

PERIODIC TABLE OF THE ELEMENTS

1 IA																	18 VIIIA
1 H Hydrogen 1.008 1																	2 He Helium 4.003 2
2 Li Lithium 6.941 2	3 Be Beryllium 9.012 22																
3 Na Sodium 22.990 281	4 Mg Magnesium 24.305 282																
4 K Potassium 39.098 2881	5 Ca Calcium 40.078 2882	6 Sc Scandium 44.956 2892	7 Ti Titanium 47.867 28102	8 V Vanadium 50.942 28112	9 Cr Chromium 51.996 28131	10 Mn Manganese 54.938 28132	11 Fe Iron 55.845 28142	12 Co Cobalt 58.933 28152	13 Ni Nickel 58.693 28162	14 Cu Copper 63.546 28181	15 Zn Zinc 65.38 28182	16 Ga Gallium 69.723 28183	17 Ge Germanium 72.631 28184	18 As Arsenic 74.922 28185	19 Se Selenium 78.971 28186	20 Br Bromine 79.904 28187	21 Kr Krypton 83.798 28188
5 Rb Rubidium 85.468 281881	6 Sr Strontium 87.62 281882	7 Y Yttrium 88.906 281892	8 Zr Zirconium 91.224 2818102	9 Nb Niobium 92.906 2818121	10 Mo Molybdenum 95.95 2818131	11 Tc Technetium 98.907 2818132	12 Ru Ruthenium 101.07 2818151	13 Rh Rhodium 102.906 2818161	14 Pd Palladium 106.42 281818	15 Ag Silver 107.868 2818181	16 Cd Cadmium 112.414 2818182	17 In Indium 114.818 2818183	18 Sn Tin 118.711 2818184	19 Sb Antimony 121.760 2818185	20 Te Tellurium 127.6 2818186	21 I Iodine 126.904 2818187	22 Xe Xenon 131.293 2818188
6 Cs Cesium 132.905 28181881	7 Ba Barium 137.328 28181882	8 Lanthanoids	9 Hf Hafnium 178.49 281832102	10 Ta Tantalum 180.948 281832112	11 W Tungsten 183.84 281832122	12 Re Rhenium 186.207 281832132	13 Os Osmium 190.23 281832142	14 Ir Iridium 192.217 281832152	15 Pt Platinum 195.085 281832171	16 Au Gold 196.967 281832181	17 Hg Mercury 200.592 281832182	18 Tl Thallium 204.383 281832183	19 Pb Lead 207.2 281832184	20 Bi Bismuth 208.980 281832185	21 Po Polonium [208.982] 281832186	22 At Astatine 209.987 281832187	23 Rn Radon 222.018 281832188
7 Fr Francium 223.020 2818321881	8 Ra Radium 226.025 2818321882	9 Actinoids	10 Rf Rutherfordium [261] 28183232102	11 Db Dubnium [262] 28183232112	12 Sg Seaborgium [266] 28183232122	13 Bh Bohrium [264] 28183232132	14 Hs Hassium [269] 28183232142	15 Mt Meitnerium [278] 28183232152	16 Ds Darmstadtium [281] 28183232162	17 Rg Roentgenium [280] 28183232172	18 Cn Copernicium [285] 28183232182	19 Nh Nihonium [286] 28183232183	20 Fl Flerovium [289] 28183232184	21 Mc Moscovium [289] 28183232185	22 Lv Livermorium [293] 28183232186	23 Ts Tennessine [294] 28183232187	24 Og Oganesson [294] 28183232188

Group (IUPAC) — 11
Group (CAS) — IB

Atomic Number — 79
Symbol — Au
Name — Gold
Atomic Mass — 196.967

Oxidation States — +3, +1

Electron Shell Configuration — 2 8 18 32 18 1

ELECTRON SHELLS

Energy Level	1	2	3	4	5	6	7	8
Shell Name	K	L	M	N	O	P	Q	R
Max. Electrons	2	8	18	32	32	18	8	2
s	2	2	2	2	2	2	2	2
p		6	6	6	6	6		
d			10	10	10	10		
f				14	14			

Lanthanoids

57 La Lanthanum 138.905 28181892	58 Ce Cerium 140.116 28181992	59 Pr Praseodymium 140.908 28182182	60 Nd Neodymium 144.243 28182282	61 Pm Promethium 144.913 28182382	62 Sm Samarium 150.36 28182482	63 Eu Europium 151.964 28182582	64 Gd Gadolinium 157.25 28182592	65 Tb Terbium 158.925 28182782	66 Dy Dysprosium 162.500 28182882	67 Ho Holmium 164.930 28182982	68 Er Erbium 167.259 28183082	69 Tm Thulium 168.934 28183182	70 Yb Ytterbium 173.055 28183282	71 Lu Lutetium 174.967 28183292
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Actinoids

89 Ac Actinium 227.028 2818321892	90 Th Thorium 232.038 28183218102	91 Pa Protactinium 231.036 2818322092	92 U Uranium 238.029 2818322192	93 Np Neptunium 237.048 2818322292	94 Pu Plutonium 244.064 2818322482	95 Am Americium 243.061 2818322582	96 Cm Curium 247.070 2818322592	97 Bk Berkelium 247.070 2818322782	98 Cf Californium 251.080 2818322882	99 Es Einsteinium [254] 2818322982	100 Fm Fermium 257.095 2818323082	101 Md Mendelevium 258.1 2818323182	102 No Nobelium 259.101 2818323282	103 Lr Lawrencium [262] 2818323283
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