

Naming Ionic Compounds Practice Worksheet

Name the following ionic compounds:

- 1) NH_4Cl _____
- 2) $\text{Fe}(\text{NO}_3)_3$ _____
- 3) TiBr_3 _____
- 4) Cu_3P _____
- 5) SnSe_2 _____
- 6) GaAs _____
- 7) $\text{Pb}(\text{SO}_4)_2$ _____
- 8) $\text{Be}(\text{HCO}_3)_2$ _____
- 9) $\text{Mn}_2(\text{SO}_3)_3$ _____
- 10) $\text{Al}(\text{CN})_3$ _____

Write the formulas for the following compounds:

- 11) chromium (VI) phosphate _____
- 12) vanadium (IV) carbonate _____
- 13) tin (II) nitrite _____
- 14) cobalt (III) oxide _____
- 15) titanium (II) acetate _____
- 16) vanadium (V) sulfide _____
- 17) chromium (III) hydroxide _____
- 18) lithium iodide _____
- 19) lead (II) nitride _____
- 20) silver bromide _____

Lots of Ionic Naming Practice Problems

Name the following ionic compounds:

- 1) NaBr _____
- 2) Sc(OH)₃ _____
- 3) V₂(SO₄)₃ _____
- 4) NH₄F _____
- 5) CaCO₃ _____
- 6) NiPO₄ _____
- 7) Li₂SO₃ _____
- 8) Zn₃P₂ _____
- 9) Sr(C₂H₃O₂)₂ _____
- 10) Cu₂O _____
- 11) Ag₃PO₄ _____
- 12) YClO₃ _____
- 13) SnS₂ _____
- 14) Ti(CN)₄ _____
- 15) KMnO₄ _____
- 16) Pb₃N₂ _____
- 17) CoCO₃ _____
- 18) CdSO₃ _____
- 19) Cu(NO₂)₂ _____
- 20) Fe(HCO₃)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 sulfate _____
- 39) platinum (II) sulfide _____
- 40) ammonium sulfate _____

Naming Covalent Compounds Worksheet

Write the formulas for the following covalent compounds:

- 1) antimony tribromide _____
- 2) hexaboron silicide _____
- 3) chlorine dioxide _____
- 4) hydrogen iodide _____
- 5) iodine pentafluoride _____
- 6) dinitrogen trioxide _____
- 7) ammonia _____
- 8) phosphorus triiodide _____

Write the names for the following covalent compounds:

- 9) P_4S_5 _____
- 10) O_2 _____
- 11) SeF_6 _____
- 12) Si_2Br_6 _____
- 13) SCl_4 _____
- 14) CH_4 _____
- 15) B_2Si _____
- 16) NF_3 _____

Practice Worksheet: Names & Formulas of Acids

5.

Review:

- When the anion does NOT contain Oxygen, & is a BINARY acid:
Use the prefix *hydro* + root of the anion's name - *ic* + the word acid
Examples: HCl = *hydrochloric acid*; HBr = *hydrobromic acid*
- When the anion contains Oxygen, & is a TERNARY acid:
The name depends on the name of the polyatomic anion. DON'T use the prefix '*hydro-*'! Examples: H₂SO₄ has the sulfate anion, so the acid name will end in *-ic*: **Sulfuric acid**. H₂SO₃ has the sulfite anion, so the name of the acid will end in *-ous*: **Sulfurous acid**.

ATE → IC

ITE → OUS

Write FORMULAS for the following: NAME the following :

Nitric acid	HClO
Chloric acid	H ₃ PO ₄
Acetic acid	HCl
Hydrobromic acid	H ₃ BO ₃
Sulfurous acid	H ₂ SO ₄
Chlorous acid	HNO ₂
Hydrochloric acid	HI
Phosphoric acid	HC ₂ H ₃ O ₂
Nitrous acid	HF
Hydrofluoric acid	H ₃ PO ₃
Hypochlorous acid	HCN
Hydroiodic acid	HClO ₃
Phosphorous acid	H ₂ CO ₃
Carbonic acid	H ₂ SO ₃
Perchloric acid	HClO ₂
Permanganic acid	HNO ₃
Sulfuric acid	HBr
Hydrocyanic acid	

Naming Acids Worksheet

Name _____

Name the following acids

- 1. ~~HCl~~
- 2. HClO_4
- 3. HIO_3
- 4. HI
- 5. H_2SO_4
- 6. H_2S
- 7. HCN
- 8. H_2CO_3
- 9. HBrO_4
- 10. HBrO_3
- 11. $\text{HC}_2\text{H}_3\text{O}_2$
- 12. H_3PO_3
- 13. H_3P
- 14. H_2CrO_4
- 15. H_2CrO_2
- 16. H_2Cr

Give formulas for the following acids

- 17. hydrofluoric acid
- 18. nitric acid
- 19. nitrous acid
- 20. hydroxic acid
- 21. periodic acid
- 22. percarbonic acid
- 23. hypobromous acid
- 24. bromous acid
- 25. permanganic acid
- 26. manganic acid
- 27. iodous acid
- 28. sulfurous acid
- 29. sulfuric acid
- 30. perchloric acid
- 31. chlorous acid
- 32. acetic acid
- 33. phosphoric acid
- 34. phosphorous acid