

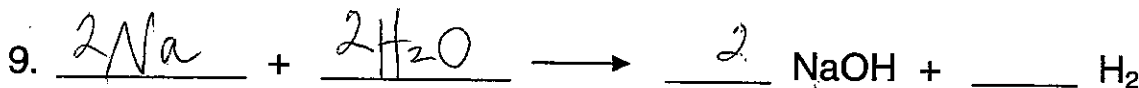
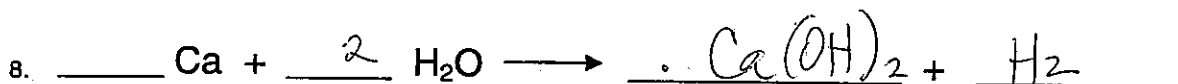
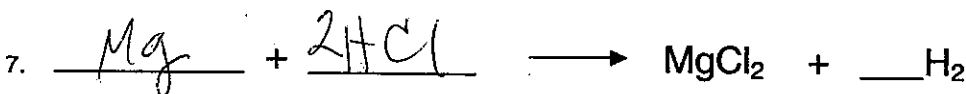
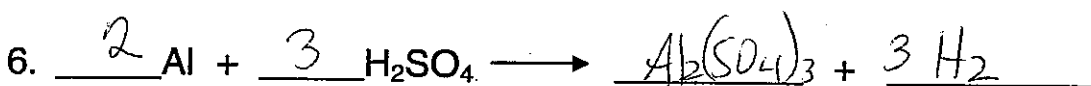
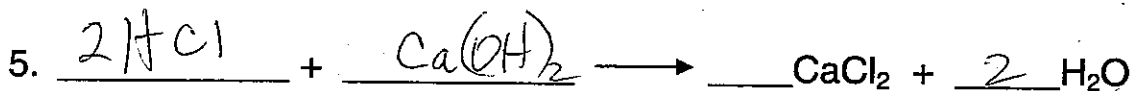
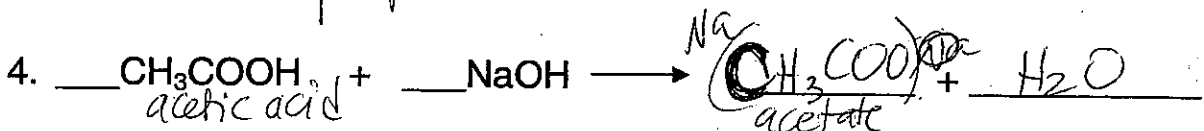
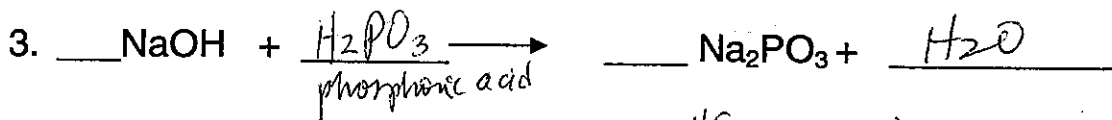
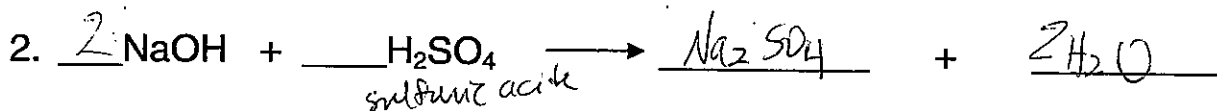
Polyatomic Ions and Writing Chemical Formulas (Criss-Cross Method)

Name: _____

Write the formulas of the compounds produced from the listed ions.

	Cl^{-1}	CO_3^{-1}	OH^{-1}	SO_4^{-2}	PO_4^{-3}	NO_3^{-1}
Na^{+1}						
NH_4^{+1}						
K^{+1}						
Ca^{+2}						
Mg^{+2}						
Zn^{+2}						
Fe^{+3}						
Al^{+3}						
Co^{+3}						
Fe^{+2}						
H^{+1}						

Predictions for Acid Base Reactions



Acid + base = salt + water
 metal + acid = ^{metal} salt + gas
 alkali metal + water \rightarrow ^{metal hydroxide} base + gas

Name _____

Naming Ionic Compounds

REMEMBER THE 2 SIMPLE RULES:

- Write cation first, then the anion.
- The correct formula contains the fewest positive and negative ions needed to make the total electrical charge zero.

Cation	Anion	Formula	Name
Na^{+1}	HCO_3^{-1}		Sodium bicarbonate
K^{+1}	Cl^{-1}		Potassium chloride
Zn^{2+}	OH^{-1}		Zinc hydroxide
Fe^{3+}	O^{2-}		Iron(III) oxide
Cu^{+1}	O^{2-}		Copper(I) oxide
Ba^{2+}	F^{-1}		Barium fluoride
Pb^{2+}	NO_3^{-1}		Lead nitrate
NH_4^{+1}	CO_3^{2-}		Ammonium carbonate
Al^{3+}	PO_4^{3-}		Aluminum(III) phosphate
Mg^{2+}	O^{2-}		Magnesium oxide
Na^{+1}	CO_3^{2-}		Sodium carbonate
Ag^{+1}	PO_4^{3-}		Silver phosphate
Cd^{2+}	SO_4^{2-}		Cadmium sulfate
Fe^{2+}	PO_4^{3-}		Iron(II) phosphate
Cu^{2+}	NO_2^{-1}		Copper(II) nitrite
Na^{+1}	SO_3^{2-}		Sodium sulfite
Al^{3+}	SO_4^{2-}		Aluminum sulfate
Fe^{3+}	Cl^{-1}		Iron(III) chloride
Ba^{2+}	I^{-1}		Barium iodide

