**Quiz 1 Chemical Principles I Chem 1984 Fall 2013**

**Basic Review problems \_\_\_\_\_/30**

**Your name: \_\_\_\_\_\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 pt)**

1. How many significant figures in the numbers listed below ? (6 pts)
2. 0.0010 \_\_\_2\_\_\_
3. 1.0010 \_\_\_5\_\_\_
4. 100 \_\_1\_\_\_\_
5. 2 \*104 \_\_\_1\_\_\_
6. 300. \_\_3\_\_\_\_
7. 15.00 \_\_4\_\_\_\_
8. Round off the numbers below to the indicated significant digits. (6 pts)
9. 0.001233 to 2 sig figs \_\_\_\_\_0.0012\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. 5656 to 1 sig fig \_\_\_\_\_\_\_\_6000\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. 9.1915\*10-3 to 3 sig figs \_\_\_\_\_\_\_9.19\*10-3\_\_\_\_\_\_\_\_\_\_\_
12. 6299 to 1 sig fig \_\_\_\_\_\_\_\_\_\_\_\_\_\_6000\_\_\_\_\_\_\_\_\_\_\_\_\_
13. 103.351 to 4 sig figs \_\_\_\_\_\_\_\_\_\_103.4\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. 1.0 to 1 sig fig \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. Evaluate each expression below to the correct significant figure count:

(3 pts each, 12 pts total)

1. 1 + 0.10 + 0.011 = \_\_\_\_\_1\_\_\_\_\_\_\_\_\_\_
2. 2.1381-0.1 = \_\_\_\_\_2.0\_\_\_\_\_\_\_\_\_\_
3. 6.0 + 0.0100 = \_\_\_\_\_3\_\_\_\_\_\_\_\_\_\_

3 5.0000

1. (3.00\*1.0) = \_\_\_\_\_2.0\_\_\_\_\_\_\_\_

(1.5-0.001)

**4**.) Given 1 m =1.094 yd; 12 inches = 1 ft; 1 yd=3 ft

Convert 6 inches into meters to 3 sig figs using just the data above.

(5 pts)

6 in \* 1 ft \* 1 yd \* 1 m = 0.152 m

12 in 3 ft 1.094 yd