|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 Hydro-genH1.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2HeliumHe4.0 |
| 3LithiumLi6.9 | 4Beryl-liumBe9.0 |  |  |  |  |  |  |  |  |  |  | 5BoronB10.8 | 6CarbonC12.0 | 7Nitro-genN14.0 | 8OxygenO16.0 | 9Fluor-ineF19.0 | 10NeonNe20.2 |
| 11SodiumNa23.0 | 12Magne-siumMg24.3 |  |  |  |  |  |  |  |  |  |  | 13Alumi-numAl27.0 | 14SiliconSi28.1 | 15Phos-phorousP31.0 | 16SulfurS32.1 | 17Chlor-ineCl35.5 | 18ArgonAr39.9 |
| 19Potas-siumK39.1 | 20Calc-iumCa40.1 | 21Scan-diumSc45.0 | 22Titan-iumTi47.9 | 23Vana-diumV50.9 | 24Chrom-iumCr52.0 | 25Manga-neseMn54.9 | 26IronFe55.8 | 27CobaltCo58.9 | 28NickelNi58.7 | 29CopperCu63.5 | 30ZincZn65.4 | 31Gall-iumGa69.7 | 32Germa-niumGe72.6 | 33ArsenicAs74.9 | 34Sele-niumSe79.0 | 35Brom-ineBr79.9 | 36Kryp-tonKr83.8 |
| 37Rubi-diumRb85.5 | 38Stron-tiumSr87.6 | 39YttriumY88.9 | 40Zirco-niumZr91.2 | 41Niob-iumNb92.9 | 42Molyb-denumMo95.9 | 43Tech-netiumTc(98) | 44Ruthe-niumRu101.1 | 45Rhod-iumRh102.9 | 46Palla-diumPd106.4 | 47SilverAg107.9 | 48Cad-miumCd112.4 | 49IndiumIn114.8 | 50TinSn118.7 | 51Anti-monySb121.8 | 52Tellu-riumTe127.6 | 53IodineI126.9 | 54XenonXe131.3 |
| 55CesiumCs132.9 | 56BariumBa137.3 | 57\*Lanth-anumLa138.9 | 72Hafn-iumHf178.5 | 73Tanta-lumTa180.9 | 74Tung-stenW183.8 | 75Rhen-iumRe186.2 | 76Osm-iumOs190.2 | 77IridiumIr192.2 | 78Plati-numPt195.1 | 79GoldAu197.0 | 80Merc-uryHg200.6 | 81Thall-iumTl204.4 | 82LeadPb207.2 | 83Bis-muthBi208.9 | 84Polo-niumPo(209) | 85Astat-ineAt(210) | 86RadonRn(222) |
| 87Fran-ciumFr(223) | 88RadiumRa(226) | 89\*\*Actin-iumAc(227) | 104Ruther-fordiumRf(261) | 105Dub-niumDb(262) | 106Seabor-giumSg(263) | 107Bohr-iumBh(262) | 108Hass-iumHs(265) | 109Metn-eriumMt(266) | 110Ununn-iliumUun(269) | 111Ununu-niumUuu(272) | 112Copern-iciumCp(277) | 113Ununt-riumUuh(?) | 114Ununt-etriumUuq(289) | 115Ununp-eniumUuh(?) | 116Ununh-exiumUuh(?) | 117Ununh-eptiumUuo(?) | 118Ununo-ctiumUuo(?) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 58\*CeriumCe140.1 | 59Prase-odymPr140.9 | 60Neody-miumNb144.2 | 61Prome-thiumPm(147) | 62Samar-iumSm150.4 | 63Euro-piumEu152.0 | 64Gado-liniumGd157.2 | 65Terb-iumTb158.9 | 66Dyspr-osiumDy162.5 | 67Hol-miumHo164.9 | 68ErbiumEr167.3 | 69Thul-iumTm168.9 | 70Ytter-biumYb173.0 | 71Lutet-iumLu175.0 |  |
|  |  |  | 90\*\*Thor-iumTh232.0 | 91Prota-ctinPa(231) | 92Uran-iumU(238) | 93Neptu-niumNp(237) | 94Pluto-niumPu(244) | 95Amer-iciumAm(243) | 96CuriumCm(247) | 97Berke-liumBk(247) | 98Calif-orniumCf(251) | 99Einst-einiumEs(252) | 100Ferm-iumFm(257) | 101Mende-leviumMd(258) | 102Nobel-iumNo(259) | 103Lawre-nciumLr(262) |  |

Prefixes for

non-metal

Compounds

 1 – mono

 2 – di

 3 – tri

 4 – tetra

 5 – penta

 6 – hexa

 7 – hepta

 8 – octa

 9 – nona

10 – deca

**Some Common Ions**

**CATIONS +1 +2 +3, +4 to +7**

hydrogen H+

lithium Li+ boron B3+

sodium Na+ magnesium Mg2+ aluminum Al3+

potassium K+ calcium Ca2+ gallium Ga3+

rubidium Rb+ strontium Sr2+ indium In3+

cesium Cs+ barium Ba2+ thallium Tl3+

silver Ag+  zinc Zn2+

 titanium(II) Ti2+ titanium (III) Ti3+ titanium (IV) Ti4+

 chromium (II) Cr2+ chromium (III) Cr3+ chromium (VI) Cr6+

 manganese (III) Mn3+ manganese (III) Mn5+ manganese (VII) Mn7+

iron (II) Fe2+ iron (III) Fe3+

copper (I) Cu+ copper (II) Cu2+

 zirconium (II) Zr2+ zirconium (III) Zr3+ zirconium (IV) Zr4+

 molybdenum Mo2+ molybdenum Mo3+ molybdenum Mo6+

tin (II) Sn2+ tin (IV) Sn4+

mercury (I) Hg22+ mercury (II) Hg2+

 lead (II) Pb2+ lead (IV) Pb4+

ammonium NH4+

**ANIONS -1 -2 -3, -4**

Hydride\* H- carbideC4-

fluoride F- oxide O2- nitride N3-

chloride Cl- sulfide S-2 phosphide P3-

bromide Br-

iodide I- oxalate C2O42-

thiosulfate S2O32-

**per**fluor**ate** **F**O4- chromate CrO42-

chlor**ate** **Cl**O3- dichromate Cr2O72-

brom**ite** **Br**O2-

**hypo**iod**ite** **I**O- hydrogen carbonate HCO3- carbonate CO32-

 dihydrogen phosphite H2PO3- hydrogen phosphite HPO32- phosphite PO33-

hydroxide OH- dihydrogen phosphate H2PO4- hydrogen phosphate HPO42- phosphate PO43-nitrite NO2- hydrogen sulfite HSO3- sulfite SO32-

nitrate NO3- hydrogen sulfate HSO4- sulfate SO42-

acetate C2H3O2- dihydrogen arsenite H2AsO3- hydrogen arsenite HAsO32- arsenite AsO33-

permanganate MnO4- dihydrogen arsenate H2AsO4- hydrogen arsenate HAsO42- arsenate AsO43-

thiocyanate -SCN-

cyanide -CN-

isocyanide -NC-

\*metals only