

CHEMISTRY  
WORKSHEET 1b.

Name: \_\_\_\_\_

**== PLEASE BRING THESE TO THE NEXT CLASS IF WE DON'T FINISH ==**

**1.\_ Round off each number as specified. Express answers in standard scientific notation:**

- a. 0.00034187 to 3 sig. figs
- b.  $105.729 \times 10^2$  to 4 sig. figs
- c. 18.9915 to 5 sig. figs
- d.  $4.375 \times 10^8$  to 3 sig. figs
- e.  $3.59213 \times 10^{-4}$  to 2 sig. figs
- f. 0.0037025 to 3 sig. figs

**2.\_ Perform the following calculations. Express each answer in scientific notation to the correct number of significant digits. The \* symbol stands for multiplication.**

- a.  $1.04 * 10^2 \times 6.02 * 10^{23}$
- b.  $(0.102 * 273 * 0.00327) / 3.04$
- c.  $3.0 * 10^8 \times 5.072 * 10^2 \times 8.37285 * 10^{-4}$

**3.\_ Perform each of these conversions:**

- a. 8.45 cm into millimeters
- b.  $3.91 * 10^3$  cm into meters
- c. 474.6 nm into centimeters
- d.  $1.720 * 10^4$  ml into L
- e.  $3.205 * 10^{-4}$  w into milliwatts
- f.  $5.7 * 10^7$   $\mu$ g into grams