Section 1A 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 = _____ mL

8) 71.2 lb = _____ hg

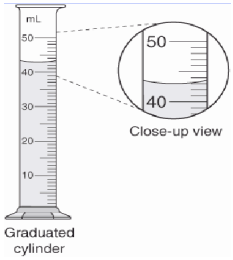
9) 190000 μs = _____hours

10) 23.7 yd = _____ cm

Part 2: Answer the following questions:

1) What is the purpose of a sand filter as a separation technique?

2) Use the following pictures to measure the amounts. Express answers as accurately as possible.



3) Describe a situation in which the following pieces of safety equipment are used:

a) fire extinguisher

b) fire blanket

c) safety shower

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.		
0.0001045		
		3.56020×10^{4}

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 • 232 = _____ Scientific Notation: _____

3) 6.9 / 1102 = _____ Scientific Notation: _____

4) 1123.54 - 151.9 = _____ Scientific Notation: _____

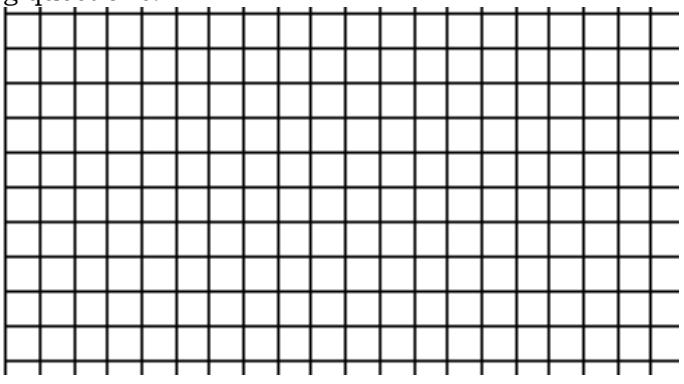
5) 122.09 • 64 = _____ Scientific Notation: _____

6) 137.67 + 1904.5 = _____ Scientific Notation: _____

7) 1204 / 2.0 = _____ Scientific Notation: _____

Part 5: Use the data listed below to answer the following questions.

Group Number	% Water Recovered
1	23.2
2	91.4
3	65.9
4	71.1
5	32.2
6	85.6
7	88.9
8	81.0
9	63.7
10	69.5
11	78.6



1) Construct a histogram for the data collected.

2) Determine the mean, median and range of the data compiled.