

24/7 Chemistry Notes: Periodic Trends

Atomic Radius (size)

Periodic Table of the Elements

Atomic number — 14

Symbol — **Si**

Atomic mass — 28.086

Silicon — Name

Group 1												Group 18																							
1	H 1.008 Hydrogen											2	He 4.0026 Helium																						
2	Li 6.941 Lithium	3	Be 9.012 Beryllium											10	Ne 20.179 Neon																				
3	Na 22.990 Sodium	4	Mg 24.305 Magnesium											18	Ar 39.948 Argon																				
4	K 39.098 Potassium	20	Ca 40.08 Calcium	21	Sc 44.956 Scandium	22	Ti 47.88 Titanium	23	V 50.942 Vanadium	24	Cr 51.996 Chromium	25	Mn 54.938 Manganese	26	Fe 55.847 Iron	27	Co 58.933 Cobalt	28	Ni 58.69 Nickel	29	Cu 63.546 Copper	30	Zn 65.39 Zinc	31	Ga 69.72 Gallium	32	Ge 72.61 Germanium	33	As 74.922 Arsenic	34	Se 78.96 Selenium	35	Br 79.904 Bromine	36	Kr 83.80 Krypton
5	Rb 85.468 Rubidium	38	Sr 87.62 Strontium	39	Y 88.906 Yttrium	40	Zr 91.224 Zirconium	41	Nb 92.906 Niobium	42	Mo 95.94 Molybdenum	43	Tc (98) Technetium	44	Ru 101.07 Ruthenium	45	Rh 101.07 Rhodium	46	Pd 106.42 Palladium	47	Ag 107.868 Silver	48	Cd 112.41 Cadmium	49	In 114.82 Indium	50	Sn 118.71 Tin	51	Sb 121.763 Antimony	52	Te 127.60 Tellurium	53	I 126.904 Iodine	54	Xe 131.29 Xenon
6	Cs 132.905 Cesium	56	Ba 137.33 Barium	57	La 138.906 Lanthanum	72	Hf 178.49 Hafnium	73	Ta 180.948 Tantalum	74	W 183.84 Tungsten	75	Re 186.207 Rhenium	76	Os 190.23 Osmium	77	Ir 192.22 Iridium	78	Pt 195.08 Platinum	79	Au 196.967 Gold	80	Hg 200.59 Mercury	81	Tl 204.383 Thallium	82	Pb 207.2 Lead	83	Bi 208.980 Bismuth	84	Po (209) Polonium	85	At (210) Astatine	86	Rn (222) Radon
7	Fr (223) Francium	88	Ra 226.025 Radium	89	Ac 227.028 Actinium	104	Rf (261) Rutherfordium	105	Db (262) Dubnium	106	Sg (263) Seaborgium	107	Bh (262) Bohrium	108	Hs (265) Hassium	109	Mt (266) Meitnerium	110	(269) Darmstadtium																

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

Lanthanide Series

58	Ce 140.12 Cerium	59	Pr 140.908 Praseodymium	60	Nd 144.24 Neodymium	61	Pm (145) Promethium	62	Sm 150.36 Samarium	63	Eu 151.97 Europium	64	Gd 157.25 Gadolinium	65	Tb 158.925 Terbium	66	Dy 162.50 Dysprosium	67	Ho 164.930 Holmium	68	Er 167.26 Erbium	69	Tm 168.934 Thulium	70	Yb 173.04 Ytterbium	71	Lu 174.967 Lutetium
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Actinide Series

90	Th 232.038 Thorium	91	Pa 231.036 Protactinium	92	U 238.029 Uranium	93	Np 237.048 Neptunium	94	Pu (244) Plutonium	95	Am (243) Americium	96	Cm (247) Curium	97	Bk (247) Berkelium	98	Cf (251) Californium	99	Es (252) Einsteinium	100	Fm (257) Fermium	101	Md (258) Mendelevium	102	No (259) Nobelium	103	Lr (262) Lawrencium
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Ionization Energy- the amount of energy required to remove an electron

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Ionic Radius

Cation

Anion

Quick Summary:

Atomic Radius _____

Ionization Energy _____

Electronegativity _____

Cations are _____ than the atom.

Anions are _____ than the atom.