

# Physical Science Assignment 2-3

Read section 2-3. Then, based on the information in your textbook, answer the following questions :

Name \_\_\_\_\_

Class Period \_\_\_\_\_

Date \_\_\_\_\_

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1. What is ***matter***?

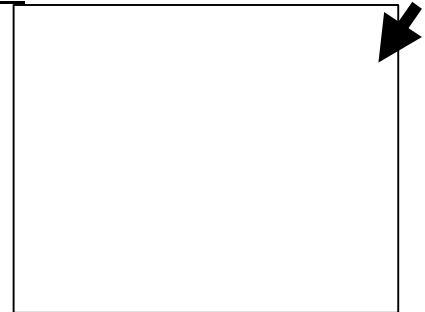
\_\_\_\_\_

2. What is the definition for ***volume***?

\_\_\_\_\_

3. Describe a ***cubic centimeter***. on the lines below... then draw a cubic centimeter in this box.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



4. If we put a single, solid cubic centimeter of metal on the balance and determine that its mass is 2.6g, what is the ***density*** of the metal?

\_\_\_\_\_

5. Look at figure 2-11. If we have a block of gold that has a volume of 8 cubic centimeters, what will be the mass of the block?

6. If we have 10 mL of a liquid and it has a mass of 122g, what is the density of the liquid?

\_\_\_\_\_

7. Write the definition for buoyancy.

\_\_\_\_\_

8. Explain how buoyancy and density are related.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***Please continue on the other side.***

9. Explain how divers decrease their average density.

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10. Explain why a hot air balloon rises.

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11. Which of the substances in Figure 2-11 would sink in water?

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Extra Credit

If we have a cubic ***decimeter*** of gold, how many pounds will it weigh?