

Rules for Writing Ionic and Net Ionic Equations

1. Write all molecular compounds in molecular form.
Examples: $\text{C}_{11}\text{H}_{22}\text{O}_{11}(aq)$ $\text{H}_2\text{O}(l)$ $\text{CO}_2(g)$
2. Write all weak electrolytes in molecular form.
Examples: $\text{CH}_3\text{CO}_2\text{H}(aq)$ **Not** $\text{H}^+(aq) + \text{CH}_3\text{CO}_2^-(aq)$
 $\text{NH}_3(aq)$ **Not** $\text{NH}_4^+(aq) + \text{OH}^-(aq)$
3. Write soluble strong electrolytes as ions and insoluble strong electrolytes as combined solids (i.e., "molecular" form).
Examples: $\text{NaCl}(aq) = \text{Na}^+(aq) + \text{Cl}^-(aq)$
 $\text{AgCl}(s) = \text{AgCl}(s)$