Reactions: Acid Reactions and Net Ionic Equations

Name: _____

1. Complete each of the following reactions and write full ionic as well as net ionic equations. (If you don't know the names of the compounds name them too!)

 $CaCO_{3(s)} + HCl_{(aq)} \rightarrow$

 $NaSO_{3(s)} + CH_3COOH_{(aq)} \rightarrow$

 $Rb_2O_{(s)} \ + \ H_2SO_4_{(aq)} \ \rightarrow \label{eq:rescaled}$

 $Cu(OH)_{2~(s)}~+~H_2SO_{4~(aq)}~\rightarrow$

 $K_2O_{(s)} \ + \ CH_3COOH_{(aq)} \ \rightarrow \label{eq:K2O}$

NaHCO_{3 (s)} + CH₃COOH (aq) \rightarrow

 $NaHSO_{3\,(s)} + H_2SO_{4\,(aq)} \rightarrow$

 $MgS_{(s)} + H_2SO_4_{(aq)} \rightarrow$

NaOH $_{(aq)}$ + HCl $_{(aq)}$ \rightarrow

 $NaSO_{3(aq)} + H_2SO_{4(aq)} \rightarrow$

 $CaCO_{3 (aq)} + CH_{3}COOH_{(aq)} \rightarrow$

2. Write net ionic equations for the following reactions.a) Solutions of lithium carbonate and ethnoic acid are mixed.

b) Solutions of sodium sulfide and sulfuric acid are mixed.

- c) A spatula of potassium hydrogensulfite is dropped in hydrochloric acid in a beaker.
- d) A spatula of sodium oxide is added to ethanoic acid in a beaker.

e) A small amount of magnesium sulfide is added to hydrochloric acid in a beaker.

f) A small coil of iron is dropped into sulfuric acid in a beaker.

g) Copper(II) hydroxide is reacted is with hydrobromic acid.

h) A solution of iron (II) sulfite is added to ethanoic acid.

i) A solution of sodium hydrogen sulfite is added to sulfuric acid in a beaker.

j) A solution of potassium sulfide is mixed with ethanoic acid.

k) Sulfur dioxide is bubbled through water.