MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM

2002 Massachusetts Comprehensive Assessment System

Periodic Table of the Elements

Group (Family)

Period	1A 1	2A 2	3B 3	4B 4	5B 5	6B 6	7B 7	8B 8	8B 9	8B 10	1B 11	2B 12	3A 13	4A 14	5A 15	6A 16	7A 17	8A 18
1	1.00794 H 1 Hydrogen																	4.00260 He 2 Helium
2	6.941 Li 3 Lithium	9.01218 Be 4 Beryllium											10.81 B 5 Boron	12.0111 C 6 Carbon	14.0067 N 7 Nitrogen	15.9994 O 8 Oxygen	18.998403 F 9 Fluorine	20.179 Ne 10 Neon
3	22.98977 Na 11 Sodium	24.305 Mg 12 Magnesium											26.98154 Al 13 Aluminum	28.0855 Si 14 Silicon	30.97376 P 15 Phosphorus	32.06 S 16 Sulfur	35.453 Cl 17 Chlorine	39.948 Ar 18 Argon
4	39.0983 K 19 Potassium	40.08 Ca 20 Calcium	44.9559 Sc 21 Scandium	47.88 Ti 22 Titanium	50.9415 V 23 Vanadium	51.996 Cr 24 Chromium	54.9380 Mn 25 Manganese	55.847 Fe 26 Iron	58.9332 Co 27 Cobalt	58.69 Ni 28 Nickel	63.546 Cu 29 Copper	65.39 Zn 30 Zinc	69.72 Ga 31 Gallium	72.59 Ge 32 Germanium	74.9216 As 33 Arsenic	78.96 Se 34 Selenium	79.904 Br 35 Bromine	83.80 Kr 36 Krypton
5	85.4678 Rb 37 Rubidium	87.62 Sr 38 Strontium	88.9059 Y 39 Yttrium	91.224 Zr 40 Zirconium	92.9064 Nb 41 Niobium	95.94 Mo 42 Molybdenum	(98) Tc 43 Technetium	101.07 Ru 44 Ruthenium	102.905 Rh 45 Rhodium	106.42 Pd 46 Palladium	107.868 Ag 47 Silver	112.41 Cd 48 Cadmium	114.82 In 49 Indium	118.71 Sn 50 Tin	121.75 Sb 51 Antimony	127.60 Te 52 Tellurium	126.905 I 53 Iodine	131.29 Xe 54 Xenon
6	132.905 Cs 55 Cesium	137.33 Ba 56 Barium	138.906 La 57 Lanthanum	178.49 Hf 72 Hafnium	180.948 Ta 73 Tantalum	183.85 W 74 Tungsten	186.207 Re 75 Rhenium	190.2 Os 76 Osmium	192.22 Ir 77 Iridium	195.08 Pt 78 Platinum	196.967 Au 79 Gold	200.59 Hg 80 Mercury	204.383 Tl 81 Thallium	207.2 Pb 82 Lead	208.980 Bi 83 Bismuth	(209) Po 84 Polonium	(210) At 85 Astatine	(222) Rn 86 Radon
7	(223) Fr 87 Francium	226.025 Ra 88 Radium	227.028 Ac 89 Actinium	(261) Rf* 104 Rutherfordium	(262) Db 105 Dubnium	(263) Sg 106 Seaborgium	(262) Bh 107 Bohrium	(265) Hs 108 Hassium	(266?) Mt 109 Meitnerium	(269?) 110	111	112	113	114	115	116	117	118

Mass numbers in parentheses are those of the most stable or most common isotope.

Lanthanide Series	140.12 Ce 58 Cerium	140.908 Pr 59 Praseodymium	144.24 Nd 60 Neodymium	(145) Pm 61 Promethium	150.36 Sm 62 Samarium	151.96 Eu 63 Europium	157.25 Gd 64 Gadolinium	158.925 Tb 65 Terbium	162.50 Dy 66 Dysprosium	164.930 Ho 67 Holmium	167.26 Er 68 Erbium	168.934 Tm 69 Thulium	173.04 Yb 70 Ytterbium	174.967 Lu 71 Lutetium
Actinide Series	232.038 Th 90 Thorium	231.036 Pa 91 Protactinium	238.029 U 92 Uranium	237.048 Np 93 Neptunium	(244) Pu 94 Plutonium	(243) Am 95 Americium	(247) Cm 96 Curium	(247) Bk 97 Berkelium	(251) Cf 98 Californium	(252) Es 99 Einsteinium	(257) Fm 100 Fermium	(258) Md 101 Mendelevium	(259) No 102 Nobelium	(260) Lr 103 Lawrencium

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