Significant Figures (Sig.Fig.) and Dimensional Analysis (DA) Worksheet
From Bauck, ChemFiesta.com and ScienceSpot.net

SIG.FIGS.
PART 1: How many significant figures are in each of the following numbers?

1) 5.40
2) 210
3) 801.5
4) 1000
5) 101.0100
6) -311
7) 50.0
8) 1.2×10^{3}
9) 0.00120
10) 0.0102
11) 9.010×10^{-6}
12) 2370.0
13) 50
14) 606

PART 2: Calculate the answer to the correct number of sig.figs., using the rules.

15) 13.9 + 98.08?
16) 2.0987 x 2345
17) $2.897 \times 10^{3} + 2.09 \times 10^{4}$
18) 12.09 / 12.8
19) 12.039 / 34.9
20) 12.098 + 13.09
21) 12.98 - 6.098
22) $(2.5 \times 10^{23}) \times (2.45 \times 10^{25})$
23) 13.9 - 13.70
24) 13.98 x 24.09

PART 3: Short answers

25) Why are significant figures important when taking data in the laboratory?
26) Why are significant figures *not* important when solving problems in your math class?
27) Using two different instruments, I measured the length of my foot to be 27 centimeters and 27.00 centimeters. Explain the difference between these two measurements.

DIMENSIONAL ANALYSIS on the other side →