

# WebElements: the periodic table on the world-wide web

http://www.webelements.com/

Negretary   Negr	1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
He	hydrogen																		
10.076   1	1 1																		
10.076   1	H																		He
Element name atomic number   Symbol				Mana															
Secondary   Seco		bervllium	•			element name	2							boron	carbon	nitrogen	oxvaen	fluorine	
Symbol		-														7			
According   Scandium   Scandium		Da														NI			
Social color   Soci		Бе			S	ymp	OI							B		N	U		иe
11			atomic weight (mean relative mass)																20.180
Na																			
22,990   24,305   potassium   calcium   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   86   80   80   80   80   80   80   80														13					
22.990   24.305   potassium   calcium   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   38   34   35   36   39.948   39.948   39.948   30.948	Na	Mg												Al	Si	P	S	CI	Ar
Potassium   Calcium   19   20   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   36   36   35   36   36   36   36	22.990													26.982	28.086	30.974	32.065	35.453	39.948
Sc   Ti			•	scandium	titanium	vanadium	chromium	manganese	iron	cobalt	nickel	copper	zinc						
39.98   40.078   44.956   47.867   50.942   51.996   54.938   55.845   58.933   58.693   63.546   65.39   69.723   72.61   74.922   78.96   79.904   83.80	19	20		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Tubidium   Strontium   37   38   38   39   40   41   42   43   44   45   46   47   48   49   50   51   52   53   54	K	Ca		Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
37   38   X   X   X   X   X   X   X   X   X	39.098	40.078		44.956	47.867	50.942	51.996	54.938	55.845	58.933	58.693	63.546	65.39	69.723	72.61	74.922	78.96	79.904	83.80
Rb   Sr   Sr   Sr   Sr   Sr   Sr   Sr   S						niobium	molybdenum		ruthenium		palladium	silver							
85.468   87.62   88.906   91.224   92.906   95.94   98   101.07   102.91   106.42   107.87   112.41   114.82   118.71   121.76   127.60   126.90   131.29   126.90				39				43	44		46	47	48	49	50		52	53	
85.468   87.62   88.906   91.224   92.906   95.94   [98]   101.07   102.91   106.42   107.87   112.41   114.82   118.71   121.76   127.60   126.90   131.29	Rb	Sr		Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te		Xe
CS BA * Lu Hf TA W Re OS Ir Pt Au Hg Isonomic Indium Seaborgium B7 108 109 100 101 111 112 113 114 115 116 Fr Ra ** Lr Rf Db Sg Bh Hs Mt Ds Rg Uub Uut Uuq Uup Uuh	85.468	87.62		88.906	91.224	92.906	95.94	[98]	101.07	102.91	106.42		112.41	114.82	118.71	121.76	127.60	126.90	131.29
Cs         Ba         *         Lu         Hf         Ta         W         Re         Os         Ir         Pt         Au         Hg         TI         Pb         Bi         Po         At         Rn           132.91         137.33         137.33         178.49         180.95         183.84         186.21         190.23         192.22         195.08         196.97         200.59         204.38         207.2         208.98         [209]         [210]         [222]           francium 87         88         89-102         103         104         105         106         107         108         109         110         111         112         113         114         115         116           Fr         Ra         ***         Lr         Rf         Db         Sg         Bh         Hs         Mt         Ds         Rg         Uub         Uut         Uuq         Uup         Uuh								rhenium											
132.91   137.33   174.97   178.49   180.95   183.84   186.21   190.23   192.22   195.08   196.97   200.59   204.38   207.2   208.98   [209]   [210]   [222]   [223]	55	56	57-70	71		73	74	75	76	77	78	79		81	82		84	85	86
132.91   137.33   174.97   178.49   180.95   183.84   186.21   190.23   192.22   195.08   196.97   200.59   204.38   207.2   208.98   [209]   [210]   [222]   195.08   196.97   200.59   204.38   207.2   208.98   [209]   [210]   [222]   [210]   [222]   [222]   [223]   [233]   [	Cs	Ba	*	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	TI	Pb	Bi	Po	At	Rn
Fr Ra ** Lr Rf Db Sg Bh Hs Mt Ds Rg Uub Uut Uuq Uup Uuh													200.59					[210]	[222]
Fr Ra ** Lr Rf Db Sg Bh Hs Mt Ds Rg Uub Uut Uuq Uup Uuh																			
	_			_							110		112				116		
	Fr	Ra	**	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Uub	Uut	Uuq	Uup	Uuh		
	[223]	[226]		[262]	[261]	[262]	[266]	[264]	[269]	[268]	[281]		[285]	[284]	[289]	[288]	[292]		

	lanthanum <b>57</b>	cerium <b>58</b>	praseodymium <b>59</b>	neodymium <b>60</b>	promethium <b>61</b>	samarium <b>62</b>	europium <b>63</b>	gadolinium <b>64</b>	terbium <b>65</b>	dysprosium <b>66</b>	holmium <b>67</b>	erbium <b>68</b>	thulium <b>69</b>	ytterbium <b>70</b>
*lanthanoids	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
	138.91	140.12	140.91	144.24	[145]	150.36	151.96	157.25	158.93	162.50	164.93	167.26	168.93	173.04
	actinium	thorium	protactinium	uranium	neptunium	plutonium	americium	curium	berkelium	californium	einsteinium	fermium	mendelevium	nobelium
	89	90	91	92	93	94	95	96	97	98	99	100	101	102
**actinoids	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No
	[227]	232.04	231.04	238.03	[237]	[244]	[243]	[247]	[247]	[251]	[252]	[257]	[258]	[259]

Symbols and names: the symbols and names of the elements, and their spellings are those recommended by the International Union of Pure and Applied Chemistry (IUPAC - http://www.iupac.org/). Names have yet to be proposed for the most recently discovered elements 111–112 and 114 so those used here are IUPAC's temporary systematic names. In the USA and some other countries, the spellings aluminum and cesium are normal while in the UK and elsewhere the common spelling is sulphur. Group labels: the numeric system (1–18) used here is the current IUPAC convention.

Atomic weights (mean relative masses): Apart from the heaviest elements, these are the IUPAC 2001 values and given to 5 significant figures. Elements for which the atomic weight is given within square brackets have no stable nuclides and are represented by the element's longest lived isotope.

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#### **Web Links**

If you are connected to the InterNet and your Adobe Acrobat software is sufficiently current, click on any of the elements in the periodic table from within the Adobe Acrobat reader to retrieve information about that element from the WebElements site. To do this, you will need an appropriate Web browser program. You may need to update your Adobe Acrobat Reader program [http://www.adobe.com/acrobat/].

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