GRADE 8 CHEMISTRY

QUARTER THREE WORKSHEET 3 OF 2012 E.C

PLEASE ATTEMPT THE FOLLOWING QUESTIONS AFTER READING YOUR TEXT BOOK FROM PAGE 122-126

I. GIVE SHORT ANSWER TO EACH OF THE FOLLOWING QUESTIONS.

1. What is chemical formula?
2. What formation does a chemical formula of a compound provide?
3. Explain what information each of the following formulas of compounds can provide.
   A. $C_6H_{12}O_6$
   B. $CaCO_3$
   C. H_2O
   D. NH_3
4. Identify the following as a chemical formula of an element or a chemical formula of a compound.
   A. NH_3
   B. $Cu(NO_3)_2$
   C. HCl
   D. O_3
   E. S_8
   F. K_2SO_4
   G. N_2O
   H. P_4
   I. P_4O_6
5. What is the difference between molecular mass and formula mass?
6. Write the “4” steps to calculate molecular mass or formula mass.
7. Three isotopes of Argon exist in nature. Argon-36, Argon-38, Argon-40 with masses of 36 a.m.u, 38 a.m.u and 40 a.m.u and percent abundance of 0.337%, 0.063% and 96.6% respectively. What is the average atomic mass of Argon?

8. Two naturally occurring isotopes of chlorine have masses of 35 a.m.u and 37 a.m.u. If the average atomic masses of chlorine is 35.5 a.m.u, what would be the percent abundance of each isotope of the lement?

9. Calculate the molecular mass of each of the following compounds.
   A. $C_2H_2O_4$
   B. H_2SO_4
   C. $C_6H_{12}O_6$
   D. H_2CO_3
   E. NH_3
   F. N_2O_4
   G. S_8
   H. HNO_3
   I. P_4
10. Calculate the formula mass of each of the following compounds. (At. Mass Ba=137, N=14, O=16, Mg=24, H=1, Ca=20, P=31, K=39, Na=23, S=32, Ca=40, Br=80)
   A. $Ba(NO_3)_2$
   B. $Mg(HCO_3)_2$
   C. $Ca_3(PO_4)_2$
   D. KNO_3
   E. Na_2SO_4
   F. NH_4NO_3
   G. $MgBr_2$
   H. $CaCO_3$
   I. KBr