**Atomic Mass and Molecular Mass Practice Answers**

1.a) one atom of iron b) one formula unit of copper (II) chloride

c) 2 calcium atoms d) 4 formula units of iron (III) sulfate

2.a) 1b) 2 c) 8 d) 4 e) 8 f) 10

3. Ca3Mg5(Si4O11)2(OH)2.**Ca – 3; Mg – 5; Si – 8; O – 24; H – 2**

4.a) Na – 3; P – 1; O – 4; b) Ca – 1; H – 4; P – 2; O – 8; c) C – 4; H – 10;

d) Fe – 3; As – 2; O – 8; e) Cu – 1; N – 2; O – 6; f) Mg – 1; S – 1; O – 11; H – 14;

5.a) M**H3PO4**=3(1.008u)+30.974u + 4(15.999u)= **97.994u**

b) M**HClO4=**1.008u + 35.453u + 4(15.999u) = **100.457u**

6.a) M**SO2=**32.065u + 2(15.999u) = **64.063u**

b)M**P4O10=**4(30.974u) + 10(15.999u) = **283.886u**

c) M**UF6=**238.029u + 6(18.998u) = **352.017u**

d) M**NH3=**14.007u + 3(1.008u) = **17.031u**

e) M**CCl4=**12.011u + 4(35.453u) = **153.823u**

7.a) M**CH4=**12.011u + 4(1.008u) = **16.043u**

b) M**KClO4=**39.098u + 35.453u + 4(15.999u) = **138.547u**

c) M**PCl3=**30.974u + 3(35.453u) = **137.333u**

d)M**H2SO4**=2(1.008u) + 32.065u + 4(15.999u) = **98.077u**

e) M**SiO2=**28.086u + 2(15.999u = **60.084u**

f)M**NO2=**14.007u + 2(15.999u) = **46.005u**

g) M**N2O5=**2(14.007u) + 5(15.999u) = **108.009u**

h) M**C6H12O6**=6(12.011u) + 12(1.008u) + 6(15.999u) = **180.156u**

8.a) M**NaHCO3=**22.990u + 1.008u + 12.011u + 3(15.999u) =**84.006u**

b) M**N2O=**2(14.007u) + 15.999u = **44.013u**

c) M**KMnO4=**39.098u + 54.938u +4(15.999u) = **158.032u**

d) M**CaCO3=**40.078u + 12.011u + 3(15.999u) = **100.086u**

e) M**MgSO4•7H2O=**24.305u + 32.065u +4(15.999u) + 14(1.008u) + 7(15.999u) = **246.471u**

f) M**O3**=3(15.999u) = **47.997u**