

NAMING COMPOUNDS

IONIC (METALS + NONMETALS)

FIXED (GREEN) CHARGE METALS

1. CsF

2. SrO₂

3. Al(C₂H₃O₂)₃

4. Li₂S

5. ZnCl₂

6. CdS

7. BaI₂

8. AlCl₃

9. NaBr

10. MgS

11. AgNO₃

12. NaCl

13. MgSO₃

14. Al₂O₃

15. Ag₂S

16. RbBr

17. MgCl₂

18. NaBrO₃

VARIABLE (RED) CHARGE METALS [=ROMAN NUMERAL]

1. Fe(BrO₄)₃

2. PbS₂

3. Bi₂O₅

4. Sb₂O₅

5. CuI₂

6. BiPO₃

7. Ni(HCO₃)₃

8. Sn(NO₂)₄

9. FeHPO₄

10. PbI₄

11. Cd(NO₃)₂

12. Fe(OH)₃

13. MnO₂

14. Fe₂O₄

15. Cr₂O₃

16. AuCl₃

17. TiO₂

18. Ru(NO₃)₃

NAMING COMPOUNDS

MOLECULAR (NONMETALS ONLY!)

NONACIDS (NO STARTING HYDROGEN)

1. N_2O

2. CS_2

3. NI_3

4. SF_2

5. PCl_3

6. SeO_3

7. SiF_4

8. N_2F_4

9. NO

10. N_2Cl_2

11. $(NH_4)_2Se$

12. PCl_5

13. NH_4Cl

14. CO_2

15. NH_4F

16. $SiCl_4$

ACIDS (ALWAYS START WITH H)

BINARY ACIDS (H + NM)

1. $H_2Se_{(aq)}$

2. $HI_{(aq)}$

3. $H_2S_{(aq)}$

4. $H_3P_{(aq)}$

5. $HBr_{(aq)}$

6. $HF_{(aq)}$

7. $HCl_{(aq)}$

8. $H_2Te_{(aq)}$

9. $H_3As_{(aq)}$

OXYACIDS (H + NM + O)

1. $H_2SO_3_{(aq)}$

2. $HNO_2_{(aq)}$

3. $HClO_{(aq)}$

4. $H_3PO_4_{(aq)}$

5. $H_2SO_4_{(aq)}$

6. $HIO_3_{(aq)}$

7. $HClO_4_{(aq)}$

8. $HNO_3_{(aq)}$

9. $HBrO_3_{(aq)}$

10. $HFO_2_{(aq)}$

11. $HIO_2_{(aq)}$

12. $H_2CO_3_{(aq)}$

13. $H_2C_2O_4_{(aq)}$

14. $HC_2H_3O_2_{(aq)}$

15. $HClO_3_{(aq)}$

16. $HBrO_2_{(aq)}$

NAMING COMPOUNDS ~ ANSWER KEY

IONIC (METALS + NONMETALS)

FIXED (GREEN) CHARGE METALS

1. CsF
cesium fluoride
2. SrO₂
strontium oxide
3. Al(C₂H₃O₂)₃
aluminum acetate
4. Li₂S
lithium sulfide
5. ZnCl₂
zinc chloride
6. CdS
cadmium sulfide
7. BaI₂
barium iodide
8. AlCl₃
aluminum chloride
9. NaBr
sodium bromide
10. MgS
magnesium sulfide
11. AgNO₃
silver nitrate
12. NaCl
sodium chloride
13. MgSO₃
magnesium sulfite
14. Al₂O₃
aluminum oxide
15. Ag₂S
silver sulfide
16. RbBr
rubidium bromide
17. MgCl₂
magnesium chloride
18. NaBrO₃
sodium bromate

VARIABLE (RED) CHARGE METALS [=ROMAN NUMERAL]

1. Fe(BrO₄)₃
Iron (III) perbromate
2. PbS₂
Lead (IV) sulfide
3. Bi₂O₅
Bismuth (V) oxide
4. Sb₂O₅
Antimony (V) oxide
5. CuI₂
Copper (II) iodide
6. BiPO₃
Bismuth (III) phosphite
7. Ni(HCO₃)₃
Nickel (III) hydrogen carbonate
8. Sn(NO₂)₄
Tin (IV) nitrite
9. FeHPO₄
Iron (II) hydrogen phosphate
10. PbI₄
Lead (IV) iodide
11. Cd(NO₃)₂
Chromium (II) nitrate
12. Fe(OH)₃
Iron (III) hydroxide
13. MnO₂
Manganese (IV) oxide
14. Fe₂O₄
Iron (IV) oxide
15. Cr₂O₃
Chromium (III) oxide
16. AuCl₃
Gold (III) chloride
17. TiO₂
Titanium (II) oxide
18. Ru(NO₃)₃
Ruthenium (III) nitrate

NAMING COMPOUNDS ~ ANSWER KEY

MOLECULAR (NONMETALS ONLY!)

NONACIDS (NO STARTING HYDROGEN)

1. N_2O
Dinitrogen monoxide
2. CS_2
Carbon disulfide
3. NI_3
Nitrogen trioxide
4. SF_2
Sulfur difluoride
5. PCl_3
Phosphorus trichloride
6. SeO_3
Selenium trioxide
7. SiF_4
Silicon Tetrafluoride
8. N_2F_4
Dinitrogen tetrafluoride
9. NO
Nitrogen monoxide
10. N_2Cl_2
Dinitrogen dichloride
11. $(NH_4)_2Se$
Diammonium selenide
12. PCl_5
Phosphorus pentachloride
13. NH_4Cl
Ammonium monochloride
14. CO_2
Carbon dioxide
15. NH_4F
Ammonium monofluoride
16. $SiCl_4$
Silicon tetrachloride

ACIDS (ALWAYS START WITH H)

BINARY ACIDS (H + NM)

1. $H_2Se_{(aq)}$
Hydroselenic acid
2. $HI_{(aq)}$
Hydroiodic acid
3. $H_2S_{(aq)}$
Hydrosulfuric acid
4. $H_3P_{(aq)}$
Hydrophosphoric acid
5. $HBr_{(aq)}$
Hydrobromic acid
6. $HF_{(aq)}$
Hydrofluoric acid
7. $HCl_{(aq)}$
Hydrochloric acid
8. $H_2Te_{(aq)}$
Hydrotelluric acid
9. $H_3As_{(aq)}$
Hydroarsenic acid

OXYACIDS (H + NM + O)

1. $H_2SO_3_{(aq)}$
Sulfurous acid
2. $HNO_2_{(aq)}$
Nitrous acid
3. $HClO_{(aq)}$
Hypochlorous acid
4. $H_3PO_4_{(aq)}$
Phosphoric acid
5. $H_2SO_4_{(aq)}$
Sulfuric acid
6. $HIO_3_{(aq)}$
Iodic acid
7. $HClO_4_{(aq)}$
Perchloric acid
8. $HNO_3_{(aq)}$
Nitric acid
9. $HBrO_3_{(aq)}$
Bromic acid
10. $HFO_2_{(aq)}$
Fluorous acid
11. $HIO_2_{(aq)}$
Iodous acid
12. $H_2CO_3_{(aq)}$
Carbonic acid
13. $H_2C_2O_4_{(aq)}$
Oxalic acid
14. $HC_2H_3O_2_{(aq)}$
Acetic acid
15. $HClO_3_{(aq)}$
Chloric acid
16. $HBrO_2_{(aq)}$
Bromous acid