Lots of Ionic Naming Practice Problems

Name the following ionic compounds:

1) $NaBr$ _____

2) $Sc(OH)_3$ _____

3) $V_2(SO_4)_3$ _____

4) NH_4F _____

5) $CaCO_3$ _____

6) $NiPO_4$ _____

7) Li_2SO_3 _____

8) Zn_3P_2 _____

9) $Sr(C_2H_3O_2)_2$ _____

10) Cu_2O _____

11) Ag_3PO_4 _____

12) $Y(ClO)_3$ _____

13) SnS_2 _____

14) $Ti(CN)_4$ _____

15) $KMnO_4$ _____

16) Pb_3N_2 _____

17) $CoCO_3$ _____

18) $CdSO_3$ _____

19) $Cu(NO_2)_2$ _____

20) $Fe(HCO_3)_2$ _____

Write the formulas for the following ionic compounds:

21) lithium acetate _____

22) iron (II) phosphate _____

23) titanium (II) selenide _____

24) calcium bromide _____

25) gallium chloride _____

26) sodium hydride _____

27) beryllium hydroxide _____

28) zinc carbonate _____

29) manganese (VII) arsenide _____

30) copper (II) chlorate _____

31) cobalt (III) chromate _____

32) ammonium oxide _____

33) potassium hydroxide _____

34) lead (IV) sulfate _____

35) silver cyanide _____

36) vanadium (V) nitride _____

37) strontium acetate _____

38) molybdenum (II) sulphate _____

39) platinum (II) sulfide _____

40) ammonium sulfate _____

Ionic Nomenclature

Write the international chemical formula or the English IUPAC name for each of the compounds given. This exercise involves all classes of ionic compounds.

	International Chemical Formula	IUPAC Name
1	$SrCl_2$	
2	RbBr	
3	Na_2O	
4		aluminum sulphide
5		zinc chloride
6		magnesium iodide
7	$CoCl_2$	
8	TiO_2	
9	Cu_2O	
10		tin (II) sulphide
11		chromium (III) oxide
12		iron (II) sulphide
13	KC_6H_5COO	
14	$Na_2S_2O_3$	
15	NH_4HCO_3	
16		ammonium sulphide
17		barium sulphite
18		magnesium hydroxide
19	$FeSO_4 \cdot 7H_2O$	
20	$LiCl \cdot 4H_2O$	
21		sodium sulphate decahydrate
22	$Au(NO_3)_3$	
23		bismuth (III) sulphate
24		lead (II) acetate trihydrate
25	$KMnO_4$	

REVIEW OF CHEMISTRY 10
NAMING AND WRITING FORMULAS FOR IONIC COMPOUNDS

Complete the following table. (All ionic compounds as pure substances are solids at room temperature. Indicate the state using an (s) subscript.)

	Chemical Formula	Name of Compound	Description and/or Use
1.	$ZnO_{(s)}$		protective oxide on zinc metal
2.		sodium bromide	present in Epsom salts
3.		sodium hydroxide	forms corrosive alkaline solution
4.	$AlCl_3 \cdot 6H_2O_{(s)}$		present in antiperspirant
5.		copper(I) oxide	agricultural fungicide
6.	$Ca(OH)_{2(s)}$		formed by action of water on CaO
7.	$Na_2CO_3 \cdot 10H_2O_{(s)}$		water softener, washing soda
8.		magnesium sulfate heptahydrate	active ingredient of Epsom salts
9.	$Fe_2O_{3(s)}$		reddish-brown powder
10.		potassium chloride	component of fertilizers
11.		zinc sulfide	zinc blende (zinc ore)
12.	$Na_3PO_{4(s)}$		cleaning agent
13.		sodium hydrogen carbonate	baking soda
14.		nickel(II) bromide	forms a green solution
15.	$PbO_{2(s)}$		electrode in car batteries
16.		ammonium carbonate	present in some cleaning powders
17.	$NaHSO_{4(s)}$		aqueous solution strongly acidic
18.		cupric chloride	agricultural fungicide
19.	$AgNO_{3(s)}$		making photographic films
20.		potassium chlorate	lab preparation of oxygen
21.	$KMnO_{4(s)}$		fungicide
22.		ammonium sulfate	fertilizer
23.	$KNO_{3(s)}$		preserving meats, gunpowder
24.		sodium hypochlorite	laundry bleach
25.	$SnF_{2(s)}$		toothpaste additive