

# Groups

		1										2						13										14	15	16	17	18
1	1																			2												
	1	2											5	6	7	8	9	10	11	12	13	14	15	16	17	18						
1	H																			He												
	Hydrogen																			Helium												
	1.01																			4.00												
2	3	4											5	6	7	8	9	10	11	12	13	14	15	16	17	18						
	Li	Be											B	C	N	O	F	Ne														
	Lithium	Beryllium											Boron	Carbon	Nitrogen	Oxygen	Flourine	Neon														
	6.94	9.01											10.81	12.01	14.01	16.00	19.00	20.18														
3	11	12											13	14	15	16	17	18														
	Na	Mg											Al	Si	P	S	Cl	Ar														
	Sodium	Magnesium											Aluminium	Silicon	Phosphorus	Sulfur	Chlorine	Argon														
	22.99	24.31											26.98	28.09	30.97	32.06	35.45	39.95														
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36														
	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr														
	Potassium	Calcium	Scandium	Titanium	Vanadium	Chromium	Manganese	Iron	Cobalt	Nickel	Copper	Zinc	Gallium	Germanium	Arsenic	Selenium	Bromine	Krypton														
	39.10	40.08	44.96	47.87	50.94	52.00	54.94	55.85	58.93	58.69	63.55	65.38	69.72	72.63	74.92	78.96	79.90	83.80														
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54														
	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe														
	Rubidium	Strontium	Yttrium	Zirconium	Niobium	Molybdenum	Technetium (98)	Ruthenium	Rhodium	Palladium	Silver	Cadmium	Indium	Tin	Antimony	Tellurium	Iodine	Xenon														
	85.47	87.62	88.91	91.22	92.91	95.96	(98)	101.07	102.90	106.42	107.87	112.41	114.82	118.71	121.76	127.60	126.90	131.29														
6	55	56											72	73	74	75	76	77	78	79	80	81	82	83	84	85	86					
	Cs	Ba											Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn					
	Caesium	Barium											Hafnium	Tantalum	Tungstem	Rhenium	Osmium	Iridium	Platinum	Gold	Mercury	Thallium	Lead	Bismuth	Polonium	Astatine	Radon					
	132.90	137.33											178.49	180.94	183.84	186.21	190.23	192.22	195.08	196.96	200.59	204.38	207.20	208.98	(209)	(210)	(222)					
7	87	88											104	105	106	107	108	109	110	111	112	113	114	115	116	117	118					
	Fr	Ra											Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo					
	Francium	Radium											Rutherfordium	Dubnium	Seabergium	Bohrium	Hassium	Meitnerium	Darmstatium	Roentgenium	Copernicium	Ununtrium	Flerovium	Ununpentium	Livermorium	Ununseptium	Ununoctium					
	(223)	(226)											(267)	(268)	(271)	(272)	(270)	(276)	(281)	(280)	(285)	(284)	(289)	(288)	(293)	(294)	(294)					
	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71																	
	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu																	
	Lanthanum	Cerium	Praseodymium	Neodymium	Promethium	Samarium	Europium	Gadolinium	Terbium	Dysprosium	Holmium	Erbium	Thulium	Ytterbium	Lutium																	
	138.90	140.12	140.90	144.24	(145)	150.36	151.96	157.25	158.92	162.50	164.93	167.26	168.93	173.05	174.97																	
	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103																	
	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr																	
	Actinium	Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium	Berkelium	Californium	Einsteinium	Fermium	Mendelevium	Nobelium	Lawrencium																	
	(227)	232.03	231.03	238.02	(237)	(244)	(243)	(247)	(247)	(251)	(252)	(257)	(258)	(259)	(262)																	