Calculating Molecular and Formula Mass

1. Calculate the molecular mass of each of the following compounds:

   (a) C_2H_5OH

   $2(12.01) + 5(1.01) + 1(16.00) + 1(1.01) = 46.08\ u$

   (b) $C_{12}H_{22}O_{11}$

   $12(12.01) + 22(1.01) + 11(16) = 342\ u$

   (c) HCN

   $1(1.01) + 1(12.01) + 1(14.01) = 27.03\ u$

   (d) CCl_4

   $1(12.01) + 4(35.45) = 154\ u$

   (e) H_2O

   $2(1.01) + 1(16) = 18.02\ u$

2. Calculate the formula mass for each of the following compounds:

   (a) $NaOH$

   $1(22.99) + 1(16) + 1(1.01) = 40\ u$

   (b) $CaCl_2$

   $1(40.08) + 2(35.45) = 111\ u$

   (c) $KC_2H_3O_2$

   $1(39.10) + 2(12.01) + 3(1.01) + 2(16) = 98.15\ u$

   (d) $Sr(NO_3)_2$

   $1(87.62) + 2[1(14.01) + 3(16)] = 211.64\ u$

   (e) $(NH_4)_3PO_4$

   $3[1(14.01) + 4(1.01)] + 30.97 + 4(16) = 149.12\ u$