

Name \_\_\_\_\_  
Physics \_\_\_\_\_  
Period \_\_\_\_\_



Date \_\_\_\_\_  
Measure & Math WS #2H  
Mrs. Nadworny

## Scientific Notation & Dimensional Analysis

**Directions:** Read online textbook pages 10 – 14 & 22 – 25 and solve the following problems using correct scientific notation and dimensional analysis.

1. Convert the following values in proper scientific notation.

a. 93,000 m

b. 0.000015 s

c.  $29 \times 10^3$  m/s

To get full credit on this assignment, you must show all of your work using the method learned in class. Simply putting an answer will earn NO credit.

2. Using dimensional analysis, convert 45 miles/hour into meters/second.

3. Using dimensional analysis, convert 158.6 megabytes into centibytes.

4. Using dimensional analysis, convert 185.6 centimeters into yards.

Answers in size order:  $1.5 \times 10^{-5}$ , 2.030 or 2.042, 20.,  $2.9 \times 10^4$ ,  $9.3 \times 10^4$ ,  $1.586 \times 10^{10}$