NAME_____
DATE_____PER_____

CHEMISTRY

NAMING AND WRITING CHEMICAL FORMULAE – I

1. When you have a chemical compound that contains a metal of known valence (Column 1 or 2, Al or Zn), you simply write down the name of the metal along with the combining form (-ide) of its nonmetal partner.

MgO _____

BaS _____

K_3P _____

Na_3N _____

BeF _____

2. The following elements can be classified into two groups, those that usually have a positive valence (ionic charge) and those that usually have a negative valence (ionic charge). Circle the positive ones!!!

Li N S Na Ba Cl K F Br S Sr Mg Cs Cu Zn O P I Rb W Sn Mn Ag

3. When you have a chemical compound that contains a metal of unknown valence, any metal to the left of the staircase, except those in columns 1 or 2 and Al or Zn, you must show the valence of the metal by using a Roman numeral as part of the compound's name.

$SnCl_4$ _____

Mn_2O_3 _____

PbS _____

Fe_2O_3 _____

$Co_3(PO_4)_2$ _____

4. When you have two nonmetals, elements found to the right of the staircase, that comprise a chemical compound, you need to use Greek prefixes to show the number of each kind of atom found in the compound. If there is only one of the first kind of atom, you usually don't write mono-.

PCl_3 _____

SiO_2 _____

P_2O_5 _____

CS_2 _____

CCl_4 _____

N_2O_5 _____

5. When you have a polyatomic ion as part of a chemical compound, you only need to write down its name because you already know its valence. It can only form compounds in the ratios dictated by the other elements in the compound.

NH_4Cl _____

$(NH_4)_2S$ _____

$Ca(OH)_2$ _____

$NaHCO_3$ _____

$Co_2(SO_4)_3$ _____

$(NH_4)_3PO_4$ _____

6. PRACTICE – PRACTICE – PRACTICE – ad nauseum!!

$NaCl$	_____	$CuCl_2$	_____
MgO	_____	$BaBr_2$	_____
$CuSO_4$	_____	$Fe_2(SO_4)_3$	_____
MoS_2	_____	$NaOH$	_____
$(NH_4)_2CO_3$	_____	$NaAl(OH)_4$	_____
KBr	_____	O_2	_____
$AgNO_3$	_____	$BaCO_3$	_____
Na_3PO_4	_____	SiO_2	_____
$SrSO_3$	_____	H_2SO_4	_____
HCl	_____	H_3PO_4	_____

zinc chloride	_____	copper (II) nitrate	_____
molybdenum (VI) oxide	_____	magnesium chlorate	_____
lead (II) nitrate	_____	phosphorus pentachloride	_____
chromium (II) chloride	_____	potassium dichromate	_____
sodium sulfate	_____	sodium nitrite	_____
water	_____	rubidium fluoride	_____
chromium (VI) oxide	_____	ammonium nitrate	_____
nickel (II) nitrite	_____	mercury (II) iodide	_____
copper (I) chlorite	_____	manganese (II) hypochlorite	_____
nitric acid	_____	carbonic acid	_____