

Energy levels
grow as group ↑

The Periodic Table of the Elements

Predicting the Charge of Ions

- 1+
- 2+
- 3+
- 4+/-
- 3-
- 2-
- 1-

Predicting the Charge of Ions																	
1		2		3		4		5		6		7		8		9	
1	H	3	Li	4	Be	5	B	6	C	7	N	8	O	9	F	10	Ne
	Hydrogen 1.00794		Lithium 6.941		Beryllium 9.012182		Boron 10.811		Carbon 12.0107		Nitrogen 14.00674		Oxygen 15.9994		Fluorine 18.9984032		Neon 20.1797
11	Na	12	Mg	13	Al	14	Si	15	P	16	S	17	Cl	18	Ar	19	K
	Sodium 22.989770		Magnesium 24.3040		Aluminum 26.981538		Silicon 28.0855		Phosphorus 30.973761		Sulfur 32.0646		Chlorine 35.4527		Argon 39.948		Potassium 39.0983
37	Rb	38	Sr	39	Y	40	Zr	41	Nb	42	Mo	43	Tc	44	Ru	45	Rh
	Rubidium 85.4678		Strontium 87.62		Yttrium 88.90585		Zirconium 91.224		Niobium 92.90638		Molybdenum 95.94		Technetium (98)		Ruthenium 101.07		Rhodium 102.90550
55	Cs	56	Ba	57	La	58	Ce	59	Pr	60	Nd	61	Pm	62	Sm	63	Eu
	Cesium 132.90545		Barium 137.327		Lanthanum 138.9055		Cerium 140.12		Praseodymium 140.90765		Neodymium 144.24		Promethium (145)		Samarium 150.36		Europium 151.964
87	Fr	88	Ra	89	Ac	90	Th	91	Pa	92	U	93	Np	94	Pu	95	Am
	Francium (223)		Radium (226)		Actinium (227)		Thorium (232)		Protactinium (231)		Uranium (238)		Neptunium (237)		Plutonium (244)		Americium (243)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 H Hydrogen 1.00794	2 He Helium 4.003	3 Li Lithium 6.941	4 Be Beryllium 9.012182	5 B Boron 10.811	6 C Carbon 12.0107	7 N Nitrogen 14.00674	8 O Oxygen 15.9994	9 F Fluorine 18.9984032	10 Ne Neon 20.1797	11 Na Sodium 22.989770	12 Mg Magnesium 24.3050	13 Al Aluminum 26.981538	14 Si Silicon 28.0855	15 P Phosphorus 30.973761	16 S Sulfur 32.066	17 Cl Chlorine 35.4527	18 Ar Argon 39.948