

| Name | Symbol | Mass | Abund. | Symbol | Mass | Abund. | Symbol | Mass | Abund. |
|------------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|
| Hydrogen | H(1) | 1.007825 | 99.99 | H(2) | 2.014102 | 0.015 | | | |
| Helium | He(3) | 3.016029 | .00014 | He(4) | 4.002603 | 100.00 | | | |
| Lithium | Li(6) | 6.015123 | 7.42 | Li(7) | 7.016005 | 92.58 | | | |
| Beryllium | Be(9) | 9.012183 | 100.00 | | | | | | |
| Boron | B(10) | 10.012938 | 19.80 | B(11) | 11.009305 | 80.20 | | | |
| Carbon | C(12) | 12.000000 | 98.90 | C(13) | 13.003355 | 1.10 | | | |
| Nitrogen | N(14) | 14.003074 | 99.63 | N(15) | 15.000109 | 0.37 | | | |
| Oxygen | O(16) | 15.994915 | 99.76 | O(17) | 16.999131 | 0.038 | O(18) | 17.999159 | 0.20 |
| Fluorine | F(19) | 18.998403 | 100.00 | | | | | | |
| Neon | Ne(20) | 19.992439 | 90.60 | Ne(21) | 20.993845 | 0.26 | Ne(22) | 21.991384 | 9.20 |
| Sodium | Na(23) | 22.989770 | 100.00 | | | | | | |
| Magnesium | Mg(24) | 23.985045 | 78.90 | Mg(25) | 24.985839 | 10.00 | Mg(26) | 25.982595 | 11.10 |
| Aluminum | Al(27) | 26.981541 | 100.00 | | | | | | |
| Silicon | Si(28) | 27.976928 | 92.23 | Si(29) | 28.976496 | 4.67 | Si(30) | 29.973772 | 3.10 |
| Phosphorus | P(31) | 30.973763 | 100.00 | | | | | | |
| Sulfur | S(32) | 31.972072 | 95.02 | S(33) | 32.971459 | 0.75 | S(34) | 33.967868 | 4.21 |
| | S(36) | 35.967079 | 0.020 | | | | | | |
| Chlorine | Cl(35) | 34.968853 | 75.77 | Cl(37) | 36.965903 | 24.23 | | | |
| Argon | Ar(36) | 35.967546 | 0.34 | Ar(38) | 37.962732 | 0.063 | Ar(40) | 39.962383 | 99.60 |
| Potassium | K(39) | 38.963708 | 93.20 | K(40) | 39.963999 | 0.012 | K(41) | 40.961825 | 6.73 |
| Calcium | Ca(40) | 39.962591 | 96.95 | Ca(42) | 41.958622 | 0.65 | Ca(43) | 42.958770 | 0.14 |
| | Ca(44) | 43.955485 | 2.086 | Ca(46) | 45.953689 | 0.004 | Ca(48) | 47.952532 | 0.19 |
| Scandium | Sc(45) | 44.955914 | 100.00 | | | | | | |
| Titanium | Ti(46) | 45.952633 | 8.00 | Ti(47) | 46.951765 | 7.30 | Ti(48) | 47.947947 | 73.80 |
| | Ti(49) | 48.947871 | 5.50 | Ti(50) | 49.944786 | 5.40 | | | |
| Vanadium | V(50) | 49.947161 | 0.25 | V(51) | 50.943963 | 99.75 | | | |
| Chromium | Cr(50) | 49.946046 | 4.35 | Cr(52) | 51.940510 | 83.79 | Cr(53) | 52.940651 | 9.50 |
| | Cr(54) | 53.938882 | 2.36 | | | | | | |
| Manganese | Mn(55) | 54.938046 | 100.00 | | | | | | |
| Iron | Fe(54) | 53.939612 | 5.80 | Fe(56) | 55.934939 | 91.72 | Fe(57) | 56.935396 | 2.20 |

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|-------------------|----------------|------------|--------|----------------|------------|-------|----------------|------------|-------|
| | Fe(58) | 57.933278 | 0.28 | | | | | | |
| Cobalt | Co(59) | 58.933198 | 100.00 | | | | | | |
| Nickel | Ni(58) | 57.935347 | 68.27 | Ni(60) | 59.930789 | 26.10 | Ni(61) | 60.931059 | 1.13 |
| | Ni(62) | 61.928346 | 3.59 | Ni(64) | 63.927968 | 0.91 | | | |
| Copper | Cu(63) | 62.929599 | 69.17 | Cu(65) | 64.927792 | 30.83 | | | |
| Zinc | Zn(64) | 63.929145 | 48.60 | Zn(66) | 65.926035 | 27.90 | Zn(67) | 66.927129 | 4.10 |
| | Zn(68) | 67.924846 | 18.80 | Zn(70) | 69.925325 | 0.60 | | | |
| Gallium | Ga(69) | 68.925581 | 60.10 | Ga(71) | 70.924701 | 39.90 | | | |
| Germanium | Ge(70) | 69.924250 | 20.50 | Ge(72) | 71.922080 | 27.40 | Ge(73) | 72.923464 | 7.80 |
| | Ge(74) | 73.921179 | 36.50 | Ge(76) | 75.921403 | 7.80 | | | |
| Arsenic | As(75) | 74.921596 | 100.00 | | | | | | |
| Selenium | Se(74) | 73.922477 | 0.90 | Se(76) | 75.919207 | 9.00 | Se(77) | 76.919908 | 7.60 |
| | Se(78) | 77.917304 | 23.50 | Se(80) | 79.916521 | 49.60 | Se(82) | 81.916709 | 9.40 |
| Bromine | Br(79) | 78.918336 | 50.69 | Br(81) | 80.916290 | 49.31 | | | |
| Krypton | Kr(78) | 77.920397 | 0.35 | Kr(80) | 79.916375 | 2.25 | Kr(82) | 81.913483 | 11.60 |
| | Kr(83) | 82.914134 | 11.50 | Kr(84) | 83.911506 | 57.00 | Kr(86) | 85.910614 | 17.30 |
| Rubidium | Rb(85) | 84.911800 | 72.17 | Rb(87) | 86.909184 | 27.84 | | | |
| Strontium | Sr(84) | 83.913428 | 0.56 | Sr(86) | 85.909273 | 9.86 | Sr(87) | 86.908902 | 7.00 |
| | Sr(88) | 87.905625 | 82.58 | | | | | | |
| Yttrium | Y(89) | 88.905856 | 100.00 | | | | | | |
| Zirconium | Zr(90) | 89.904708 | 51.45 | Zr(91) | 90.905644 | 11.27 | Zr(92) | 91.905039 | 17.17 |
| | Zr(94) | 93.906319 | 17.33 | Zr(96) | 95.908272 | 2.78 | | | |
| Niobium | Nb(93) | 92.906378 | 100.00 | | | | | | |
| Molybdenum | Mo(92) | 91.906809 | 14.84 | Mo(94) | 93.905086 | 9.25 | Mo(95) | 94.905838 | 15.92 |
| | Mo(96) | 95.904676 | 16.68 | Mo(97) | 96.906018 | 9.55 | Mo(98) | 97.905405 | 24.13 |
| | Mo(100) | 99.907473 | 9.63 | | | | | | |
| Ruthenium | Ru(96) | 95.907596 | 5.52 | Ru(98) | 97.905287 | 1.88 | Ru(99) | 98.905937 | 12.70 |
| | Ru(100) | 99.904218 | 12.60 | Ru(101) | 100.905581 | 17.00 | Ru(102) | 101.90434 | 31.60 |
| | Ru(104) | 103.905422 | 18.70 | | | | | | |
| Rhodium | Rh(103) | 102.905503 | 100.00 | | | | | | |
| Palladium | Pd(102) | 101.905609 | 1.02 | Pd(104) | 103.904026 | 11.14 | Pd(105) | 104.905075 | 22.33 |
| | Pd(106) | 105.903475 | 27.33 | Pd(108) | 107.903894 | 26.46 | Pd(110) | 109.905169 | 11.72 |

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|---------------------|----------------|----------------|------------|----------------|----------------|------------|----------------|------------------|
| Silver | Ag(107) | 106.905095 | 51.84 | Ag(109) | 108.904754 | 48.16 | | |
| Cadmium | Cd(106) | 105.906461 | 1.25 | Cd(110) | 109.903007 | 12.49 | Cd(111) | 110.904182 12.80 |
| | Cd(112) | 111.902761 | 24.13 | Cd(113) | 112.904401 | 12.22 | Cd(114) | 113.903361 28.73 |
| | Cd(116) | 115.904758 | 7.49 | | | | | |
| | Indium | In(113) | 112.904056 | 4.30 | In(115) | 114.903875 | 95.70 | |
| Tin | Sn(112) | 111.904826 | 0.97 | Sn(114) | 113.902784 | 0.65 | Sn(115) | 114.903348 0.36 |
| | Sn(116) | 115.901744 | 14.70 | Sn(117) | 116.902954 | 7.70 | Sn(118) | 117.901607 24.30 |
| | Sn(119) | 118.903310 | 8.60 | Sn(120) | 119.902199 | 32.40 | Sn(122) | 121.903440 4.60 |
| | Sn(124) | 123.905271 | 5.60 | | | | | |
| Antimony | Sb(121) | 120.903824 | 57.30 | Sb(123) | 122.904222 | 42.70 | | |
| Tellurium | Te(122) | 121.903055 | 2.60 | Te(123) | 122.904278 | 0.91 | Te(124) | 123.902825 4.82 |
| | Te(125) | 124.904435 | 7.14 | Te(126) | 125.903310 | 18.95 | Te(128) | 127.904464 31.69 |
| | Te(130) | 129.906229 | 33.80 | | | | | |
| | Iodine | I(127) | 126.904477 | 100.00 | | | | |
| Xenon | Xe(124) | 123.905894 | 0.10 | X(126) | 125.904281 | 0.09 | | |
| | Xe(128) | 127.903531 | 1.91 | Xe(129) | 128.904780 | 26.40 | Xe(130) | 129.903510 4.10 |
| | Xe(131) | 130.905076 | 21.20 | Xe(132) | 131.904148 | 26.90 | Xe(134) | 133.905395 10.40 |
| | Xe(136) | 135.907219 | 8.90 | | | | | |
| | Cesium | Cs(133) | 132.905433 | 100.00 | | | | |
| Barium | Ba(130) | 129.906277 | 0.11 | Ba(132) | 131.905042 | 0.10 | Ba(134) | 133.904490 2.42 |
| | Ba(135) | 134.905668 | 6.59 | Ba(136) | 135.904556 | 7.85 | Ba(137) | 136.905816 11.23 |
| | Ba(138) | 137.905236 | 71.70 | | | | | |
| | | | | | | | | |
| Lanthanum | La(138) | 137.907114 | 0.09 | La(139) | 138.906355 | 99.91 | | |
| Cerium | Ce(136) | 135.907140 | 0.19 | Ce(138) | 137.905996 | 0.25 | Ce(140) | 139.905442 88.48 |
| | Ce(142) | 141.909249 | 11.08 | | | | | |
| Praseodymium | Pr(141) | 140.907657 | 100.00 | | | | | |
| Neodymium | Nd(142) | 141.907731 | 27.13 | Nd(143) | 142.909823 | 12.18 | Nd(144) | 143.910096 23.80 |
| | Nd(145) | 144.912582 | 8.30 | Nd(146) | 145.913126 | 17.19 | Nd(148) | 147.916901 5.76 |
| | Nd(150) | 149.920900 | 5.64 | | | | | |
| | | | | | | | | |
| Samarium | Sm(144) | 143.912009 | 3.10 | Sm(147) | 146.914907 | 15.00 | Sm(148) | 147.914832 11.30 |
| | Sm(149) | 148.917193 | 13.80 | Sm(150) | 149.917285 | 7.40 | Sm(152) | 151.919741 26.70 |
| | Sm(154) | 153.922218 | 22.70 | | | | | |
| | | | | | | | | |
| Europium | Eu(151) | 150.919860 | 47.80 | Eu(153) | 152.921243 | 52.20 | | |
| Gadolinium | Gd(152) | 151.919803 | 0.200 | Gd(154) | 153.920876 | 2.18 | Gd(155) | 154.822629 14.80 |

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|-------------------|----------------|------------|--------|----------------|------------|-------|----------------|------------|-------|
| | Gd(156) | 155.922130 | 20.47 | Gd(157) | 156.923967 | 15.65 | Gd(158) | 157.924111 | 24.84 |
| | Gd(160) | 159.927061 | 21.86 | | | | | | |
| Terbium | Tb(159) | 158.925350 | 100.00 | | | | | | |
| Dysprosium | Dy(156) | 155.924287 | 0.060 | Dy(158) | 157.924412 | 0.10 | Dy(160) | 159.925203 | 2.34 |
| | Dy(161) | 160.926939 | 18.90 | Dy(162) | 161.926805 | 25.50 | Dy(163) | 162.928737 | 24.90 |
| | Dy(164) | 163.929183 | 28.20 | | | | | | |
| Holmium | Ho(165) | 164.930332 | 100.00 | | | | | | |
| | | | | | | | | | |
| Erbium | Er(162) | 161.928787 | 0.14 | Er(164) | 163.929211 | 1.61 | Er(166) | 165.930305 | 33.60 |
| | Er(167) | 166.932061 | 22.95 | Er(168) | 167.932383 | 26.80 | Er(170) | 169.935476 | 14.90 |
| Thulium | Tm(169) | 168.934225 | 100.00 | | | | | | |
| Ytterbium | Yb(168) | 167.933908 | 0.13 | Yb(170) | 169.934774 | 3.05 | Yb(171) | 170.936338 | 14.30 |
| | Yb(172) | 171.936393 | 21.90 | Yb(173) | 172.938222 | 16.12 | Yb(174) | 173.938873 | 31.80 |
| | Yb(176) | 175.942576 | 12.70 | | | | | | |
| Lutetium | Lu(175) | 174.940785 | 97.40 | Lu(176) | 175.942694 | 2.60 | | | |
| Hafnium | Hf(174) | 173.940065 | 0.16 | Hf(176) | 175.941420 | 5.20 | Hf(177) | 176.943233 | 18.60 |
| | Hf(178) | 177.943710 | 27.10 | Hf(179) | 178.945827 | 13.74 | Hf(180) | 179.946561 | 35.20 |
| | | | | | | | | | |
| Tantalum | Ta(180) | 179.947489 | 0.012 | Ta(181) | 180.948014 | 99.99 | | | |
| Tungsten | W(180) | 179.946727 | 0.13 | W(182) | 181.948225 | 26.30 | W(183) | 182.950245 | 14.30 |
| | W(184) | 183.950953 | 30.67 | W(186) | 185.954377 | 28.60 | | | |
| Rhenium | Re(185) | 184.952977 | 37.40 | Re(187) | 186.955765 | 62.60 | | | |
| Osmium | Os(184) | 183.952514 | 0.02 | Os(186) | 185.953852 | 1.58 | Os(187) | 186.955762 | 1.60 |
| | Os(188) | 187.955850 | 13.30 | Os(189) | 188.958156 | 16.10 | Os(190) | 189.958455 | 26.40 |
| | Os(192) | 191.961487 | 41.00 | | | | | | |
| Iridium | Ir(191) | 190.960603 | 37.30 | Ir(193) | 192.962942 | 62.70 | | | |
| | | | | | | | | | |
| Platinum | Pt(190) | 189.959937 | 0.010 | Pt(192) | 191.961049 | 0.79 | Pt(194) | 193.962679 | 32.90 |
| | Pt(195) | 194.964785 | 33.80 | Pt(196) | 195.964947 | 25.30 | Pt(198) | 197.967879 | 7.20 |
| Gold | Au(197) | 196.966560 | 100.00 | | | | | | |
| Mercury | Hg(196) | 195.965812 | 0.15 | Hg(198) | 197.966760 | 10.10 | Hg(199) | 198.968269 | 17.00 |
| | Hg(200) | 199.968316 | 23.10 | Hg(201) | 200.970293 | 13.20 | Hg(202) | 201.970632 | 29.65 |
| | Hg(204) | 203.973481 | 6.80 | | | | | | |
| Thallium | Tl(203) | 202.972336 | 29.52 | Tl(205) | 204.974410 | 70.48 | | | |
| Lead | Pb(204) | 203.973037 | 1.40 | Pb(206) | 205.974455 | 24.10 | Pb(207) | 206.975885 | 22.10 |
| | Pb(208) | 207.976641 | 52.40 | | | | | | |

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|----------------|----------------|------------|--------|---------------|------------|------|---------------|------------------|
| Bismuth | Bi(209) | 208.980388 | 100.00 | | | | | |
| Thorium | Th(232) | 232.038054 | 100.00 | | | | | |
| Uranium | U(234) | 234.040947 | 0.006 | U(235) | 235.043925 | 0.72 | U(238) | 238.050786 99.27 |