Chem Skills Worksheet #3: Significant Figures

Determine the number of significant figures

1) 0.93 _____

2) 340 _____

3) 0.097 _____

4) 39.5 _____

5) 0.09305 _____

6) 38.05 _____

7) 0.00760 _____

8) 1.008 _____

9) 10001 _____

10) 15.96 _____

11) 10100 _____

12) 1.95×10^{-8} _____

13) 89050. _____

14) 3.9×10^3 _____

Round the following atomic masses to 3 significant figures

1) Al 26.98514 _____

2) C 12.011 _____

3) H 1.0079 _____

4) Hg 200.59 _____

5) U 238.029 _____

6) Au 196.9665 _____

Add or Subtract the following measured numbers

1) 7.623 + 85.0 + 9.815 _____

2) 230.72 + 0.00861 + 9.7250 _____

3) 10.96 – 5.5

4) 10.96 – 5.555 _____

5) 9.0731 + 0.00078 _____

6) 23.6 – 16.1218

Multiple or Divide the following measured numbers

1) 2.695 x 33.20 x 1.5611 _____

2) 8.032/0.591 _____

3) (72.21 x 6.42) + 7.050 _____

4) $(3.2 \times 10^3)(4.21 \times 10^2)$ $\div 6.28 \times 10^{-8}$ _____

5) $(2.500 \times 10^6)(3.92 \times 10^{-3})$ _____

6) (6000260 x 0.005201) $\div 5.206$ _____

Solve (answer in correct # of sig figs with proper units)

1) Density equals mass divided by volume. Calculate the density of a chunk of iron that occupies 14.3 mL and has a mass of 112.398 grams _____

Name _____   Date _____   Period _____

2) The solubility of sodium chloride in water at 0^0C is 35.7g per
    100mL. How much will dissolve in 1500 mL?

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