Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class period: \_\_\_\_

**Unit 2: Dimensional Analysis**

**Test Review Answer Key**

**Directions:** Show all work (known and unknown, and **dimensional analysis method**). Round correct answers to correct number of significant figures.

1. Convert 10 Mm to cm.
2. A bucket of water contains 5.45 L of water. How many mL of water is this?
3. A scientist measures out precisely 1.45 mg of a chemical. How many μg is this equal to?
4. How many weeks are equal to 2.94 x 106 minutes?
5. How many feet are equal to 25.51 dm?
6. The highest mountain in North America is Mt. McKinley at 3.848 miles high. How many kilometers is this?
7. How many tons are equal to 6.87 x 109 mg? (1 oz = 28.34 g, 1 ton = 2000 lb)
8. A car has a gasoline tank with a capacity of 18.0 gallons. How many liters is this equal to? (1 L = 2.1134 pints, 1 gallon = 4 quarts, 1 quart = 2 pints)
9. How many years are equal to 1,345,000 seconds?
10. A leaky roof drips at the rate of 0.48 L/hr when it rains. What is this rate in mL/min? **\*TRY IT!\***