

CHEMISTRY 1A NOMENCLATURE WORKSHEET

Chemical Formula Nomenclature Practice:

Complete these in lab and on your own time for practice. You should complete this by Sunday.
Use the stock form for the transition metals.

Give the formula for the following:

- | | | | |
|------------------------------|---|---------------------------|---|
| 1. sulfur dioxide | _____SO ₂ _____ | 26. methane | _____CH ₄ _____ |
| 2. sodium thiosulfate | _____Na ₂ S ₂ O ₃ _____ | 27. copper (II) sulfate | _____CuSO ₄ _____ |
| 3. ammonium phosphate | _____ (NH ₄) ₃ PO ₄ _____ | 28. nitrogen dioxide | _____NO ₂ _____ |
| 4. potassium chlorate | _____KClO ₃ _____ | 29. mercury (II) chloride | _____HgCl ₂ _____ |
| 5. lithium hydroxide | _____LiOH_____ | 30. tin (II) bromide | _____SnBr ₂ _____ |
| 6. zinc nitrite | _____Zn(NO ₂) ₂ _____ | 31. silver iodide | _____AgI_____ |
| 7. sodium sulfate | _____Na ₂ SO ₄ _____ | 32. magnesium bisulfite | _____Mg(HSO ₃) ₂ _____ |
| 8. cobalt (IV) bisulfite | _____Co(HSO ₃) ₄ _____ | 33. carbon disulfide | _____CS ₂ _____ |
| 9. cadmium nitrate | _____Cd(NO ₃) ₂ _____ | 34. beryllium periodate | _____Be(IO ₄) ₂ _____ |
| 10. nitric oxide | _____NO_____ | 35. platinum (IV) cyanide | _____Pt(CN) ₄ _____ |
| 11. hydrogen peroxide | _____H ₂ O ₂ _____ | 36. ammonia | _____NH ₃ _____ |
| 12. carbon monoxide | _____CO_____ | 37. dinitrogen oxide | _____N ₂ O_____ |
| 13. silicon dioxide | _____SiO ₂ _____ | 38. ferric oxide | _____Fe ₂ O ₃ _____ |
| 14. copper (I) bromide | _____CuBr_____ | 39. gold (III) chloride | _____AuCl ₃ _____ |
| 15. iron (II) chromate | _____FeCrO ₄ _____ | 40. strontium sulfide | _____SrS_____ |
| 16. mercury (I) fluoride | _____Hg ₂ F ₂ _____ | 41. uranium (VI) fluoride | _____UF ₆ _____ |
| 17. carbon tetrachloride | _____CCl ₄ _____ | 42. lead (II) bicarbonate | _____Pb(HCO ₃) ₂ _____ |
| 18. carbon dioxide | _____CO ₂ _____ | 43. stannic fluoride | _____SnF ₄ _____ |
| 19. cobalt (II) chloride | _____CoCl ₂ _____ | 44. sodium dichromate | _____Na ₂ Cr ₂ O ₇ _____ |
| 20. aluminum carbonate | _____Al ₂ (CO ₃) ₃ _____ | 45. water | _____H ₂ O_____ |
| 21. diphosphorus pentaoxide | _____P ₂ O ₅ _____ | 46. lead (II) peroxide | _____PbO ₂ _____ |
| 22. cesium oxalate | _____Cs ₂ C ₂ O ₄ _____ | 47. calcium carbide | _____Ca ₂ C_____ |
| 23. nickel (II) sulfite | _____NiSO ₃ _____ | 48. rubidium chromate | _____Rb ₂ CrO ₄ _____ |
| 24. barium hypochlorite | _____Ba(ClO) ₂ _____ | 49. nickel (II) chlorate | _____Ni(ClO ₃) ₂ _____ |
| 25. phosphorus pentachloride | _____PCl ₅ _____ | 50. magnesium nitride | _____Mg ₃ N ₂ _____ |

CHEMISTRY 1A NOMENCLATURE WORKSHEET

51. ammonium sulfide	<u>(NH₄)₂S</u>	74. mercury (I) acetate	<u>Hg₂(C₂H₃O₂)₂</u>
52. aluminum phosphide	<u>AlP</u>	75. calcium bisulfate	<u>Ca(HSO₄)₂</u>
53. zinc dichromate	<u>ZnCr₂O₇</u>	76. lithium hydride	<u>LiH</u>
54. aluminum hydride	<u>AlH₃</u>	77. lithium chlorate	<u>LiClO₃</u>
55. strontium phosphate	<u>Sr₃(PO₄)₂</u>	78. cupric perchlorate	<u>Cu(ClO₄)₂</u>
56. tin (II) phosphate	<u>Sn₃(PO₄)₂</u>	79. gold (III) perchlorate	<u>Au(ClO₄)₃</u>
57. chromium (III) nitrate	<u>Cr(NO₃)₃</u>	80. aluminum bisulfite	<u>Al(HSO₃)₃</u>
58. cobalt (II) chlorate	<u>Co(ClO₃)₂</u>	81. iron (II) phosphate	<u>Fe₃(PO₄)₂</u>
59. cesium cyanide	<u>CsCN</u>	82. copper (II) chloride	<u>CuCl₂</u>
60. bismuth (III) bisulfate	<u>Bi(HSO₄)₃</u>	83. ammonium nitrate	<u>NH₄NO₃</u>
61. magnesium chlorite	<u>Mg(ClO₂)₂</u>	84. mercury (I) sulfate	<u>Hg₂SO₄</u>
62. arsenic trichloride	<u>AsCl₃</u>	85. cesium nitrite	<u>CsNO₂</u>
63. tin (II) oxide	<u>SnO</u>	86. sodium bisulfate	<u>NaHSO₄</u>
64. lead (II) perchlorate	<u>Pb(ClO₄)₂</u>	87. hydrochloric acid	<u>HCl (aq)</u>
65. iron (II) bromide	<u>FeBr₂</u>	88. sulfuric acid	<u>H₂SO₄ (aq)</u>
66. silver sulfite	<u>Ag₂SO₃</u>	89. phosphoric acid	<u>H₃PO₄ (aq)</u>
67. potassium permanganate	<u>KMnO₄</u>	90. perchloric acid	<u>HClO₄ (aq)</u>
68. tin (IV) sulfate	<u>Sn(SO₄)₂</u>	91. hydrobromic acid	<u>HBr (aq)</u>
69. cobalt (IV) fluoride	<u>CoF₄</u>	92. tin (IV) permanganate	<u>Sn(MnO₄)₄</u>
70. cesium bromate	<u>CsBrO₃</u>	93. hydroiodic acid	<u>HI (aq)</u>
71. iron (III) dichromate	<u>Fe₂(Cr₂O₇)₃</u>	94. nitric acid	<u>HNO₃ (aq)</u>
72. beryllium iodide	<u>BeI₂</u>	95. magnesium dichromate	<u>MgCr₂O₇</u>
73. copper (I) carbonate	<u>Cu₂CO₃</u>		

CHEMISTRY 1A NOMENCLATURE WORKSHEET

Give the names of the following compounds

- | | | | |
|---|----------------------------|--|------------------------------|
| 1. NaCl | ___sodium chloride___ | 23. AgC ₂ H ₃ O ₂ | ___silver acetate___ |
| 2. AgNO ₃ | ___silver nitrate___ | 24. Cr ₂ O ₃ | ___chromium (III) oxide___ |
| 3. BaCrO ₄ | ___barium chromate___ | 25. KBr | ___potassium bromide___ |
| 4. KOH | ___potassium hydroxide___ | 26. Cd(HSO ₄) ₂ | ___cadmium bisulfate___ |
| 5. ZnSO ₄ | ___zinc sulfate___ | 27. CO ₂ | ___carbon dioxide___ |
| 6. MgBr ₂ | ___magnesium bromide___ | 28. H ₂ O ₂ | ___hydrogen peroxide___ |
| 7. Al ₂ O ₃ | ___aluminum oxide___ | 29. CaSO ₄ | ___calcium sulfate___ |
| 8. CdCl ₂ | ___cadmium chloride___ | 30. Ni ₃ (PO ₄) ₂ | ___nickel (II) phosphate___ |
| 9. NH ₄ I | ___ammonium iodide___ | 31. AsF ₃ | ___arsenic trifluoride___ |
| 10. Fe(OH) ₃ | ___iron (III) hydroxide___ | 32. Co ₃ (AsO ₄) ₂ | ___cobalt (II) arsenate___ |
| 11. Ba ₃ (PO ₄) ₂ | ___barium phosphate___ | 33. ZnCr ₂ O ₇ | ___zinc dichromate___ |
| 12. KClO ₃ | ___potassium chlorate___ | 34. KCN | ___potassium cyanide___ |
| 13. Na ₂ CO ₃ | ___sodium carbonate___ | 35. Bi(NO ₃) ₃ | ___bismuth (III) nitrate___ |
| 14. (NH ₄) ₂ C ₂ O ₄ | ___ammonium oxalate___ | 36. CaH ₂ | ___calcium hydride___ |
| 15. (NH ₄) ₂ CO ₃ | ___ammonium carbonate___ | 37. SnS ₂ | ___tin (IV) sulfide___ |
| 16. NiF ₂ | ___nickel (II) fluoride___ | 38. Cr ₂ (SO ₄) ₃ | ___chromium (III) sulfate___ |
| 17. Zn(ClO ₃) ₂ | ___zinc chlorate___ | 39. Hg(BrO ₃) ₂ | ___mercury (II) bromate___ |
| 18. Ca(OH) ₂ | ___calcium hydroxide___ | 40. N ₂ O ₄ | ___dinitrogen tetroxide___ |
| 19. BaSO ₃ | ___barium sulfite___ | 41. Pb(HCO ₃) ₂ | ___lead (II) bicarbonate___ |
| 20. AlCl ₃ | ___aluminum chloride___ | 42. Na ₂ Cr ₂ O ₇ | ___sodium dichromate___ |
| 21. Cu ₂ CO ₃ | ___copper (I) carbonate___ | 43. PbO ₂ | ___lead (IV) oxide___ |
| 22. FeO | ___iron (II) oxide___ | (2 possible names) | ___lead (II) peroxide___ |