

You will use the rules for naming and writing formulas with the following periodic table and polyatomic ion chart

Periodic Table of Fictional Elements

Though the symbols and names are different, the normal patterns and rules that we learned apply.

Example: Af (Afraidium) would bond just as Aluminum does based on its position on the table.

1 H hydrominium 1.15																	2 Du Duust 4.30
3 Bz Bazoolium 6.84	4 Ju Jumbonium 9.21											13 Be Beerium 10.18	14 C Chorzium 12.84	15 P Poopium 14.38	16 O onionium 15.02	17 En Energon 17.50	18 Nb Noobium 20.17
11 Ax Axonium 22.99	12 Fz Fazon 24.50											13 Af Afraidium 25.48	14 Su Supermanium 28.08	15 N Nucleon 30.11	16 S Solarium 32.60	17 Cc Calculon 37.00	18 Az Amazonium 39.45
19 Je Jellium 39.71	20 Bo Bolonium 41.35	3 Nd Necrodermis 44.95	4 Mt Metatron 46.18	5 Vi Vibranium 49.91	6 Fi Fishium 51.99	7 Ms Moonsilver 54.93	8 Fg Figium 55.84	9 Cw Clownium 57.33	10 Gr Grapium 58.17	11 Ss Soulsteel 63.54	12 He Hellion 66.99	31 G Galvorn 68.07	32 Go Gorium 71.66	33 A Adamantium 74.92	34 St Slothium 78.96	35 Bt Bathorium 80.38	36 Kf Krafton 83.08
37 Cb Corbomium 84.16	38 Ct Catium 87.62	39 Nc Necrogen 88.21	40 Tb Tiberium 90.02	41 Ur Uridium 92.90	42 Pe Peasium 95.94	43 Bb Bombastium 98.74	44 Rs Redstone 101.99	45 Rd Randomonium 102.91	46 Et Eternium 106.40	47 Bn Blingidium 109.99	48 Db Dragonbane 112.41	49 Id Idolium 114.82	50 Sn Sinisium 118.69	51 Jo Jouronium 120.75	52 Tm Timonium 127.60	53 Cy Coyotium 126.90	54 Z Zunium 131.30
55 Ch Chronoton 132.93	56 Cp Capsidium 135.33	71 Pi Pieium 173.25	72 Wa Warpstone 178.49	73 Bz Byzantium 180.95	74 Sm Starmetal 183.85	75 Mc Magicon 186.21	76 Or Oricalcum 190.20	77 If Internium 192.22	78 Pm Possium 195.09	79 Tg Tigerium 196.97	80 Kg Kingen 200.59	81 Tm Targanium 204.37	82 Ps Psitanium 206.24	83 Bd Bendezium 208.12	84 Ph Phasium 209.55	85 Se Sealenium (210)	86 It Inerton (222)

Fictional Polyatomic Ion Chart

-1 ion		-2 ion		-3 ion	
Formula	name	Formula	name	Formula	name
PO ₂ ⁻¹	Poopite	SO ₃ ⁻²	Solarite	NO ₃ ⁻³	Nuclite
PO ₃ ⁻¹	Poopate	SO ₄ ⁻²	Solarate	NO ₄ ⁻³	Nuclate
CcO ⁻¹	Hypocalculite	CO ₄ ⁻²	chorzate		
CcO ₂ ⁻¹	Calculite	StO ₂ ⁻²	slothite		
CcO ₃ ⁻¹	Calculate	FiO ₄ ⁻²	fishate		
CcO ₄ ⁻¹	Percalculate	SuO ₃ ⁻²	superate	+1 ion	
OH ⁻¹	Hydroxide			PH ₄ ⁺¹	Pooponium
C ₂ H ₃ O ₂ ⁻¹	Acetate				

Other Reference Materials

1 mole = 22.4 Liters

1 mole = 6.02×10^{23} particles

1 mole = (molar mass) grams

___ mole A = ___ mole B

$$\text{percent composition} = \frac{\text{mass of element}}{\text{mass of compound}} \times 100$$

$$\text{percent composition} = \frac{\# \text{ of atoms (atomic mass)}}{\text{molar mass}} \times 100$$

$$\text{percent yield} = \frac{\text{actual yield}}{\text{theoretical yield}} \times 100$$

Fictional Elements Electronegativity Values

Be 2.0	C 2.5	P 3.0	O 3.5	En 4.0	Nb
Af 1.5	Su 1.8	N 2.1	S 2.5	Cc 3.0	Az
G 1.6	Go 1.8	A 2.0	St 2.4	Bt 2.8	Kf 3.0
Id 1.7	Sn 1.8	Jo 1.9	Tm 2.1	Cy 2.5	Z 2.6
Tm 1.8	Ps 1.8	Bd 1.9	Ph 2.0	Se 2.2	It 2.4

Solubility Rules for Fictional Ionic Compounds

Compounds	Solubility
Salts of Alkali Metals and Pooponium	Soluble
Poopate, Acetate and Calculate salts	Soluble
Solarate salts [except: Ps^{+2} , Bn^{+1} , Kg_2^{+2} , Cp^{+2} , Di^{+2} , and Bo^{+2} are insoluble]	Soluble
Calculides, Bathorides and Coyotides salts [except: Ps^{+2} , Bn^{+1} , Kg_2^{+2} are insoluble]	Soluble
Energides [except group 2, Ps^{+2} , Fg^{+3} are insoluble]	Soluble
Chorzate, Nuclate, and Fishate [except: Alkali Metals and Pooponium are soluble]	Insoluble
Hydroxides [except: Alkali Metals, Bo^{+2} , Di^{+2} , and Pooponium are soluble]	Insoluble
Solarides [except: Group 1, 2, and Pooponium are soluble]	Insoluble

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Molecular Geometry Reference Sheet

A is central atom, X is atom bonded to A.

A and X can be any element, even the same element.

Note: We are only interested in bonds and lone pairs around central atom (A). Lone pairs of electrons around other atoms (X) are not important for determining molecular shape (geometry) but MUST be shown in the structural formula (Lewis structure).

Picture	Shape (molecular geometry)	Picture	Shape (molecular geometry)
$\begin{array}{ c c } \hline \text{:A}\equiv\text{X} & \text{:}\ddot{\text{A}}\text{---X} \\ \hline \ddot{\text{A}}=\text{X} & \text{A}\text{---X} \\ \hline \end{array}$	Linear		Trigonal planar
$\begin{array}{c} \text{X---A---X} \\ \text{X=A=X} \\ \text{X---A}\equiv\text{X} \end{array}$	Linear		Trigonal pyramidal
$\begin{array}{c} \text{X---}\ddot{\text{A}}\text{---X} \\ \text{X---}\ddot{\text{A}}\text{:} \\ \\ \text{X} \end{array}$	Bent		Tetrahedral