Name: _____

Unit 2 Review

Perform the following conversions:

5.3 mm to cm _____

17 cm to mm _____

5001 g to kg _____

0.010 kg to g _____

125 cm to km _____

0.0003 km to mm _____

828 cs to ms _____

4 cg to g _____

503 s to ms _____

1 mL to L _____

Indicate the number of significant figures in each of the following:

12 _____

1098 _____

2001 _____

2.001 _____

0.0000101 _____

1.01 _____

1000 _____

22.0403 _____

525.00000 _____

0.0900 _____

Perform the following calculations, answering with the proper number of significant figures

$\frac{2.00}{3.00}$ = _____

55.0001 + 0.0002 + 0.104 = _____

(0.14)(6.022) = _____

52.331 + 26.01 – 0.9981 = _____

$\frac{(4.031)(0.08206)(373.1)}{0.995}$ = _____

$\frac{0.15}{28.062}$ = _____

$\frac{0.500}{44.02}$ = _____

(0.0043)(0.0821)(298) = _____

Nickels are composed of an alloy containing both copper and nickel. A student finds that the mass of a nickel is 4.89 g. She then determines the mass of the copper in the coin to be 3.66 g and the mass of the nickel in the coin to be 1.23 g. Determine the percent composition of EACH metal in the nickel.

If the accepted mass of copper in a nickel is 3.75 grams, what is the % error from the experiment above?