

## Binary Molecular Nomenclature

Rules for Binary Molecular Compounds	Prefixes
1. The naming system is for compounds composed of two <u>nonmetallic</u> elements.	1 - mono
2. The first element keeps its name	2 - di
a. The first element gets a prefix if it has a subscript in the formula	3 - tri
3. The second element gets the <i>-ide</i> suffix (ending)	4 - tetra
a. The second element ALWAYS gets a prefix	5 - penta
	6 - hexa

Compound Name	Compound Formula
Carbon dioxide	$CO_2$
Carbon monoxide	$CO$
Diphosphorus pentoxide	$P_2O_5$
Dinitrogen monoxide	$N_2O$
Silicon dioxide	$SiO_2$
Carbon tetrabromide	$CCl_4$
Sulfur dioxide	$SO_2$
Phosphorus pentabromide	$PBr_5$
Iodine trichloride	$ICl_3$
Nitrogen triiodide	$NI_3$
Dinitrogen trioxide	$N_2O_3$

Compound Formula	Compound Name
$N_2O_4$	dinitrogen tetroxide
$SO_3$	sulfur trioxide
$NO$	nitrogen oxide
$NO_2$	nitrogen dioxide
$As_2O_5$	diarsenic pentoxide
$PCl_3$	phosphorus trichloride
$CCl_4$	carbon tetrachloride
$H_2O$	water
$SeF_6$	selenium hexafluoride

For answers to this worksheet, [Click Here](#)

Type I Binary Compounds contain Group I, II, and III metals with non-metal ions. Show the correct name for the following compounds.

Give correct names for these Type I binary compounds

KCl	potassium chloride	MgO	magnesium oxide
K <sub>2</sub> O	potassium oxide	AlCl <sub>3</sub>	aluminum chloride
CaO	calcium oxide	BaS	barium sulfide
MgCl <sub>2</sub>	magnesium chloride	Al <sub>2</sub> S <sub>3</sub>	aluminum sulfide
NaH	sodium hydride	SrF <sub>2</sub>	strontium fluoride
ZnS	zinc sulfide	MgI <sub>2</sub>	magnesium iodide
RbBr	rubidium bromide	CaSe	calcium selenide
Al <sub>2</sub> O <sub>3</sub>	aluminum oxide	BaBr <sub>2</sub>	barium bromide
Na <sub>3</sub> N	sodium nitride	CsCl	cesium chloride
Ca <sub>2</sub> C	calcium carbide	Mg <sub>3</sub> P <sub>2</sub>	magnesium phosphide
KI	potassium iodide	CaCl <sub>2</sub>	calcium chloride

Give correct formulas for these Type I binary compounds

calcium iodide	CaI <sub>2</sub>	magnesium phosphide	Mg <sub>3</sub> P <sub>2</sub>
calcium hydride	CaH <sub>2</sub>	sodium chloride	NaCl
magnesium fluoride	MgF <sub>2</sub>	barium oxide	BaO
cadmium bromide	CdBr <sub>2</sub>	aluminum arsenide	AlAs
sodium nitride	Na <sub>3</sub> N	calcium sulfide	CaS
rubidium oxide	Rb <sub>2</sub> O	potassium selenide	K <sub>2</sub> Se
barium nitride	Ba <sub>3</sub> N <sub>2</sub>	sodium iodide	NaI
lithium chloride	LiCl	lithium sulfide	Li <sub>2</sub> S
silver sulfide	Ag <sub>2</sub> S	calcium carbide	Ca <sub>2</sub> C
aluminum nitride	AlN	sodium hydride	NaH
cesium fluoride	CsF	magnesium nitride	Mg <sub>3</sub> N <sub>2</sub>

Return to: [Exam/Quiz Review Page](#) | [Compound Naming Page](#)

Practice Problems (Answer using the Stock system.)

Write the correct name for:

- |  |                      |                             |                         |
|--|----------------------|-----------------------------|-------------------------|
| 1) $\overset{2+}{\text{Cu}}\overset{2-}{\text{S}}$ | copper (II) sulfide  | 21) $\text{Hg}_2\text{O}$   | mercury (I) oxide       |
| 2) $\text{PbBr}_4$                                 | lead (IV) bromide    | 22) $\text{Hg}_2\text{I}_2$ | mercury (I) iodide      |
| 3) $\text{Pb}_3\text{N}_2$                         | lead (II) nitride    | 23) $\text{AuCl}_3$         | gold (III) chloride     |
| 4) $\text{Fe}_2\text{O}_3$                         | iron (III) oxide     | 24) $\text{MnO}$            | manganese (II) oxide    |
| 5) $\text{FeI}_2$                                  | iron (II) iodide     | 25) $\text{CrCl}_3$         | chromium (III) chloride |
| 6) $\text{Sn}_3\text{P}_4$                         | tin (IV) phosphide   | 26) $\text{CoO}$            | cobalt (II) oxide       |
| 7) $\text{Cu}_2\text{S}$                           | copper (I) sulfide   | 27) $\text{Mn}_2\text{O}_3$ | manganese (III) oxide   |
| 8) $\text{SnCl}_2$                                 | tin (II) chloride    | 28) $\text{Co}_2\text{S}_3$ | cobalt (III) sulfide    |
| 9) $\text{HgO}$                                    | mercury (II) oxide   | 29) $\text{AuF}$            | gold (I) fluoride       |
| 10) $\text{Hg}_2\text{F}_2$                        | mercury (I) fluoride | 30) $\text{CrBr}_2$         | chromium (II) bromide   |

Answers to Set One

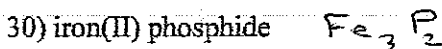
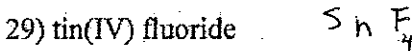
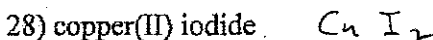
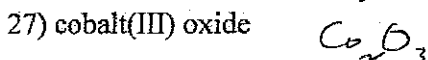
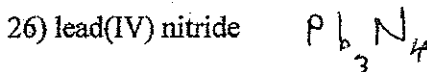
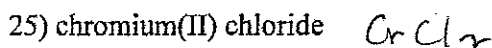
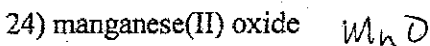
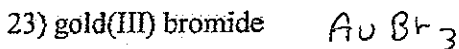
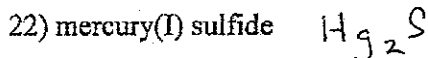
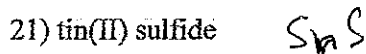
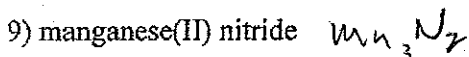
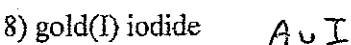
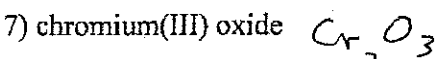
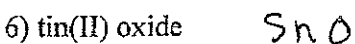
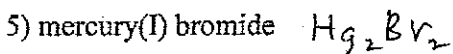
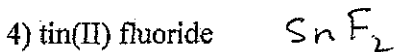
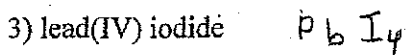
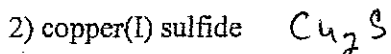
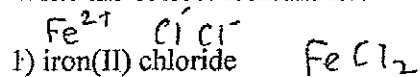
- 11)  $\text{CuCl}_2$  copper (II) chloride  
 12)  $\text{CuBr}$  copper (I) bromide  
 13)  $\text{PbO}$  lead (II) oxide  
 14)  $\text{Fe}_2\text{S}_3$  iron (III) sulfide  
 15)  $\text{PbCl}_2$  lead (II) chloride  
 16)  $\text{SnO}$  tin (II) oxide  
 17)  $\text{Cu}_2\text{O}$  copper (I) oxide  
 18)  $\text{PbO}_2$  lead (IV) oxide  
 19)  $\text{FeO}$  iron (II) oxide  
 20)  $\text{SnO}_2$  tin (IV) oxide

Answers to Set Two

Answers to Set Three

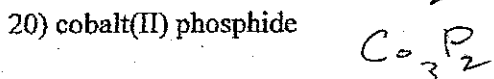
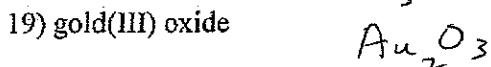
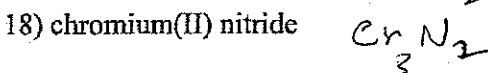
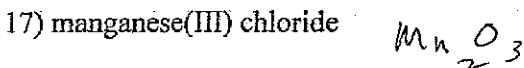
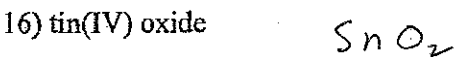
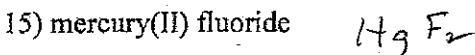
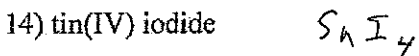
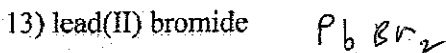
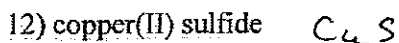
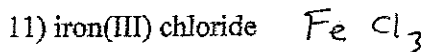
Practice Problems (Answer using the Stock system.)

Write the correct formula for:



Special words about mercury

Answers to Set One



Answers to Set Two

Answers to Set Three

## Inorganic Nomenclature Worksheet

- |                               |                                     |                                  |
|-------------------------------|-------------------------------------|----------------------------------|
| 1. ammonium sulfide           | 51. aluminum acetate                | 101. sodium acetate              |
| 2. sodium nitrate             | 52. calcium chloride dihydrate      | 102. zinc sulfite                |
| 3. cupric bromide             | 53. barium chromate                 | 103. silver bicarbonate          |
| 4. aluminum sulfate           | 54. cobaltic chloride               | 104. potassium iodide            |
| 5. potassium nitrate          | 55. barium chloride dihydrate       | 105. lead(IV) chlorite           |
| 6. ferrous carbonate          | 56. sulfurous acid                  | 106. mercurous chromate          |
| 7. lead(II) phosphate         | 57. potassium hydroxide             | 107. lead(II) nitrite            |
| 8. diphosphorus pentoxide     | 58. zinc bisulfite                  | 108. potassium dichromate        |
| 9. cupric hydroxide           | 59. sodium sulfite                  | 109. magnesium carbonate         |
| 10. calcium fluoride          | 60. cobaltous sulfate               | 110. calcium bicarbonate         |
| 11. nickel nitrate            | 61. ferric oxide                    | 111. aluminum hydroxide          |
| 12. silver cyanide            | 62. silver phosphate                | 112. cobaltous oxide             |
| 13. ammonium sulfite          | 63. sodium hypochlorite             | 113. ferric permanganate         |
| 14. zinc sulfate              | 64. ammonium chromate               | 114. ammonium chromate           |
| 15. tin(II) chloride          | 65. barium carbonate                | 115. nitrogen triiodide          |
| 16. antimony(III) chloride    | 66. calcium iodide                  | 116. sulfur trioxide             |
| 17. silver sulfide            | 67. cupric sulfate                  | 117. ammonium dichromate         |
| 18. magnesium hydroxide       | 68. cuprous chloride                | 118. iron(III) bicarbonate       |
| 19. ammonium carbonate        | 69. ferric carbonate                | 119. ammonium perchlorate        |
| 20. nickel acetate            | 70. zinc phosphate                  | 120. cobaltic acetate            |
| 21. sodium chromate           | 71. sodium nitrite                  | 121. cobaltous hydroxide         |
| 22. chromic bisulfate         | 72. silver oxide                    | 122. iron(II) chromate           |
| 23. potassium permanganate    | 73. nickel bromide                  | 123. ferric bromide              |
| 24. silver perchlorate        | 74. magnesium oxide                 | 124. zinc sulfate                |
| 25. potassium phosphate       | 75. mercuric perchlorate            | 125. boron phosphide             |
| 26. nickel iodide             | 76. lithium hypochlorite            | 126. ferric bicarbonate          |
| 27. mercurous oxide           | 77. oxygen difluoride               | 127. cupric bisulfate            |
| 28. lead(II) chlorite         | 78. cobalt(II) hydrogen sulfate     | 128. acetic acid (diff. from 79) |
| 29. hydrogen iodide           | 79. acetic acid (see #128)          | 129. barium bisulfite            |
| 30. iron(II) bisulfite        | 80. barium hypochlorite             | 130. nitric acid                 |
| 31. magnesium nitrate         | 81. ammonium hydroxide              | 131. calcium sulfide             |
| 32. iron(III) chromate        | 82. cobalt(II) iodide               | 132. copper(I) bisulfate         |
| 33. iron(II) chromate         | 83. chromium(II) bicarbonate        | 133. zinc permanganate           |
| 34. copper(II) hydroxide      | 84. sodium hydroxide                | 134. ferric carbonate            |
| 35. cuprous carbonate         | 85. silver nitrate                  | 135. hydrobromic acid            |
| 36. chromic acetate           | 86. mercury(II) nitrate             | 136. hydrocyanic acid            |
| 37. calcium chlorate          | 87. hydrochloric acid               | 137. hydrogen cyanide            |
| 38. ammonium oxide            | 88. aluminum bisulfite              | 138. sulfuric acid               |
| 39. aluminum perchlorate      | 89. cobalt(III) hydrogen sulfate    | 139. copper(I) sulfate           |
| 40. zinc bicarbonate          | 90. ferric hydrogen carbonate       | 140. chromium(III) oxide         |
| 41. sodium phosphate          | 91. phosphorus pentabromide         | 141. aluminum oxide              |
| 42. silver hypochlorite       | 92. nickel chloride hexahydrate     | 142. cobaltous bisulfate         |
| 43. ammonium phosphate        | 93. ammonium aluminum sulfate       | 143. barium carbonate            |
| 44. ferrous chlorite          | 94. iron(III) hydrogen carbonate    | 144. mercuric chloride           |
| 45. potassium sulfide         | 95. mercury(I) hydrogen phosphate   | 145. ferrous chromate            |
| 46. tin(IV) bromide           | 96. plumbic hydrogen carbonate      | 146. cupric hydroxide            |
| 47. lithium chromate          | 97. mercuric hydrogen carbonate     | 147. perchloric acid             |
| 48. magnesium bisulfate       | 98. mercurous hydrogen phosphate    | 148. ferric phosphate            |
| 49. ferrous phosphate         | 99. copper(II) sulfate pentahydrate | 149. lead(II) oxide              |
| 50. calcium sulfate dihydrate | 100. chromic dihydrogen phosphate   | 150. cobaltic chlorate           |

- |                                 |                                 |                                  |   |
|---------------------------------|---------------------------------|----------------------------------|---|
| 1. $(\text{NH}_4)_2\text{S}$    | 6. $\text{FeCO}_3$              | 12. $\text{AgCN}$                | 18. $\text{Mg}(\text{OH})_2$                      |
| 2. $\text{NaNO}_3$              | 7. $\text{Pb}_3(\text{PO}_4)_2$ | 13. $(\text{NH}_4)_2\text{SO}_3$ | 19. $(\text{NH}_4)_2\text{CO}_3$                  |
| 3. $\text{CuBr}_2$              | 8. $\text{P}_2\text{O}_5$       | 14. $\text{ZnSO}_4$              | 20. $\text{Ni}(\text{C}_2\text{H}_3\text{O}_2)_2$ |
| 4. $\text{Al}_2(\text{SO}_4)_3$ | 9. $\text{Cu}(\text{OH})_2$     | 15. $\text{SnCl}_2$              | 21. $\text{NaCrO}_3$                              |
| 5. $\text{KNO}_3$               | 10. $\text{CaF}_2$              | 16. $\text{SbCl}_3$              | 22. $\text{Cr}(\text{HSO}_4)_3$                   |
|                                 | 11. $\text{Ni}(\text{NO}_3)_2$  | 17. $\text{Ag}_2\text{S}$        | 23. $\text{KMnO}_4$                               |

- |     |   |     |   |
|-----|---|-----|---|
| 24. | $\text{AgClO}_4$                              | 49. | $\text{Fe}_3(\text{PO}_4)_2$                  |
| 25. | $\text{K}_3\text{PO}_4$                       | 50. | $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$     |
| 26. | $\text{NiI}_2$                                | 51. | $\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3$ |
| 27. | $\text{Hg}_2\text{O}$                         | 52. | $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$     |
| 28. | $\text{Pb}(\text{ClO}_2)_2$                   | 53. | $\text{Ba}(\text{CrO}_3)_2$                   |
| 29. | $\text{HI}$                                   | 54. | $\text{Co}_2\text{I}_3$                       |
| 30. | $\text{Fe}(\text{HSO}_3)_2$                   | 55. | $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$     |
| 31. | $\text{Mg}(\text{NO}_3)_2$                    | 56. | $\text{H}_2\text{SO}_3$                       |
| 32. | $\text{Fe}(\text{CrO}_3)_3$                   | 57. | $\text{KOH}$                                  |
| 33. | $\text{Fe}(\text{CrO}_3)_2$                   | 58. | $\text{Zn}(\text{HSO}_3)_2$                   |
| 34. | $\text{Cu}(\text{OH})_2$                      | 59. | $\text{Na}_2\text{SO}_3$                      |
| 35. | $\text{Cu}_2\text{CO}_3$                      | 60. | $\text{CoSO}_4$                               |
| 36. | $\text{Cr}(\text{C}_2\text{H}_3\text{O}_2)_3$ | 61. | $\text{Fe}_2\text{O}_3$                       |
| 37. | $\text{Ca}(\text{ClO}_3)_2$                   | 62. | $\text{Ag}_3\text{PO}_4$                      |
| 38. | $(\text{NH}_4)_2\text{O}$                     | 63. | $\text{NaClO}$                                |
| 39. | $\text{Al}(\text{ClO}_4)_3$                   | 64. | $(\text{NH}_4)_2\text{CrO}_4$                 |
| 40. | $\text{Zn}(\text{HCO}_3)_2$                   | 65. | $\text{BaCO}_3$                               |
| 41. | $\text{Na}_3\text{PO}_4$                      | 66. | $\text{CaI}_2$                                |
| 42. | $\text{AgClO}$                                | 67. | $\text{CuSO}_4$                               |
| 43. | $(\text{NH}_4)_3\text{PO}_4$                  | 68. | $\text{CuCl}$                                 |
| 44. | $\text{Fe}(\text{ClO})_2$                     | 69. | $\text{Fe}_2(\text{CO}_3)_3$                  |
| 45. | $\text{K}_2\text{S}$                          | 70. | $\text{Zn}_3(\text{PO}_4)_2$                  |
| 46. | $\text{SnBr}_4$                               | 71. | $\text{NaNO}_2$                               |
| 47. | $\text{LiCrO}_3$                              | 72. | $\text{Ag}_2\text{O}$                         |
| 48. | $\text{Mg}(\text{HSO}_4)_2$                   | 73. | $\text{NiBr}_2$                               |

If a formula can be named more than one correct way, then give all. For example,  $\text{Fe}(\text{HCO}_3)_3$  can be named four different ways. They are iron(III) bicarbonate, iron(III) hydrogen carbonate, ferric bicarbonate, and ferric hydrogen carbonate. The second way would be best.

151. $\text{HgF}_2$	191. $\text{KF}$	231. $\text{N}_2\text{O}_5$	271. $\text{NaOH}$	290. $\text{XeF}_4$	328. $\text{Be}(\text{ClO}_4)_2$
152. $\text{KCl}$	192. $\text{CaSO}_4$	232. $\text{SnCrO}_4$	272. $\text{Ni}_3$	291. $\text{Hg}(\text{OH})_2$	329. $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$
153. $\text{KMnO}_4$	193. $\text{HCl}$	233. $\text{Al}_2\text{O}_3$	273. $\text{ClF}_3$	292. $\text{CaH}_2$	330. $\text{Ba}(\text{BrO}_3)_2$
154. $\text{KClO}_4$	194. $\text{SbCl}_3$	234. $\text{CuCO}_3$	274. $\text{P}_3\text{N}_5$	293. $\text{As}_4\text{O}_6$	331. $\text{AuCl}_3$
155. $\text{ZnO}$	195. $\text{As}_4\text{O}_{10}$	235. $\text{ClO}_2$	275. $\text{UF}_6$	294. $\text{BN}$	332. $\text{Al}_2\text{S}_3$
156. $\text{Ba}(\text{OH})_2$	196. $\text{NH}_4\text{Cl}$	236. $\text{CuS}$	276. $\text{NBr}_3$	295. $\text{CoS}$	333. $\text{Na}_2\text{HPO}_4$
157. $\text{NH}_4\text{MnO}_4$	197. $\text{NH}_4\text{NO}_3$	237. $\text{MgI}_2$	277. $\text{Cl}_2\text{O}_3$	296. $\text{N}_2\text{O}_4$	334. $\text{Mg}_3(\text{PO}_4)_2$
158. $\text{CaCO}_3$	198. $\text{IF}_5$	238. $\text{CoCl}_3$	278. $\text{CsF}$	297. $\text{H}_3\text{BO}_3$	335. $\text{CuSO}_3$
159. $\text{Ba}_3(\text{PO}_4)_2$	199. $\text{NaHCO}_3$	239. $\text{NaCN}$	279. $\text{CO}$	298. $\text{I}_2\text{O}_5$	336. $\text{KAl}(\text{C}_2\text{O}_4)_2$
160. $\text{Fe}_2\text{O}_3$	200. $\text{Ba}(\text{OH})_2$	240. $\text{Hg}_3\text{N}_2$	280. $\text{Cu}_2\text{S}$	299. $\text{PbO}$	337. $\text{Cr}_2(\text{SO}_3)_3$
161. $\text{CoF}_3$	201. $\text{FeCl}_3$	241. $\text{BrO}_3$	281. $\text{KHCO}_3$	300. $\text{NaBr}$	338. $\text{HClO}$
162. $\text{H}_2\text{CO}_3$	202. $\text{HF}$	242. $\text{SiF}_4$	282. $\text{SbCl}_5$	301. $\text{Li}_2\text{CrO}_4$	339. $\text{HClO}_2$
163. $\text{K}_2\text{SO}_4$	203. $\text{PbSO}_4$	243. $\text{Sb}_2\text{O}_5$	283. $\text{CO}_2$	302. $\text{ICl}$	340. $\text{HClO}_3$
164. $\text{NaHSO}_4$	204. $\text{KrF}_2$	244. $\text{LiH}$	284. $\text{HgO}$	303. $\text{SO}_3$	341. $\text{HClO}_4$
165. $\text{PF}_5$	205. $\text{NaCl}$	245. $\text{SF}_6$	285. $\text{PCl}_3$	304. $\text{Hg}_2\text{O}$	342. $\text{Mn}(\text{IO}_3)_2$
166. $\text{Ag}_2\text{O}$	206. $\text{P}_2\text{O}_5$	246. $\text{SnI}_4$	286. $\text{PBr}_5$	305. $\text{NaH}$	343. $\text{KBrO}_3$
167. $\text{Pb}(\text{ClO}_2)_2$	207. $\text{AlBr}_3$	247. $\text{KOH}$	287. $\text{IF}_7$	306. $\text{OsO}_4$	344. $\text{Fe}(\text{ClO}_4)_3$
168. $\text{Cu}_2\text{CrO}_4$	208. $\text{Ba}(\text{NO}_3)_2$	248. $\text{K}_2\text{O}$	288. $\text{Cl}_2\text{O}$	307. $\text{XeF}_2$	345. $\text{Cr}(\text{OH})_3$
169. $\text{Ca}(\text{ClO}_4)_2$	209. $\text{BrF}_5$	249. $\text{H}_2\text{SO}_4$	289. $\text{CCl}_4$	308. $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$	
170. $\text{HC}_2\text{H}_3\text{O}_2$	210. $\text{P}_4\text{O}_6$	250. lithium oxide		309. $\text{NaC}_2\text{H}_3\text{O}_2$	
171. $\text{LiI}$	211. $\text{FePO}_4$	251. xenon trioxide		310. $\text{Al}(\text{OH})_3$	
172. $\text{Al}_2(\text{SO}_4)_3$	212. $\text{Hg}_2\text{SO}_4$	252. gold(I) chloride		311. $\text{Li}_2\text{HPO}_4$	
173. $\text{HBr}$	213. $\text{KH}$	253. gold(I) cyanide		312. $\text{Ca}(\text{NO}_3)_2$	
174. $\text{Hg}_2(\text{ClO})_2$	214. $\text{Co}_2(\text{SO}_3)_3$	254. sodium oxide		313. $\text{Ni}(\text{ClO}_4)_2$	
175. $\text{CrCl}_3$	215. $\text{N}_2\text{O}_3$	255. potassium chlorate		314. $\text{Mn}(\text{NO}_3)_2$	
176. $\text{H}_3\text{PO}_4$	216. $\text{N}_2\text{O}$	256. mercurous nitrite		315. $\text{Au}(\text{H}_2\text{PO}_4)_3$	
177. $\text{LiMnO}_4$	217. $\text{Fe}(\text{NO}_2)_3$	257. nickel(II) fluoride		316. $\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3$	
178. $\text{Fe}_2(\text{HPO}_4)_3$	218. $\text{Sn}_3(\text{PO}_4)_2$	258. potassium cyanide		317. $\text{KAl}(\text{SO}_4)_2$	
179. $\text{Na}_2\text{CO}_3$	219. $\text{H}_2\text{O}_2$	259. manganese dioxide		318. $\text{Al}(\text{MnO}_4)_3$	
180. $\text{Mg}(\text{HCO}_3)_2$	220. $\text{Be}(\text{OH})_2$	260. osmium tetrachloride		319. $(\text{NH}_4)_3\text{PO}_4$	
181. $\text{Sn}_3(\text{PO}_4)_4$	221. $\text{Sr}(\text{HCO}_3)_2$	261. rubidium carbonate		320. $\text{CoSO}_4 \cdot 6 \text{H}_2\text{O}$	
182. $\text{HNO}_3$	222. $\text{Sr}(\text{OH})_2$	262. trisulfur dinitride		321. $\text{MgCl}_2 \cdot 6 \text{H}_2\text{O}$	
183. $\text{ZnCl}_2$	223. $\text{P}_4\text{S}_{10}$	263. nitrogen trichloride		322. $\text{CuSO}_4 \cdot 5 \text{H}_2\text{O}$	
184. $\text{NaH}_2\text{PO}_4$	224. $\text{Hg}_2\text{O}_2$	264. vanadium(V) oxide		323. $\text{NaHS} \cdot \text{H}_2\text{O}$	
185. $\text{Hg}_2\text{Cl}_2$	225. $\text{Hg}_2(\text{OH})_2$	265. selenium tetrafluoride		324. $\text{MgSO}_4 \cdot 9 \text{H}_2\text{O}$	
186. $\text{Fe}(\text{NO}_2)_2$	226. $\text{NH}_4\text{F}$	266. stannous hypochlorite		325. $\text{NaH}_2\text{PO}_4 \cdot 9 \text{H}_2\text{O}$	
187. $\text{CuNH}_4\text{PO}_4$	227. $\text{XeF}_6$	267. tellurium hexafluoride		326. $\text{Na}_2\text{CrO}_4 \cdot 4 \text{H}_2\text{O}$	
188. $\text{NaMgPO}_4$	228. $\text{K}_2\text{Cr}_2\text{O}_7$	268. lanthanum(III) phosphate		327. $\text{Pb}(\text{CH}_3\text{COO})_2 \cdot 3 \text{H}_2\text{O}$	
189. $\text{Sn}(\text{HCO}_3)_4$	229. $\text{NH}_4\text{OH}$	269. sodium hydrogen sulfate monohydrate			
190. $\text{NaMnO}_4$	230. $(\text{NH}_4)_3\text{PO}_4$	270. chromium(III) hydrogen phosphate			

151. mercury (II) fluoride  
 152. potassium chloride  
 153. potassium permanganate  
 154. potassium perchlorate  
 155. zinc oxide  
 156. calcium carbonate  
 157. barium phosphate  
 158. iron(III) oxide  
 159. barium phosphate  
 160. iron(III) oxide

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|---|---|
| 161. cobalt (III) fluoride                        | 186. iron (II) nitrate                              |
| 162. carbonic acid                                | 187. copper (II) ammonium phosphate                 |
| 163. potassium sulfate                            | 188. sodium magnesium phosphate                     |
| 164. sodium bisulfate                             | 189. tri (IV) hydrogen carbonate                    |
| 165. phosphorus penta fluoride                    | 190. sodium permanganate                            |
| 166. silver oxide                                 | 191. potassium fluoride                             |
| 167. lead (II) chlorite                           | 192. calcium sulfate                                |
| 168. copper (I) perchlorate                       | 193. <sup>hydrochloric acid</sup> hydrogen chloride |
| 169. calcium perchlorate                          | 194. antimony chloride                              |
| 170. acetic acid                                  | 195. <del>or</del> tetra arsenic deca oxide         |
| 171. lithium iodide                               | 196. ammonium chloride                              |
| 172. aluminum sulfate                             | 197. ammonium nitrate                               |
| 173. <sup>hydrobromic acid</sup> hydrogen bromide | 198. iodine penta fluoride                          |
| 174. mercury (I) hypochlorite                     | 199. sodium hydrogen carbonate                      |
| 175. chromium (III) chloride                      | 200. barium hydroxide                               |
| 176. phosphoric acid                              | 201. iron (III) chloride                            |
| 177. lithium permanganate                         | 202. hydrofluoric acid                              |
| 178. iron (III) hydrogen phosphate                | 203. lead (II) sulfate                              |
| 179. sodium carbonate                             | 204. krypton difluoride                             |
| 180. magnesium hydrogen carbonate                 | 205. sodium chloride                                |
| 181. tin (IV) phosphate                           | 206. diphosphorus pentoxide                         |
| 182. nitric acid                                  | 207. aluminum bromide                               |
| 183. zinc chloride                                | 208. barium nitrate                                 |
| 184. sodium dihydrogen phosphate                  | 209. bromine penta fluoride                         |
| 185. mercury (II) chloride                        | 210. tetraphosphorus hexa oxide                     |



Write the formula for each of the acids listed below:

1. Nitric acid	$\text{HNO}_3$
2. Chloric acid	$\text{HClO}_3$
3. Acetic acid	$\text{HC}_2\text{H}_3\text{O}_2$
4. Hydrobromic acid	$\text{HBr}$
5. Sulfurous acid	$\text{H}_2\text{SO}_3$
6. Chlorous acid	$\text{HClO}_2$
7. Hydrochloric acid	$\text{HCl}$
8. Phosphoric acid	$\text{H}_3\text{PO}_4$
9. Nitrous acid	$\text{HNO}_2$
10. Hydrofluoric acid	$\text{HF}$
11. Perchloric acid	$\text{HClO}_4$
12. Hydroiodic acid	$\text{HI}$
13. Phosphorous acid	$\text{H}_3\text{PO}_3$
14. Carbonic acid	$\text{H}_2\text{CO}_3$
15. Sulfuric acid	$\text{H}_2\text{SO}_4$

Name each of the following acids:

16. $\text{HClO}_4$	perchloric acid
17. $\text{H}_3\text{PO}_4$	phosphoric acid
18. $\text{HCl}_{(aq)}$	hydrochloric acid
19. $\text{H}_2\text{SO}_4$	sulfuric acid
20. $\text{HNO}_2$	nitrous acid
21. $\text{HI}_{(aq)}$	hydroiodic acid
22. $\text{HC}_2\text{H}_3\text{O}_2$	acetic acid
23. $\text{HF}_{(aq)}$	hydrofluoric acid
24. $\text{H}_3\text{PO}_3$	phosphorous acid
25. $\text{HClO}_3$	chloric acid
26. $\text{H}_2\text{CO}_3$	carbonic acid
27. $\text{H}_2\text{SO}_3$	sulfurous acid
28. $\text{HClO}_2$	chlorous acid
29. $\text{HNO}_3$	nitric acid
30. $\text{HBr}_{(aq)}$	hydrobromic acid