

NAME:

PERIOD:

DATE:

DENSITY HOMEWORK #3

Answer all questions as best you can. Use your notebook to help. Be specific. Be scientific.

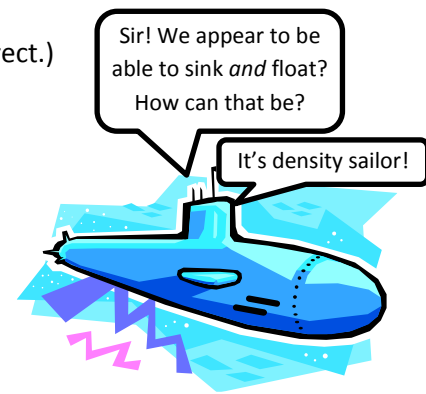
1. Define **volume** -

2. Define **mass** -

3. Define **matter** -

4. Which of the following are not correct about density? (Choose all that are incorrect.)

- A. it tells how much space an object takes up
- B. it is two measurements compared to each other
- C. it tells whether a substance will sink or float in another substance
- D. it tells us how much gravity is pulling on an object
- E. it represents how many particles are packed into an amount of space



5. Find the density of a plastic ball with a volume of 10 mL and a mass of 5 g.

Show the formula and show your work or you get no credit.

6. Water has a density of 1.0 g/mL. If I put the ball from the previous question into a glass of water, would it sink or float?

Why?



7. Write a list of instructions to explain how to find the density of a marble.

8. Draw pictures of two boxes with the same volume, but different densities.

9. Draw pictures of two pizzas with the same number of pepperonis, but with different densities of pepperoni.



10. I have 100 mL of water with a mass of 100 g and a density of 1.0 g/mL.

If I pour away 50 mL of water, what is the density of the 50 mL that is left?

Give mathematical evidence to prove it.