Mr. MacGillivray
General Chemistry
Practice Problems: Writing Formulas for Binary Ionic Compounds

	a) Cl^-	b) S^{2-}	c) P^{3-}	d) F^-	e) O^{2-}	f) N^{3-}	g) Br^-	h) I^-
1) Na^+								
2) Ba^{2+}								
3) Al^{3+}								
4) Cu^+								
5) Cu^{2+}								
6) Fe^{2+}								
7) Fe^{3+}								
8) K^+								
9) Ca^{2+}								
10) Co^{2+}								
11) Pb^{4+}								
12) Sn^{2+}								
13) Hg^{2+}								
14) Zn^{2+}								

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	a) Cl^-	b) S^{2-}	c) P^{3-}	d) F^-	e) O^{2-}	f) N^{3-}	g) Br^-	h) I^-
1) Na^+	$NaCl$	Na_2S	Na_3P	NaF	Na_2O	Na_3N	$NaBr$	NaI
2) Ba^{2+}	$BaCl_2$	BaS	Ba_3P_2	BaF_2	BaO	Ba_3N_2	$BaBr_2$	BaI_2
3) Al^{3+}	$AlCl_3$	Al_2S_3	AlP	AlF_3	Al_2O_3	AlN	$AlBr_3$	AlI_3
4) Cu^+	$CuCl$	Cu_2S	Cu_3P	CuF	Cu_2O	Cu_3N	$CuBr$	CuI
5) Cu^{2+}	$CuCl_2$	CuS	Cu_3P_2	CuF_2	CuO	Cu_3N_2	$CuBr_2$	CuI_2
6) Fe^{2+}	$FeCl_2$	FeS	Fe_3P_2	FeF_2	FeO	Fe_3N_2	$FeBr_2$	FeI_2
7) Fe^{3+}	$FeCl_3$	Fe_2S_3	FeP	FeF_3	Fe_2O_3	FeN	$FeBr_3$	FeI_3
8) K^+	KCl	K_2S	K_3P	KF	K_2O	K_3N	KBr	KI
9) Ca^{2+}	$CaCl_2$	CaS	Ca_3P_2	CaF_2	CaO	Ca_3N_2	$CaBr_2$	CaI_2
10) Co^{2+}	$CoCl_2$	CoS	Co_3P_2	CoF_2	CoO	Co_3N_2	$CoBr_2$	CoI_2
11) Pb^{4+}	$PbCl_4$	PbS_2	Pb_3P_4	PbF_4	PbO_2	Pb_3N_4	$PbBr_4$	PbI_4
12) Sn^{2+}	$SnCl_2$	SnS	Sn_3P_2	SnF_2	SnO	Sn_3O_2	$SnBr_2$	SnI_2
13) Hg^{2+}	$HgCl_2$	HgS	Hg_3P_2	HgF_2	HgO	Hg_3N_2	$HgBr_2$	HgI_2
14) Zn^{2+}	$ZnCl_2$	ZnS	Zn_3P_2	ZnF_2	ZnO	Zn_3N_2	$ZnBr_2$	ZnI_2

1 a	sodium	chloride
1 b	sodium	sulfide
1 c	sodium	phosphide
1 d	sodium	fluoride
1 e	sodium	oxide
1 f	sodium	nitride
1 g	sodium	bromide
1 h	sodium	iodide

2 a	barium	chloride
2 b	barium	sulfide
2 c	barium	phosphide
2 d	barium	fluoride
2 e	barium	oxide
2 f	barium	nitride
2 g	barium	bromide
2 h	barium	iodide

3 a	aluminum	chloride
3 b	aluminum	sulfide
3 c	aluminum	phosphide
3 d	aluminum	fluoride
3 e	aluminum	oxide
3 f	aluminum	nitride
3 g	aluminum	bromide
3 h	aluminum	iodide

4 a	copper (I)	chloride
4 b	copper (I)	sulfide
4 c	copper (I)	phosphide
4 d	copper (I)	fluoride
4 e	copper (I)	oxide
4 f	copper (I)	nitride
4 g	copper (I)	bromide
4 h	copper (I)	iodide

5 a	copper (II)	chloride
5 b	copper (II)	sulfide
5 c	copper (II)	phosphide
5 d	copper (II)	fluoride
5 e	copper (II)	oxide
5 f	copper (II)	nitride
5 g	copper (II)	bromide
5 h	copper (II)	iodide

6 a	iron (II)	chloride
6 b	iron (II)	sulfide
6 c	iron (II)	phosphide
6 d	iron (II)	fluoride
6 e	iron (II)	oxide
6 f	iron (II)	nitride
6 g	iron (II)	bromide
6 h	iron (II)	iodide

7 a	iron (III)	chloride
7 b	iron (III)	sulfide
7 c	iron (III)	phosphide
7 d	iron (III)	fluoride
7 e	iron (III)	oxide
7 f	iron (III)	nitride
7 g	iron (III)	bromide
7 h	iron (III)	iodide

8 a	potassium	chloride
8 b	potassium	sulfide
8 c	potassium	phosphide
8 d	potassium	fluoride
8 e	potassium	oxide
8 f	potassium	nitride
8 g	potassium	bromide
8 h	potassium	iodide

9 a	calcium	chloride
9 b	calcium	sulfide
9 c	calcium	phosphide
9 d	calcium	fluoride
9 e	calcium	oxide
9 f	calcium	nitride
9 g	calcium	bromide
9 h	calcium	iodide

10 a	cobalt (II)	chloride
10 b	cobalt (II)	sulfide
10 c	cobalt (II)	phosphide
10 d	cobalt (II)	fluoride
10 e	cobalt (II)	oxide
10 f	cobalt (II)	nitride
10 g	cobalt (II)	bromide
10 h	cobalt (II)	iodide

11 a	lead (IV)	chloride
11 b	lead (IV)	sulfide
11 c	lead (IV)	phosphide
11 d	lead (IV)	fluoride
11 e	lead (IV)	oxide
11 f	lead (IV)	nitride
11 g	lead (IV)	bromide
11 h	lead (IV)	iodide
12 a	tin (II)	chloride
12 b	tin (II)	sulfide
12 c	tin (II)	phosphide
12 d	tin (II)	fluoride
12 e	tin (II)	oxide
12 f	tin (II)	nitride
12 g	tin (II)	bromide
12 h	tin (II)	iodide
13 a	mercury (II)	chloride
13 b	mercury (II)	sulfide
13 c	mercury (II)	phosphide
13 d	mercury (II)	fluoride
13 e	mercury (II)	oxide
13 f	mercury (II)	nitride
13 g	mercury (II)	bromide
13 h	mercury (II)	iodide
14 a	zinc	chloride
14 b	zinc	sulfide
14 c	zinc	phosphide
14 d	zinc	fluoride
14 e	zinc	oxide
14 f	zinc	nitride
14 g	zinc	bromide
14 h	zinc	iodide