

## Practice Sheet for Quiz Scientific Measurement

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Directions:** Use your need to know sheets for following definitions.1. **quantitative:** \_\_\_\_\_

\_\_\_\_\_

2. **qualitative:** \_\_\_\_\_

\_\_\_\_\_

3. **volume:** \_\_\_\_\_

\_\_\_\_\_

4. **weight:** \_\_\_\_\_

\_\_\_\_\_

5. **mass:** \_\_\_\_\_

\_\_\_\_\_

6. **density:** \_\_\_\_\_

\_\_\_\_\_

7. Below is a number written in scientific notation. Label the **coefficient** and the **exponent**.

$$3.5 \times 10^{-6}$$

8. Give one example of a **quantitative** measurement. \_\_\_\_\_9. Give one example of a **qualitative** measurement. \_\_\_\_\_10. Convert to **scientific** notation:

a) 5009.8

b) 14,050,000.

c) 0.000 89

d) 0.000 000 793

11. Convert to **standard** notation (normal numbers)a.  $3.508 \times 10^3$ b.  $2.9 \times 10^{-4}$

12. Put the following metric units in order from **biggest to smallest**.

millimeters

meters

kilometers

centimeters

decimeter

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13. The unit **meter** is used to measure \_\_\_\_\_.

14. The unit **gram** is used to measure \_\_\_\_\_.

15. The unit **liter** is used to measure \_\_\_\_\_.

16. a) What is the difference between mass and weight? b) What would happen to your weight and to your mass if you would travel to the moon?

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17. What is the formula for density?

18. What is the biggest advantage of the metric system? (*Hint, think of why so many countries use it*)

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19. Why would it be good for us to use the metric system every day?

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20. How many meters are the following:

a) 1000 mm \_\_\_\_\_      b) 100 cm \_\_\_\_\_      c) 1 km \_\_\_\_\_

21. 1L = \_\_\_\_\_ mL = \_\_\_\_\_ cm<sup>3</sup>

22. A cube of a metal has a volume of 78 cm<sup>3</sup> and a mass of 780 g. Calculate its density, include formula, how you set up the problem and the units.