

1. What is the formula weight of potassium chlorate,  $\text{KClO}_3$ ? *B3a*
2. Determine the formula weight of acetic acid,  $\text{HC}_2\text{H}_3\text{O}_2$ . *B3a*
3. Sucrose (cane sugar) has the formula  $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ . Determine its formula weight. *B3a*
4. Determine the formula weight of glycerol,  $\text{C}_3\text{H}_8\text{O}_3$ . *B3a*
5. Potassium dichromate has the formula  $\text{K}_2\text{Cr}_2\text{O}_7$ . Determine its formula weight.
6. Crystalline magnesium sulfate (Epsom salts) has the formula  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ . What is its formula weight? *B3a*
7. Determine the formula weight of each of the following compounds: (a)  $\text{K}_2\text{CO}_3$ ; (b)  $\text{N}_2\text{H}_4$ ; (c)  $\text{HgO}$ ; (d)  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ; (e)  $\text{H}_2\text{SO}_4$ ; (f)  $\text{MgBr}_2$ ; (g)  $\text{Al}_2\text{S}_3$ ; (h)  $\text{Ca}(\text{NO}_3)_2$ ; (i)  $\text{Fe}_2(\text{Cr}_2\text{O}_7)_3$ ; (j)  $\text{KMnO}_4$ . *B3a*
8. Baking powders contain sodium hydrogen carbonate,  $\text{NaHCO}_3$ . Calculate its percentage composition. *B3b*
9. What is the percentage composition of a soap having the formula  $\text{C}_{17}\text{H}_{35}\text{COONa}$ ? *B3b*
10. Vinegar contains acetic acid,  $\text{HC}_2\text{H}_3\text{O}_2$ . Find its percentage composition. *B3b*