

Solutions

Each answer shows the steps, then the **result**.

2.1

- $\text{Na}^+(aq) + \text{Cl}^-(aq)$ (separate ions)

2.2

- A spectator ion

2.3

- Solids, gases, molecular substances (and weak electrolytes)

3.1 B

- unchanged on both sides

3.2

(a)

- K^+ and NO_3^-

(b)

- $\text{Pb}^{2+}(aq) + 2\text{I}^-(aq) \rightarrow \text{PbI}_2(s)$

3.3

- Complete ionic cancels Na^+ and Cl^- ; net ionic: $\text{H}^+(aq) + \text{OH}^-(aq) \rightarrow \text{H}_2\text{O}(l)$