Name _____   Period_____

Unit Conversions Worksheet 1

Use **unit analysis** to solve the following problems. Conversion factors can be found on your conversion factors handout. *Express your answers in scientific notation when necessary.*

1. Convert 83 cm into meters.

7. Convert 2.0 miles to inches.

2. Convert 459 L into milliliters.

8. Convert $25 to dimes.

3. Convert 2.5 mm to micrometers.

9. Convert 10 weeks into minutes.

4. Convert 12 yards to feet.

10. Convert 0.00378 kg into grams.

5. Convert 10 hours to seconds.

11. Convert 12.1 mm into centimeters.

6. Convert 15 quarts to pints.

12. Convert 6.8 gallons into milliliters.

13. A chemical costs $5.25 per pound. What would be the cost of 10.0 kg of the chemical?

14. Arrange the following from shortest to longest:
    a. a 1.21 m chain
    b. a 75 inch rope
    c. a 3 ft-5 in rattlesnake
    d. a yardstick

15. Write down your height (in feet and inches): _____

    a. Determine your height in inches.

    b. Determine your height in centimeters.

    c. Determine your height in yards.

    d. Determine your height in miles (write your answer in scientific notation).

Answers: **1)** 0.83 m   **2)** 459,000 mL or 4.59 x 10^5 mL   **3)** 2500 µm or 2.5 x 10^3 µm   **4)** 36 ft   **5)** 36,000 sec or 3.6 x 10^4 sec   **6)** 30 pints   **7)** 1.3 x 10^5 inches   **8)** 250 dimes   **9)** 100,800 min or 1.008 x 10^5 min   **10)** 3.78 g   **11)** 1.21 cm   **12)** 2.6 x 10^4 mL   **13)** $115.50   **14)** d < c < a < b   **15)** will vary