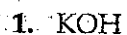
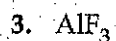


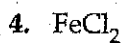
Practice Problems

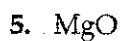
Write the names for each of the following ionic compounds.

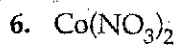






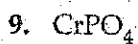


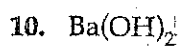


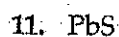


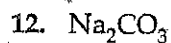


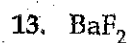


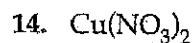


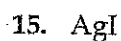


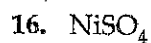


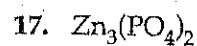


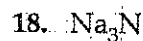
















NAMING IONIC COMPOUNDS

Name _____

Name the following compounds using the Stock Naming System.

1. CaCO_3 _____
2. KCl _____
3. FeSO_4 _____
4. LiBr _____
5. MgCl_2 _____
6. FeCl_3 _____
7. $\text{Zn}_3(\text{PO}_4)_2$ _____
8. NH_4NO_3 _____
9. $\text{Al}(\text{OH})_3$ _____
10. $\text{CuC}_2\text{H}_3\text{O}_2$ _____
11. PbSO_3 _____
12. NaClO_3 _____
13. CaC_2O_4 _____
14. Fe_2O_3 _____
15. $(\text{NH}_4)_3\text{PO}_4$ _____
16. NaHSO_4 _____
17. Hg_2Cl_2 _____
18. $\text{Mg}(\text{NO}_2)_2$ _____
19. CuSO_4 _____
20. NaHCO_3 _____
21. NiBr_3 _____
22. $\text{Be}(\text{NO}_3)_2$ _____
23. ZnSO_4 _____
24. AuCl_3 _____
25. KMnO_4 _____

Practice "Criss-cross" method

Write the formulas of the compounds produced from the listed ions.

	Cl^-	CO_3^{2-}	OH^-	SO_4^{2-}	PO_4^{3-}	NO_3^-
Na^+						
NH_4^+						
K^+						
Ca^{+2}						
Mg^{+2}						
Zn^{+2}						
Fe^{+3}						
Al^{+3}						
Co^{+3}						
Fe^{+2}						
H^+						

7-1 Practice Problems

Write the correct formula for each of the compounds listed below.

1. potassium iodide

2. barium chloride

3. lithium bromide

4. sodium hypochlorite

5. iron(III) sulfate

6. chromium(III) sulfide

7. calcium carbonate

8. sodium acetate

9. cobalt(II) fluoride

10. sodium phosphide

11. tin(IV) oxide

12. gold(III) bromide

13. copper(II) iodide

14. strontium chloride

15. lithium acetate

16. magnesium hydroxide

17. nickel(II) nitrate

18. silver oxide

19. zinc chloride

20. magnesium phosphate

NAMING MOLECULAR COMPOUNDS

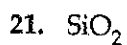
Name _____

Name the following covalent compounds.

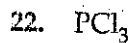
1. CO_2 _____
2. CO _____
3. SO_2 _____
4. SO_3 _____
5. N_2O _____
6. NO _____
7. N_2O_3 _____
8. NO_2 _____
9. N_2O_4 _____
10. N_2O_5 _____
11. PCl_3 _____
12. PCl_5 _____
13. NH_3 _____
14. SCl_6 _____
15. P_2O_5 _____
16. CCl_4 _____
17. SiO_2 _____
18. CS_2 _____
19. OF_2 _____
20. PBr_3 _____

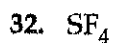
Practice Problems (continued)

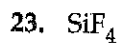
Write names for each of the following molecular substances.

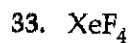


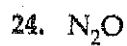


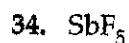


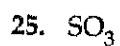


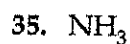


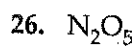


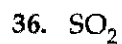


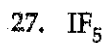


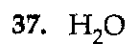


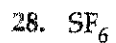


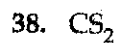


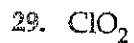


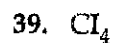


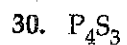


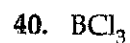












The 3 Rules for Naming the 3 Types of Acids

Rule 1—If the acid is binary, i.e. has a monatomic anion, or has an ion ending in -ide,
then: Hydro(root name of anion)ic acid

JUST BECAUSE ACID FORMULAS BEGIN WITH "H" DOES NOT MEAN THAT EVERY ACID'S NAME BEGINS WITH HYDRO!!

Rule 2—If the acid has anion ending in -ate,
then: (Root name of anion)ic acid

Rule 3—If the acid has anion ending in -ite,
then: (Root name of anion)ous acid

Acid	Name
1. HF	_____
2. HCl	_____
3. HBr	_____
4. H ₂ S	_____
5. HClO ₄	_____
6. HClO ₃	_____
7. HClO ₂	_____
8. HClO	_____
9. HNO ₃	_____
10. HNO ₂	_____
11. H ₂ SO ₄	_____
12. H ₂ SO ₃	_____
13. H ₂ CO ₃	_____
14. H ₃ PO ₄	_____
15. H ₂ C ₂ O ₄	_____
16. HC ₂ H ₃ O ₂	_____

Name	Formula
17. Nitric acid	_____
18. Acetic acid	_____
19. Sulfuric acid	_____
20. Periodic acid	_____
21. Hydroiodic acid	_____
22. Hydrocyanic acid	_____
23. Phosphorous acid	_____
24. Permanganic acid	_____
25. Hypochlorous acid	_____
26. Hydrophosphoric acid	_____

Formulas and Nomenclature

I. Name the following compounds:

1. HCl
2. KOH
3. HgOH
4. KCl
5. FeCl₃
6. HNO₃
7. NH₄OH
8. Cu₂O
9. Al₂(SO₄)₃
10. N₂O₅
11. NaOH
12. CO₂
13. HF
14. Pb(OH)₂
15. NH₄NO₃
16. NaHCO₃
17. HgO
18. Zn(NO₂)₂
19. H₃PO₄
20. CsOH
21. Li₂O
22. Ca(OH)₂
23. CaBr₂
24. Fe₂O₃
25. H₂SO₄
26. FeCO₃
27. SO₃
28. Ba(BrO₃)₂
29. Al(OH)₃
30. HClO₄
31. NaC₂H₃O₂
32. Na₂SO₄
33. H₂CO₃
34. HFO₂
35. NH₄IO₃
36. LiH

(continued)

WRITE THE FORMULAS FOR THE FOLLOWING:

- manganese dioxide
- sulfur dioxide
- iron (II) sulfate
- hypochlorous acid
- potassium permanganate
- silver chloride
- copper (II) hydroxide
- ammonium sulfide
- nickel bromide
- iron (II) oxide
- bromic acid
- ammonium bisulfate
- mercury (I) sulfate
- iron (III) oxide
- magnesium phosphate
- nickel bicarbonate
- zinc hydroxide
- hydriodic acid
- diphosphorus pentoxide
- aluminum phosphate
- hydrogen acetate
- copper (II) nitrite
- nitrogen dioxide
- phosphorus trichloride
- sodium phosphate
- potassium carbonate
- phosphoric acid
- lead (IV) chloride
- tin (II) bromide
- ammonium hydroxide
- periodic acid (periodate ion: IO_4^-)
- iron (II) hydroxide
- carbon dioxide
- dinitrogen pentoxide
- silver oxide
- aluminum nitride
- manganese (II) hydroxide
- ammonium carbonate
- aluminum oxide
- antimony pentasulfide

Naming Compounds Flow Chart

