

7. Determine the molecular mass of these compounds:

a) **CH₄** 12.011u + (4x1.008u) = **16.043u**

b) **KClO₄** 39.098u + 35.453u + (4x15.999u) = **138.547u**

c) **PCl₃** 30.974u + (3x35.453u) = **137.333u**

d) **H₂SO₄** (2x1.008u) + 32.065u + (4x15.999u) = **98.077u**

e) **SiO₂** 28.086u + (2x15.999u) = **60.084u**

f) **NO₂** 14.007u + (2x15.999u) = **46.005u**

g) **N₂O₅** (2x14.007u) + (5x15.999u) = **108.009u**

h) **C₆H₁₂O₆** (6x12.011u) + (12x1.008u) + (6x15.999u) = **180.156u**

8. What is the molecular mass of each of these common chemicals compounds?

a) **NaHCO₃** 22.990u + 1.008u + 12.011u + (3x15.999u) = **84.009u**

b) **N₂O** (2x14.007u) + 15.999u = **44.014u**

c) **KMnO₄** 39.098u + 54.938u + (4x15.999u) = **158.036u**

d) **CaCO₃** 40.078u + 12.011u + (3x15.999u) = **100.089u**

e) **MgSO₄•7H₂O** 24.305u + 32.065u + (4x15.999u) +
(14x1.008u) + (7x15.999u) = **246.482u**

f) **O₃** 3 x 15.999u = **48.000u**