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Date:

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FAMILIES OF THE PERIODIC TABLE

Group/Family	Valence Electrons	Common Ion Formed	Properties	Element Examples
ALKALI METALS Group 1	1	1+	<ul style="list-style-type: none"> - Soft metals - Only found in compounds in nature (never alone) - EXPLOSIVELY Reactive (especially w/water) 	Li K Fr Na Rb
ALKALINE EARTH METALS Group 2	2	2+	<ul style="list-style-type: none"> - Very Reactive - Also, found in compounds in nature - Firmer than Group 1 	Be Ca Sr Mg Ba Ra
TRANSITION METALS Group 3-12ish	Varies	+ Varies +	<ul style="list-style-type: none"> - All solid except Hg - Mostly ductile + malleable - Prop. vary greatly by group 	Fe Cu Hg Pb Au U
HALOGENS Group 17	7	1-	<ul style="list-style-type: none"> - Nonmetals - HIGHLY REACTIVE - Varying states of matter 	F _{2(g)} Cl _{2(g)} Br _{2(l)} I _{2(s)} At _{2(s)}
NOBLE GASES Group 18	8	∅	<ul style="list-style-type: none"> - NONREACTIVE - Colorless gases 	He Ar Kr Ne Xe Rn

Metals ↑
↓ Nonmetals

Periodic Table of the Elements

Period 1 Group 1

Metals

- Alkali Metals
- Alkaline Earth Metals
- Transition Metals
- Metalloids

Nonmetals

- Nonmetals
- Halogens
- Noble Gases

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
H 1.0079	He 4.0026											B 10.811	C 12.011	N 14.007	O 15.999	F 18.998	Ne 20.180	
Li 6.941	Be 9.0122											Al 26.982	Si 28.086	P 30.974	S 32.065	Cl 35.453	Ar 39.948	
Na 22.990	Mg 24.305	Sc 44.956	Ti 47.867	V 50.942	Cr 51.996	Mn 54.938	Fe 55.845	Co 58.933	Ni 58.693	Cu 63.546	Zn 65.39	Ga 69.723	Ge 72.61	As 74.922	Se 78.96	Br 79.904	Kr 83.80	
K 39.098	Ca 40.078	Y 88.906		Zr 91.224	Nb 92.906	Mo 95.94	Tc [98]	Ru 101.07	Rh 102.91	Pd 106.42	Ag 107.87	Cd 112.41	In 114.82	Sn 118.71	Sb 121.76	Te 127.60	I 126.90	Xe 131.29
Rb 85.468	Sr 87.62	* 57-70	Lu 174.97	Hf 178.49	Ta 180.95	W 183.84	Re 186.21	Os 190.23	Ir 192.22	Pt 195.08	Au 196.97	Hg 200.59	Tl 204.38	Pb 207.2	Bi 208.98	Po [209]	At [210]	Rn [222]
Cs 132.91	Ba 137.33	* *	Lr [262]	Rf [261]	Db [262]	Sg [263]	Bh [264]	Hs [265]	Mt [266]	Uun [271]	Uuu [272]	Uub [273]	Uuq [293]					
Fr [223]	Ra [226]																	

* Lanthanide series

lanthanum 57 138.91	cerium 58 140.12	praseodymium 59 140.91	neodymium 60 144.24	promethium 61 [145]	samarium 62 150.36	europium 63 151.96	gadolinium 64 157.25	terbium 65 158.93	dyprosium 66 162.50	holmium 67 164.93	erbium 68 167.26	thulium 69 168.93	ytterbium 70 173.04
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** Actinide series

actinium 89 [227]	thorium 90 232.04	protactinium 91 231.04	uranium 92 238.03	neptunium 93 [237]	plutonium 94 [244]	americium 95 [243]	curium 96 [247]	berkelium 97 [247]	californium 98 [251]	einsteinium 99 [252]	fermium 100 [257]	mendelevium 101 [258]	nobelium 102 [259]
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