Santa Clara High School
Chemistry

Type II Binary Ionic Compounds
Lesson 5.4, 5.5

Name _____
Per _____ Date _____

1. Add the proper charge for the ions in the first row.
2. Fill in the missing ion names and ionic symbols for transition metal ions.
3. Write the chemical formula for the combined pairs in the intersecting box. Example $PbCl_2$.

Metal Ion Name	Metal Ion Symbol	F^-	Cl^-	O^{2-}	Br^-	N^{3-}	S^{2-}	P^{3-}
Tin(II)	Sn^{2+}	SnF_2	$SnCl_2$	SnO	1 $SnBr_2$	Sn_3N_2	2 SnS	3 Sn_3P_2
Pb^{2+}	Pb^{2+}	4 PbF_2	$PbCl_2$	5 PbO	$PbBr_2$	6 Pb_3N_2	PbS	Pb_3P_2
Copper(I)	Cu^+	CuF	7 $CuCl$	Cu_2O	$CuBr$	8 Cu_3N	9 Cu_2S	Cu_3P
Iron(III)	Fe^{3+}	FeF_3	$FeCl_3$	10 Fe_2O_3	11 $FeBr_3$	FeN	Fe_2S_3	12 FeP
Lead(IV)	Pb^{4+}	13 PbF_4	$PbCl_4$	PbO_2	$PbBr_4$	14 Pb_3N_4	15 PbS_2	Pb_3P_4
Tin(IV)	Sn^{4+}	SnF_4	16 $SnCl_4$	SnO_2	$SnBr_4$	17 Sn_3N_4	18 SnS_2	Sn_3P_4
Iron(II)	Fe^{2+}	FeF_2	$FeCl_2$	19 FeO	20 $FeBr_2$	Fe_3N_2	FeS	21 Fe_3P_2
Cobalt(III)	Co^{3+}	22 CoF_3	$CoCl_3$	23 Co_2O_3	$CoBr_3$	CoN	Co_2S_3	24 CoP

1. Write the chemical formula from the other side of this page into the correctly numbered space provided.
2. Next to each formula write its chemical name.

Chemical Formula	Chemical Name
1. $SnBr_2$	tin(II) bromide
2. SnS	tin (II) sulfide
3. Sn_3P_2	tin (II) phosphide
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24.	

Just name the transition metal with it's charge as a roman numeral then add the non-metal w/ 'ide' suffix