

make ~~no~~ corrections (marked with arrows)

Metals

Name: Key

①

Name the following compounds.

Write the formulae for the following compounds

- 1.) $\overset{+2}{\text{Ca}}\overset{-1}{\text{Cl}}_2$ Calcium Chloride
- 2.) $\overset{+1}{\text{Ag}}\overset{-1}{\text{Cl}}$ Silver Chloride
- 3.) $\overset{+2}{\text{Mg}}\overset{-2}{\text{O}}$ Magnesium Oxide
- ex 4.) NaBr Sodium Bromide
- 5.) Al_2O_3 Aluminum Oxide
- ex 6.) KI Potassium Iodide
- 7.) ZnCl_2 Zinc Chloride
- 8.) Li_2O Lithium Oxide
- 9.) BaO Barium Oxide
- 10.) KCl Potassium Chloride
- 11.) MgCl_2 Magnesium Chloride
- 12.) AgI Silver Iodide
- 13.) ZnS Zinc Sulphide
- 14.) BaF_2 Barium Fluoride
- 15.) Ca_3P_2 Calcium Phosphide
- 16.) Na_2O Sodium Oxide
- 17.) AlN Aluminium Nitride
- 18.) CaCl_2 Calcium Chloride
- 19.) K_2O Potassium Oxide
- 20.) H_2S Hydrogen Sulphide
- 21.) Na_3N Sodium Nitride
- 22.) LiF Lithium Fluoride
- 23.) AlCl_3 Aluminum Chloride
- 24.) NaCl Sodium Chloride

- ex 1.) $\overset{+1}{\text{Na}}\overset{-1}{\text{Cl}}$ Sodium Chloride NaCl
- 2.) $\overset{+1}{\text{K}}\overset{-1}{\text{Br}}$ Potassium Bromide KBr
- ex 3.) $\overset{+2}{\text{Ca}}\overset{-1}{\text{F}}_2$ Calcium Fluoride CaF_2
- 4.) $\overset{+2}{\text{Zn}}\overset{-2}{\text{O}}$ Zinc Oxide ZnO
- 5.) $\overset{+1}{\text{Ag}}\overset{-2}{\text{S}}$ Silver Sulphide Ag_2S
- 6.) $\overset{+1}{\text{K}}\overset{-2}{\text{S}}$ Potassium Sulphide K_2S
- 7.) $\overset{+2}{\text{Ba}}\overset{-1}{\text{H}}$ Barium Hydride BaH_2
- ex 8.) $\overset{+3}{\text{Al}}\overset{-2}{\text{S}}$ Aluminum Sulphide Al_2S_3
- 9.) $\overset{+1}{\text{Li}}\overset{-1}{\text{Cl}}$ Lithium Chloride LiCl
- 10.) $\overset{+2}{\text{Ca}}\overset{-1}{\text{I}}$ Calcium Iodide CaI_2
- 11.) $\overset{+2}{\text{Mg}}\overset{-3}{\text{P}}$ Magnesium Phosphide Mg_3P_2
- 12.) $\overset{+2}{\text{Zn}}\overset{-1}{\text{Br}}$ Zinc Bromide ZnBr_2
- 13.) $\overset{+1}{\text{Na}}\overset{-1}{\text{I}}$ Sodium Iodide NaI
- 14.) $\overset{+3}{\text{Al}}\overset{-4}{\text{C}}$ Aluminum Carbide Al_4C_3
- 15.) $\overset{+1}{\text{K}}\overset{-1}{\text{H}}$ Potassium Hydride KH
- 16.) $\overset{+1}{\text{Ag}}\overset{-2}{\text{O}}$ Silver Oxide Ag_2O
- 17.) $\overset{+2}{\text{Ca}}\overset{-4}{\text{Si}}$ Calcium Silicide Ca_2Si
- 18.) $\overset{+2}{\text{Zn}}\overset{-3}{\text{N}}$ Zinc Nitride Zn_3N_2
- 19.) $\overset{+1}{\text{Li}}\overset{-3}{\text{N}}$ Lithium Nitride Li_3N
- 20.) $\overset{+2}{\text{Ba}}\overset{-4}{\text{C}}$ Barium Carbide Ba_2C
- 21.) $\overset{+1}{\text{Na}}\overset{-1}{\text{H}}$ Sodium Hydride NaH
- 22.) $\overset{+2}{\text{Mg}}\overset{-1}{\text{F}}$ Magnesium Fluoride MgF_2
- 23.) $\overset{+2}{\text{Ca}}\overset{-2}{\text{S}}$ Calcium Sulphide CaS
- 24.) $\overset{+2}{\text{Ba}}\overset{-1}{\text{Cl}}$ Barium Chloride Ba_2Cl_2

"arrows" need to be corrected

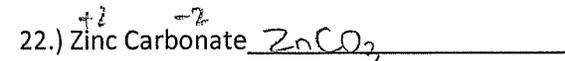
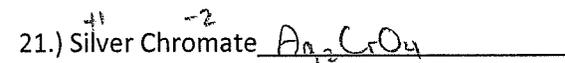
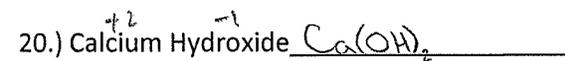
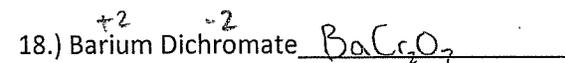
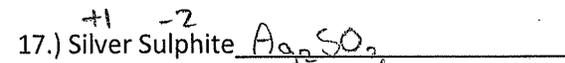
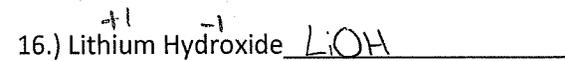
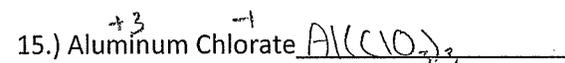
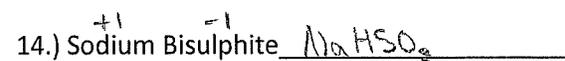
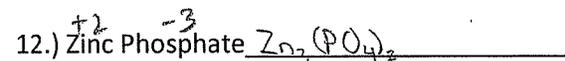
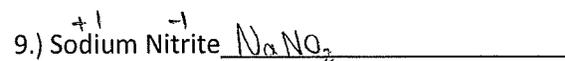
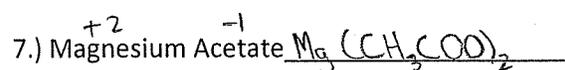
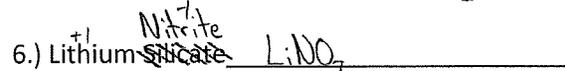
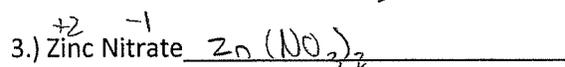
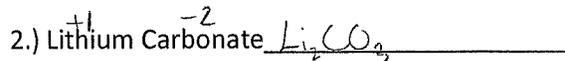
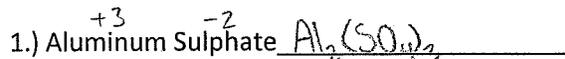
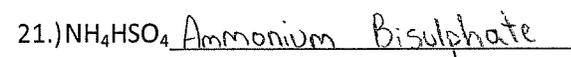
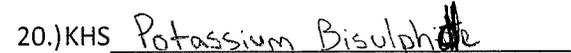
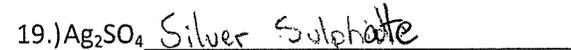
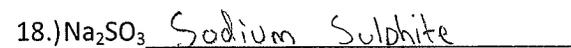
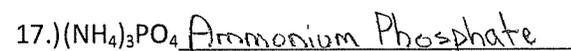
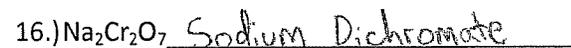
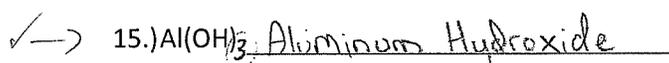
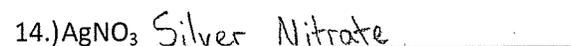
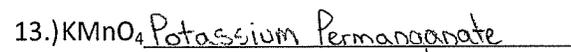
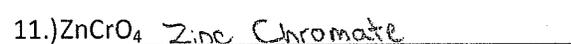
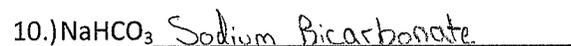
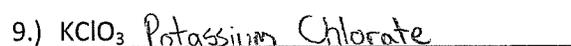
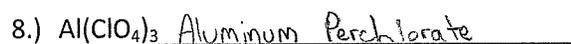
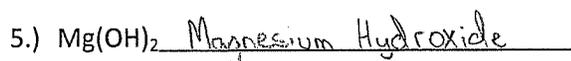
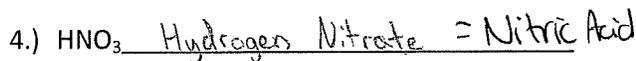
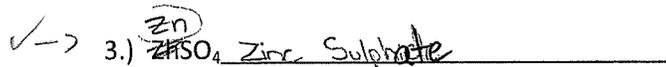
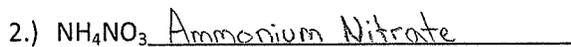
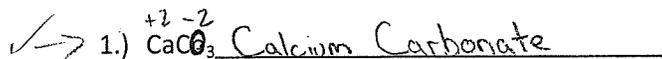
2

Polyatomics

Name: _____

Name the following compounds.

Write the formulae for the following compounds



Multivalent

Name: _____

Name the following compounds.

Write the formulae for the following compounds

- ex 1.) $^{+2}Cu^{+1}Cl$ Copper (I) Chloride
- 2.) $^{+2}Fe^{-2}O$ Iron (II) Oxide
- 3.) $^{+2}Hg^{-1}Br_2$ Mercury (II) Bromide
- ex 4.) $^{+2}Pb^{-2}O_2$ Lead(IV) Oxide
- 5.) $^{+3}Cr^{-2}S$ Chromium (II) Sulphide
- 6.) $^{+3}Fe^{-1}Cl_3$ Iron(III) Chloride
- 7.) $^{+3}Au^{-1}I$ Gold (I) Iodide
- 8.) $^{+2}Cu_2^{-2}O$ Copper (I) Oxide
- 9.) $^{+2}Pb^{-2}S$ Lead (II) Sulphide
- 10.) $^{+2}Hg^{-2}O$ Mercury (I) Oxide
- 11.) $^{+3}Fe_2^{-2}O_3$ Iron(III) Oxide
- 12.) $^{+3}Au^{-1}Br_3$ Gold (III) Bromide
- 13.) $^{+3}Cr^{-1}F_2$ Chromium (II) Fluoride
- 14.) $^{+2}Mn^{-2}S$ Manganese (II) Sulphide
- 15.) $^{+4}Sn^{-1}H_4$ Tin (IV) Hydride
- 16.) $^{+2}Sn^{-1}F_2$ Tin(II) Fluoride
- ex 17.) $^{+2}Cu^{+4}C^{-3}O_3$ Copper(II) Carbonate
- 18.) $^{+2}Pb^{-2}SO_3$ Lead (II) Sulphite
- 19.) $^{+3}Fe^{-1}(NO_3)_3$ Iron (III) Nitrate
- 20.) $^{+2}Sn^{-1}(C_2H_3O_2)_2$ Tin(II) Acetate
- 21.) $^{+2}Cu^{-2}SO_4$ Copper (I) Sulphate
- 22.) $^{+2}Hg^{-2}CrO_4$ Mercury (II) Chromate
- 23.) $^{+2}Pb^{-1}(NO_3)_2$ Lead(II) Nitrate
- 24.) $^{+3}Co^{-1}(OH)_3$ Cobalt (III) Hydroxide
- 25.) $^{+4}Sn^{-2}(SO_4)_2$ Tin (IV) Sulphate

- ex 1.) Cobalt (II) Chloride $CoCl_2$
- 2.) Potassium Bromide KBr ← normal, not multivalent
- 3.) Gold (III) Sulphide Au_2S_3
- 4.) Lead(II) Fluoride PbF_2
- 5.) Copper (I) Nitrite $CuNO_2$
- 6.) Manganese (III) Oxide Mn_2O_3
- 7.) Iron (III) Sulphide Fe_2S_3
- 8.) Tin (IV) Sulphide SnS_2
- 9.) Gold (I) Chloride $AuCl$
- 10.) Copper (II) Sulphide CuS
- ex 11.) Cobalt (III) Oxide Co_2O_3
- 12.) Manganese (III) Nitride MnN
- 13.) Mercury (II) Chlorate $Hg(ClO_3)_2$
- 14.) Lead (II) Dichromate $PbCr_2O_7$
- 15.) Chromium (III) Nitride CrN
- 16.) Manganese (III) Phosphate $MnPO_4$
- 17.) Tin (II) Sulphate $SnSO_4$
- 18.) Copper (II) Dichromate $CuCr_2O_7$
- 19.) Cobalt (II) Perchlorate $Co(ClO_4)_2$
- ex 20.) Iron (II) Acetate $Fe(CH_3COO)_2$
- 21.) Chromium (II) Sulphate $CrSO_4$
- 22.) Manganese (II) Carbonate $MnCO_3$
- 23.) Copper (II) Hydroxide $Cu(OH)_2$
- 24.) Tin (IV) Nitrate $Sn(NO_3)_4$
- 25.) Chromium (III) Acetate $Cr(CH_3COO)_3$

Naming Covalent Compounds (prefix method)

Name _____

- 1. CO Carbon Monoxide
- 2. CO₂ Carbon Dioxide
- 3. SO₂ Sulphur Dioxide
- 4. NO₂ Nitrogen Dioxide
- 5. N₂O Dinitrogen monoxide
- 6. N₂F dinitrogen monofluoride
- 7. SO₃ Sulphur trioxide
- 8. CCl₄ Carbon tetrachloride
- 9. NO Nitrogen monoxide
- 10. N₂O₅ dinitrogen pentaoxide
- 11. P₂O₅ diphosphorous pentaoxide
- 12. ~~N₂O₅~~ tricarbon octaiodide
- 13. ~~P₂O₅~~ tetranitrogen deca sulfide
- 14. N₂O₄ dinitrogen tetraoxide
- 15. CS₂ Carbon disulphide
- 16. OF₂ Oxygen difluoride
- 17. PCl₃ Phosphorous trichloride
- 18. P₂Br₆ diphosphorous hexabromide
- 19. Silicon ~~Tetra~~iodide SiI₄
- 20. Arsenic Trifluoride AsF₃
- 21. ~~Beryllium Oxide~~ BeO ~~Ionic~~
- 22. Xenon Gas Xe (not diatomic)
- 23. Diphosphorous Pentoxide P₂O₅
- 24. Carbon Monoxide CO
- 25. Carbon Pentafluoride CF₅
- 26. Selenium Dichloride SeCl₂
- 27. Carbon Dioxide CO₂
- 28. Silicon ~~Di~~sulphide SiS₂
- 29. Diboron Trisulphide B₂S₃
- 30. Phosphorous Trifluoride PF₃
- 31. Diiodine Heptaoxide I₂O₇
- 32. Phosphorous Trisulphide PS₃
- 33. Oxygen Difluoride OF₂
- 34. Chlorine Gas Cl₂

C₃I₈

~~Sulphur~~

~~to~~

N₄S₁₀

~~Sulphur~~

~~to~~

~~Selenium~~
~~tetra chloride~~

Nomenclature (mixed types):

Name _____

Write the correct formula for each of the following:

✓ →

- 1. Silver Chloride $\overset{+1}{\text{Ag}}\overset{-1}{\text{Cl}}$ AgCl
- 3. Strontium Fluoride $\overset{+2}{\text{Sr}}\overset{-1}{\text{F}}$ SrF₂
- 5. Potassium Nitrite $\overset{+1}{\text{K}}\overset{-1}{\text{NO}_2}$ KNO₂
- 7. Oxygen Gas O₂ *diatomic*
- 9. Tin(II) Bicarbonate $\overset{+2}{\text{Sn}}\overset{-1}{\text{HCO}_3}$ Sn(HCO₃)₂
- 11. Tin(IV) Sulphate $\overset{+4}{\text{Sn}}\overset{-2}{\text{SO}_4}$ Sn(SO₄)₂
- 13. Potassium Chlorite $\overset{+1}{\text{K}}\overset{-1}{\text{ClO}_2}$ KClO₂
- 15. Chromium (II) Oxide $\overset{+2}{\text{Cr}}\overset{-2}{\text{O}}$ CrO
- 17. Aluminium Oxide $\overset{+3}{\text{Al}}\overset{-2}{\text{O}_2}$ Al₂O₃
- 19. Hydrogen Bromide $\overset{+1}{\text{H}}\overset{-1}{\text{Br}}$ HBr
- 21. Iron Metal Fe
- 23. Silicon Dioxide $\overset{+4}{\text{Si}}\overset{-2}{\text{O}_2}$ SiO₂ *covalent*
- 25. Fluorine Gas F₂ *diatomic*
- 27. Rubidium Nitrite $\overset{+1}{\text{Rb}}\overset{-1}{\text{NO}_2}$ RbNO₂
- 29. Carbon Tetraiodide $\overset{+4}{\text{C}}\overset{-1}{\text{I}_4}$ CI₄ *covalent*
- 31. Iron (II) Carbonate $\overset{+2}{\text{Fe}}\overset{-2}{\text{CO}_3}$ FeCO₃
- 33. Lithium Dihydrogen Phosphate $\overset{+1}{\text{Li}}\overset{+1}{\text{H}_2}\overset{-3}{\text{PO}_4}$ LiH₂PO₄
- 35. Cadmium Acetate $\overset{+2}{\text{Cd}}\overset{-1}{\text{C}_2\text{H}_3\text{COO}}$ Cd(CH₃COO)₂
- 37. Boron Hydroxide $\overset{+3}{\text{B}}\overset{-1}{\text{OH}}$ B(OH)₃
- 39. Neon Gas Ne *noble gas*
- 41. Copper (II) Iodide $\overset{+2}{\text{Cu}}\overset{-1}{\text{I}_2}$ CuI₂
- 43. Aluminium Nitrate $\overset{+3}{\text{Al}}\overset{-1}{\text{NO}_3}$ Al(NO₃)₃
- 45. Silver Hydroxide $\overset{+1}{\text{Ag}}\overset{-1}{\text{OH}}$ AgOH
- 47. Sulphur Trioxide $\overset{+4}{\text{S}}\overset{-2}{\text{O}_3}$ SO₃ *covalent*
- 49. Iron (III) Sulphate $\overset{+3}{\text{Fe}}\overset{-2}{\text{SO}_4}$ Fe₂(SO₄)₃
- 51. Aluminium Bisulphite $\overset{+3}{\text{Al}}\overset{-1}{\text{HSO}_3}$ Al(HSO₃)₃

- 2. Zinc Sulphate $\overset{+2}{\text{Zn}}\overset{-2}{\text{SO}_4}$ ZnSO₄
- 4. Mercury (I) Nitrate $\overset{+1}{\text{Hg}}\overset{-1}{\text{NO}_3}$ HgNO₃
- 6. Lead (II) Hydroxide $\overset{+2}{\text{Pb}}\overset{-1}{\text{OH}}$ Pb(OH)₂
- 8. Hydrochloric Acid HCl
- 10. Zinc Fluoride $\overset{+2}{\text{Zn}}\overset{-1}{\text{F}}$ ZnF₂
- 12. Nitrogen Dioxide $\overset{+4}{\text{N}}\overset{-2}{\text{O}_2}$ NO₂ *covalent*
- 14. Lead(II) Chloride $\overset{+2}{\text{Pb}}\overset{-1}{\text{Cl}_2}$ PbCl₂
- 16. Bromine Gas Br₂ *diatomic*
- 18. Iron (III) Iodide $\overset{+3}{\text{Fe}}\overset{-1}{\text{I}_3}$ FeI₃
- 20. Sodium Dichromate $\overset{+6}{\text{Cr}_2}\overset{-2}{\text{O}_7}$ Na₂Cr₂O₇
- 22. Cobalt (II) Permanganate $\overset{+2}{\text{Co}}\overset{-1}{\text{MnO}_4}$ Co(MnO₄)₂
- 24. Sodium Chlorite $\overset{+1}{\text{Na}}\overset{-1}{\text{ClO}_2}$ NaClO₂
- 26. Sodium (Hydrogen Phosphate) $\overset{+1}{\text{Na}}\overset{-2}{\text{HPO}_4}$ Na₂HPO₄
- 28. Ammonium (Hydrogen Sulphite) $\overset{+1}{\text{NH}_4}\overset{-1}{\text{HSO}_3}$ NH₄HSO₃
- 30. Hydrogen Oxide $\overset{+1}{\text{H}}\overset{-2}{\text{O}}$ H₂ *water*
- 32. Gold (III) Nitrate $\overset{+3}{\text{Au}}\overset{-1}{\text{NO}_3}$ Au(NO₃)₃
- 34. Iron (III) Hydroxide $\overset{+3}{\text{Fe}}\overset{-1}{\text{OH}}$ Fe(OH)₃
- 36. Nickel Metal Ni
- 38. Strontium Sulphate $\overset{+2}{\text{Sr}}\overset{-2}{\text{SO}_4}$ SrSO₄
- 40. Barium Phosphate $\overset{+2}{\text{Ba}}\overset{-3}{\text{PO}_4}$ Ba₃(PO₄)₂
- 42. Ammonium Hydroxide $\overset{+1}{\text{NH}_4}\overset{-1}{\text{OH}}$ NH₄OH
- 44. Potassium Chromate $\overset{+6}{\text{Cr}}\overset{-2}{\text{O}_4}$ K₂CrO₄
- 46. Iron (III) Nitrate $\overset{+3}{\text{Fe}}\overset{-1}{\text{NO}_3}$ Fe(NO₃)₃
- 48. Aluminium Nitrite $\overset{+3}{\text{Al}}\overset{-1}{\text{NO}_2}$ Al(NO₂)₃
- 50. Barium Bicarbonate $\overset{+2}{\text{Ba}}\overset{-1}{\text{HCO}_3}$ Ba(HCO₃)₂
- 52. Zinc Phosphate $\overset{+2}{\text{Zn}}\overset{-3}{\text{PO}_4}$ Zn₃(PO₄)₂

← ✓

← ✓

- 53. Ammonium Perchlorate $\overset{+1}{N}H_4\overset{-1}{Cl}O_4$
- 55. Tin (II) Permanganate $\overset{+2}{Sn}(\overset{-1}{MnO_4})_2$
- 57. Magnesium Hydroxide $\overset{+2}{Mg}(\overset{-1}{OH})_2$
- 59. Magnesium Bisulphate $\overset{+2}{Mg}(\overset{-1}{HSO_4})_2$
- 61. Nitrogen Gas N_2 diatomic
- 63. Aluminum Sulphide $\overset{+3}{Al}_2\overset{-2}{S}_3$
- 65. Xenon Gas Xe noble gas
- 67. Mercury (I) Acetate $\overset{+1}{Hg}_2\overset{-1}{CH_3COO}$

- 54. Calcium Acetate $\overset{+2}{Ca}(\overset{-1}{CH_3COO})_2$
- 56. Calcium Sulphide $\overset{+2}{Ca}\overset{-2}{S}$
- 58. Sodium Metal Na
- 60. Mercury (II) Chloride $\overset{+2}{Hg}\overset{-1}{Cl}_2$
- 62. Hydrogen Sulphate $\overset{+1}{H}\overset{-2}{SO}_4$ *not a good question*
- 64. Hydrogen Iodide $\overset{+1}{H}\overset{-1}{I}$
- 66. Lithium Bicarbonate $\overset{+1}{Li}H\overset{-1}{CO}_3$
- 68. Sodium Oxide $\overset{+1}{Na}_2\overset{-2}{O}$

Write the name of the following compounds:

- 1. $\overset{+1}{Ag}I$ Silver Iodide
- 3. $\overset{+1}{Na}\overset{-1}{OH}$ Sodium Hydroxide
- 5. $\overset{+1}{H}\overset{-1}{NO}_3$ Hydrogen Nitrate
- 7. $\overset{+6}{K}_2\overset{-2}{Cr}_2O_7$ Potassium Dichromate
- 9. $\overset{+1}{NH}_4\overset{-1}{ClO}_2$ Ammonium Chlorite
- 11. $\overset{+3}{Al}\overset{-3}{PO}_4$ Aluminum Phosphate
- 13. $\overset{-4}{C}\overset{-1}{Cl}_4$ Carbon tetrachloride covalent
- 15. $\overset{+1}{H}\overset{-1}{NO}_2$ Hydrogen Nitrite
- 17. $\overset{+2}{Ca}(\overset{-2}{ClO_4})_2$ Calcium Perchlorate
- 19. N_2 Nitrogen gas diatomic
- 21. $\overset{+1}{H}_2\overset{-2}{S}$ Hydrogen Sulphide
- 23. $\overset{+2}{Mg}\overset{-2}{O}$ Magnesium Oxide
- 25. $\overset{+1}{Na}\overset{-1}{ClO}_3$ Sodium chlorate
- 27. $\overset{-2}{S}\overset{-2}{O}_3$ Sulphur trioxide covalent
- 29. $\overset{+3}{Cr}\overset{-2}{O}_3$ Chromium (III) Oxide
- 31. $\overset{+1}{Na}_2\overset{-2}{CrO}_4$ Sodium Chromate
- 33. $\overset{+1}{H}\overset{-1}{Cl}$ Hydrogen Chloride
- 35. $\overset{+2}{Cu}\overset{-2}{SO}_4$ Copper (I) Sulphate
- 37. $\overset{+3}{Fe}(\overset{-1}{ClO}_2)_2$ Iron (III) Chlorite
- 39. $\overset{-2}{S}\overset{-2}{O}_2$ Sulphur dioxide covalent

- 2. $\overset{+3}{Al}_2\overset{-2}{S}_3$ Aluminium Sulphide
- 4. $\overset{+1}{Na}_2\overset{-2}{SO}_3$ Sodium Sulphite
- 6. $\overset{+2}{Cu}\overset{-2}{SO}_4$ Copper (II) Sulphate
- 8. $\overset{-3}{N}\overset{-1}{I}_3$ Nitrogen triiodide covalent
- 10. $\overset{+1}{H}\overset{-1}{Br}$ Hydrogen Bromide
- 12. $\overset{+2}{Cu}(\overset{-1}{CH_3COO})_2$ Copper (II) Acetate
- 14. $\overset{+4}{Sn}\overset{-2}{SO}_4$ Tin (IV) Sulphate
- 16. $\overset{+1}{Rb}\overset{-1}{I}$ Rubidium Iodide
- 18. $\overset{+2}{Pb}\overset{-2}{CO}_3$ Lead (II) Carbonate
- 20. $\overset{+1}{K}\overset{-1}{MnO}_4$ Potassium Permanganate
- 22. $\overset{+2}{Ca}(\overset{-1}{OH})_2$ Calcium Hydroxide
- 24. $\overset{+2}{Pb}(\overset{-1}{NO}_3)_2$ Lead (II) Nitrate
- 26. $\overset{+6}{W}\overset{-1}{F}_6$ Tungsten Fluoride
- 28. $\overset{+1}{H}_3\overset{-3}{P}$ Trihydrogen Phosphate
- 30. $\overset{+2}{Pb}(\overset{-1}{NO}_3)_4$ Lead (IV) Nitrate
- 32. $\overset{+1}{NH}_4\overset{-1}{OH}$ Ammonium Hydroxide
- 34. $\overset{0}{Xe}\overset{-2}{O}_2$ Xenon dioxide covalent
- 36. $\overset{+2}{Cu}\overset{-2}{SO}_4$ Copper (I) Sulphate
- 38. $\overset{+3}{Au}\overset{-1}{Cl}_3$ Gold (III) Chloride
- 40. O_2 Oxygen gas diatomic