


Pale pink elements are elements from the d-block of the long periodic table.

		Group																							
		a	I	b	a	II	b	a	III	b	a	IV	b	a	V	b	a	VI	b	a	VII	b	a	VIII	b
1	I	1 H																				2 He			
2	II	3 Li	4 Be		5 B	6 C	7 N	8 O	9 F	10 Ne															
3	III	11 Na	12 Mg		13 Al	14 Si	15 P	16 S	17 Cl	18 Ar															
4	IV	19 K	20 Ca		21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni													
	V	29 Cu	30 Zn		31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr															
5	VI	37 Rb	38 Sr		39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd													
	VII	47 Ag	48 Cd		49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe															
6	VIII	55 Cs	56 Ba		57-71	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt													
	IX	79 Au	80 Hg		81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn															
7	X	87 Fr	88 Ra		89-103	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds													
	XI	111 Rg	112 Cn		113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og															
Higher oxides		R ₂ O		RO		R ₂ O ₃		RO ₂		R ₂ O ₅		RO ₃		R ₂ O ₇		RO ₄									
Volatile hydrogen compounds						[(RH ₃) _x]		RH ₄		RH ₃		RH ₂		RH											
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											
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											



https://youtu.be/kx72te_jAfw



 NCSSM
Online

https://youtu.be/AP79_srafmE

Types of Oxides

	1	2	↓	13	14	15	16	17
2	Li_2O	BeO		B_2O_3	CO_2	N_2O_3 N_2O_5	O	OF_2
3	Na_2O	MgO		Al_2O_3	SiO_2	P_2O_3 P_2O_5	SO_2 SO_3	Cl_2O_7
4	K_2O	CaO		Ga_2O_3	GeO_2	As_2O_3 As_2O_5	SeO_2 SeO_3	Br_2O
5	Rb_2O	SrO		In_2O_3	SnO_2	Sb_2O_5	TeO_3	I_2O_5
6	Cs_2O	BaO		Tl_2O_3	PbO_2	Bi_2O_5	Po	At

basic oxide
 amphoteric oxide
 acidic oxide