Name: _____   Period: ____   Date: _____

Work the following problems using dimensional analysis/factor label method. You absolutely must show your work! Feel free to express your answers in scientific notation. You will need to!

1. You're going 44 meters/second. How fast are you going in miles/hour?

2. How many liters are there in a bottle that holds 128 ounces of milk?

3. How many seconds are in one year?

4. If there are approximately 6 trillion (6 x10^{12}) miles in one light year, how far away is a star that is 430 light years? Express your answer in kilometers.

5. The Earth (here in La Cañada) rotates at a rate of about 1,000 miles/hour. How fast is this in micrometers/second?