Ionic Compounds

- most ionics are solids at room temperature

- high melting and boiling points

- soluble in water

- are conductive when dissolved in water

*** when naming ionics the rule is to simply write the name of the positive part (cation) followed by the negative part (anion).**

last part needs to end in: **ide**

some examples: **NaCl**

sodium chloride

$CaCl_2$

calcium chloride

NO PREFIXES !

Name these ionic compounds:

1. KI

2. MgO

3. $AlCl_3$

4. NaBr

5. Al_2O_3

Putting Ionics Together...Write the chemical formula.

lithium nitride

calcium oxide

barium fluoride

aluminum sulfide

*****Note*** make sure that you use whatever math you need to get the charges to cancel.**

Try the following...write the chemical formula.

1. sodium fluoride

2. zinc oxide

3. silver nitride

4. silver bromide

5. potassium iodide

6. magnesium nitride

7. zinc nitride

8. calcium hydride

Stock Ionics

- used for naming compounds (IONICS) involving metals which have been known to adopt different charges from time to time.

- Stock devised a smart method of determining which kind of metal is used.....

Roman Numerals

ex: combining Fe^{3+} and O^{2-}

Lets try combining the following and getting a formula for:

Cu^{+} and S^{2-} Hg^{2+} and O^{2-}

Ni^{2+} and F^{-} V^{5+} and O^{2-}

We can also size up the formula to come up with the name for these Stock Ionic Compounds as well:

CuS

HgO

UO_2

CuF