

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Hr: \_\_\_\_\_

**Metric Mania 2**

**Science 9**

1. What is the basic unit for volume? \_\_\_\_\_
2. Determine the volume for each object.
  - a. Use LxWxH to find the volume of chalkboard eraser \_\_\_\_\_  $\text{cm}^3$
  - b. Use water displacement to find the volume of four marbles  
\_\_\_\_\_ mL or  $\text{cm}^3$
3. Convert the following measurements.
  - a. 160 mL = \_\_\_\_\_ L
  - b. 23 kL = \_\_\_\_\_ L
  - c. 456cL = \_\_\_\_\_ mL
  - d. 120 mL = \_\_\_\_\_  $\text{cm}^3$  (Remember 1mL = 1 $\text{cm}^3$ )
4. What is the basic unit for measuring time? \_\_\_\_\_
5. How many seconds are in
  - a. 1 minute \_\_\_\_\_
  - b. 6 hours \_\_\_\_\_
  - c. 2 days \_\_\_\_\_
  - d. 5 days \_\_\_\_\_
6. What is the equation for density? \_\_\_\_\_ ( see textbook)
7. What is the density of water in g/mL? \_\_\_\_\_ ( see textbook)
8. Would the objects with the following densities float, sink or remain suspended in tap water? (refer to density of water from question #7)
  - a. 0.85 g/mL \_\_\_\_\_
  - b. 1.0 g/mL \_\_\_\_\_
  - c. 1.4 g/mL \_\_\_\_\_
  - d. 0.92 g/mL \_\_\_\_\_
9. What is the basic unit for measuring length? \_\_\_\_\_
10. What is the basic unit for measuring mass? \_\_\_\_\_
11. What is the basic unit for measuring temperature? \_\_\_\_\_

1 min = 60 s (seconds)
60 min = 1 hr
24hr = 1 day
7 day = 1 week

Covert the following temperature (You can use your reference sheet)

Example:

a.  $-72\text{ }^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

b.  $^{\circ}\text{C} = 5/9 \times (^{\circ}\text{F}-32)$

c.  $^{\circ}\text{C} = 5/9 \times (-72\text{ }^{\circ}\text{F}-32)$

d.  $-57.77\text{ }^{\circ}\text{C}$

2.  $-106^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

3.  $125\text{K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

4.  $27\text{K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

5.  $647^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

6.  $647^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

7.  $72^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

8.  $72^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ K}$

9.  $-20^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

10.  $-106^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ K}$

11.  $-72^{\circ}\text{F} = \underline{\hspace{2cm}}\text{ K}$

12.  $27\text{K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

13.  $32^{\circ}\text{ F}$  (freezing point)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

14.  $70^{\circ}\text{ F}$  (room temperature)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

15.  $98.6^{\circ}\text{ F}$  (body temperature)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

16.  $100^{\circ}\text{ F}$   $\underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

17.  $212^{\circ}\text{ F}$  (boiling point)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

18.  $0^{\circ}\text{ C}$  (freezing point)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

19.  $32^{\circ}\text{C}$   $\underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

20.  $70^{\circ}\text{ C}$   $\underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

21.  $98.6^{\circ}\text{ C}$   $\underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$

22.  $100^{\circ}\text{ C}$  (boiling point)  $\underline{\hspace{2cm}}\text{ }^{\circ}\text{F}$