## Unit 0 Quiz Review

Name: $\qquad$
1a) Define quantitative data:
b) Describe your kitchen in a quantitative way:

2a) Define qualitative observation:
b) Describe your kitchen in a qualitative way:
3) Measuring

Mass Volume Length Substance
A. A meter measures? $\qquad$
B. A gram measures? $\qquad$
C. What does a mole measure? $\qquad$
D. What does a liter measure? $\qquad$
4) How do you convert?
A. $C m$ to $m:$ $\qquad$
B. $M m$ to cm $\qquad$
C. Decimeters to meters: $\qquad$
D. liters to microliters: $\qquad$
E. Grams to mega grams: $\qquad$
F. Kg to grams: $\qquad$
G. Meters to decimeters: $\qquad$
5) Convert the following:
a) $160 \mathrm{cg}=$ $\qquad$ kg
c) $0.00054 \mathrm{hs}=$ $\qquad$ ds
b) $0.0078 \mathrm{~m}=$ $\qquad$ $\mu m$
d) $19000 \mathrm{~mL}=$ $\qquad$

A

B

c

D
6) Which picture is:
a. Accurate and not precise $\qquad$
b. Precise but not accurate $\qquad$
c. Neither accurate nor precise $\qquad$
d. Both accurate and precise $\qquad$
7) What is density?

8a) What is the density of a substance that has a mass of 33.4 grams and a volume of $5 \mathrm{~cm}^{3}$ ? Remember to include units!
b) A substance has a density of $6.1 \mathrm{~g} / \mathrm{mL}$ and a volume of 3.4 mL . What is the mass of the substance? Include units!
c) A student performs an experiment with three unknown fluids and obtains the following measurements:

Fluid $A: m=315 \mathrm{~g} \quad \mathrm{~V}=200 \mathrm{~mL}$
Fluid B: $\mathrm{m}=268 \mathrm{~g}, \mathrm{~V}=112.5 \mathrm{~mL}$
Fluid $C: m=147.5 \mathrm{~g}, \mathrm{~V}=375 \mathrm{~mL}$
Least Dense: $\qquad$
Dense:
Most Dense: $\qquad$
d) Fluids $A-C$ in the above question are mixed and allowed to settle out. Which one will float on top, which will be in the middle, and which will sink to the bottom?

