#### <u>Double Unit</u> <u>Dimensional Analysis</u>

SOLVE ALL NEATLY ON THE BINDER PAPER USING DIMENSIONAL ANALYSIS! Some starting values are in italics as a hint.

- 1) How many kilometers per hour are equivalent to 1.45 x 10<sup>7</sup> millimeters per minute?
- 2) How many inches per day are equivalent to 45.7 *feet per second*?
- 3) If you work *40 hours per week*, and make \$15 per hour, how many dollars per year do you earn?
- 4) Light travels at a speed of 186,000 miles per second. How many km per hour does it travel?
- 5) A car travels 42.00 miles on a gallon of gasoline. How many kilometers per liter is this?
- 6) There are  $6.02 \times 10^{23}$  atoms of *carbon per 12 grams*. How many atoms of carbon per pound are there?
- 7) Bathtubs can drain 6 gallons per minute. How fast do they drain in ounces per second?
- 8) Create your own double unit dimensional analysis problem. Start with a value that has two units and end with a value that has two different units. It cannot be the same as one of these worksheet problems with different numbers be unique and creative. We will do something with this problem in class so you are going to want to make a good one!

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