Chapter 1 Review

Name: _____

Part 1: Convert the following values to the desired units. Show work.

1) 0.23 km = _____ mm

2) 4600 pg = _____ μg

3) 240 lb = _____ kg

4) 120,000 cm^3 = _____ hL

5) 19.0 gal = _____ L

6) 50.0 dm = _____ in

7) 0.0056 gal = _____ μL

8) 71.2 lb = _____ hg

9) 190000 ms = _____ hours

10) 23.7 yd = _____ cm

11) 19 mi/hr = _____ m/s

12) 980 in^2 = _____ m^2

13) 2300000 cm^3 = _____ mi^3

14) 192 kg/L = _____ g/mL

Part 2: In the following density situations, calculate the missing value:

1) mass = 46 g, volume = 7.5 mL

2) volume = 10.6 cm^3, mass = 0.86 kg

3) density = 25 kg/L, volume = 30 mL

4) mass = 23.8 g, density = 2.71 g/cm^3

Part 3: For each number, tell how many sig figs and convert to the other notation

Regular notation	Sig Figs	Scientific Notation
		4.9209×10^{-8}
90.10		
7000000000		
		7.9100×10^{-5}
		1.157×10^{0}
23.540		
		1.9×10^{8}
560.		

Part 4: Express the answer to each problem in the proper number of significant figures. Then express the answer in scientific notation.

1) 468 + 1203.89 = _____ Scientific Notation: _____

2) 19.67 x 232 = _____ Scientific Notation: _____

3) 6.9 / 1102 = _____ Scientific Notation: _____

4) 1123.54 - 151.9 = _____ Scientific Notation: _____

5) 122.09 x 64 = _____ Scientific Notation: _____

Part 5: Graph the following data and determine the slope of the data:

Mass (g)	Volume (mL)
41.58	15.4
258.12	95.6
46.71	17.3
117.99	43.7
167.67	62.1
143.64	53.2
210.87	78.1