pull. |
| 4) volume of solids | D) stays constant, no matter where you are in the universe |
| 5) Mt. Everest | E) measured in mL |
| 6) Jupiter | F) you would weigh less here than in Medfield |
| 7) Density | G) you would weigh more here than in Medfield |

CALCULATE density for the following objects:

Object	Mass (g)	Volume (cm^3)	Density (g/cm^3)	Float or Sink
1) bowling ball	400 g	20 cm^3	_____ g/cm^3	
2) pen	10 g	5 cm^3	_____ g/cm^3	
3) styrofoam	8 g	16 cm^3	_____ g/cm^3	