

**CHE 111 - Extra Practice - Ch 7c**  
**Ionic and Net Ionic Reactions**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Strong Electrolyte</b>	<b>Weak Electrolyte</b>	<b>Nonelectrolyte</b>
Dissociate 100% →	Dissociate < 10% ⇌	Do not dissociate
Strong Acids Strong Bases Ionic - Soluble (aq) Written as Ions	Weak Acids Weak Bases  Written as Molecules	Molecular Compounds Ionic - Insoluble (s)  Written as Molecules

1. Classify each of the following compounds as either a (S)trong electrolyte, (W)eak electrolyte or (N)onelectrolyte.

1(a) HF 1(a) WE

1(b) NaOH 1(b) SE

1(c) BaCl<sub>2</sub> 1(c) SE

1(d) H<sub>2</sub>SO<sub>4</sub> 1(d) SE

1(e) BaCO<sub>3</sub> 1(e) NE

1(f) CaSO<sub>4</sub> 1(f) NE

1(g) Zn(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>2</sub> 1(g) SE

1(h) PbCl<sub>2</sub> 1(h) NE

1(i) CH<sub>3</sub>CH<sub>2</sub>OH 1(i) NE

1(j) Al<sub>2</sub>O<sub>3</sub> 1(j) NE

1(k) KOH 1(k) SE

1(l) KNO<sub>3</sub> 1(l) SE

1(m) AgCl 1(m) NE

1(n) C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> 1(n) NE

(a) WE (b) SE (c) SE (d) SE (e) NE (f) NE (g) SE (h) NE (i) NE (j) NE (k) SE (l) SE (m) NE (n)NE

**CHE 111 - Extra Practice - Ch 7c**  
**Ionic and Net Ionic Reactions**

**Molecular Equation:**

- Write everything as molecules or compounds.
- Include states.
- Balance the reaction.

**Total Ionic Equation:**

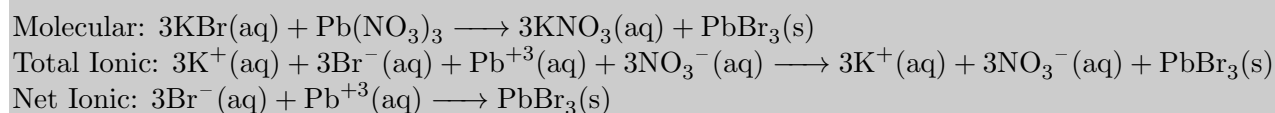
- Write SE as ions. Include charges and states.
- Write WE and Nonelectrolytes as molecules. Include states.

**Net Ionic Equation:**

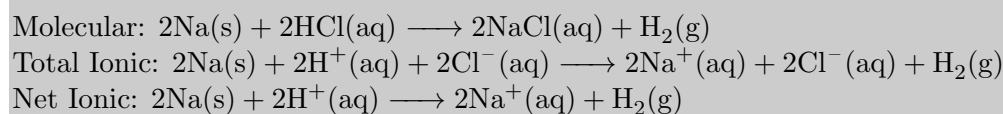
- Only include atoms, ions, and molecules that change states or charges.
- Do **not** include (cross out) spectator ions.
- Include states and balance the reaction.

On a separate sheet of paper write the Molecular, Ionic and Net Ionic equations for each of the following reactions.

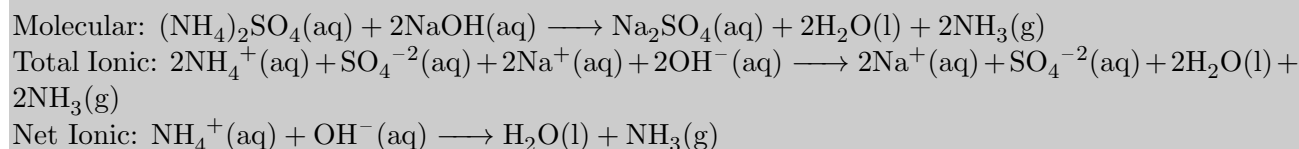
2. potassium bromide + lead (III) nitrate  $\longrightarrow$  potassium nitrate + lead (III) bromide



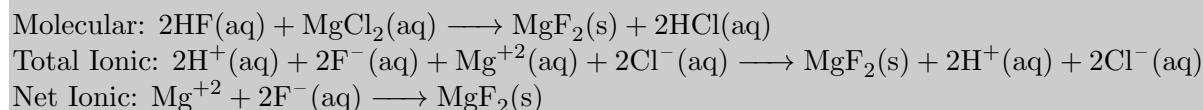
3. sodium metal + hydrochloric acid  $\longrightarrow$  sodium chloride + hydrogen



4. ammonium sulfate + sodium hydroxide  $\longrightarrow$  sodium sulfate + water + nitrogen trihydride



5. hydrofluoric acid + magnesium chloride  $\longrightarrow$  magnesium fluoride + hydrochloric acid



6. aluminium nitrate + sodium hydroxide  $\longrightarrow$  aluminium hydroxide + sodium nitrate

