

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

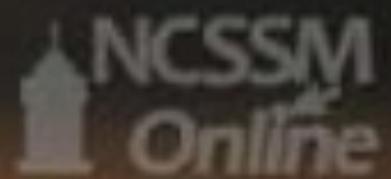
		Group											
		a I b	a II b	a III b	a IV b	a V b	a VI b	a VII b	a VIII b				
1	I	1 H									2 He		
2	II	3 Li	4 Be	5 B	6 C	7 N	8 O	9 F		10 Ne			
3	III	11 Na	12 Mg	13 Al	14 Si	15 P	16 S	17 Cl		18 Ar			
4	IV	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni		
	V	29 Cu	30 Zn	31 Ga	32 Ge	33 As	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 <sub>2</sub> O	RO	R <sub>2</sub> O <sub>3</sub>	RO <sub>2</sub>	R <sub>2</sub> O <sub>5</sub>	RO <sub>3</sub>	R <sub>2</sub> O <sub>7</sub>	RO <sub>4</sub>				
Volatile hydrogen compounds			[(RH <sub>3</sub> ) <sub>x</sub> ]	RH <sub>4</sub>	RH <sub>3</sub>	RH <sub>2</sub>	RH					

57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr



[https://youtu.be/kx72te\\_jAfw](https://youtu.be/kx72te_jAfw)



[https://youtu.be/AP79\\_srafmE](https://youtu.be/AP79_srafmE)

# Types of Oxides

1	2	13	14	15	16	17
$\text{Li}_2\text{O}$	$\text{BeO}$	$\text{B}_2\text{O}_3$	$\text{CO}_2$	$\text{N}_2\text{O}_3$ $\text{N}_2\text{O}_5$	$\text{O}$	$\text{OF}_2$
$\text{Na}_2\text{O}$	$\text{MgO}$	$\text{Al}_2\text{O}_3$	$\text{SiO}_2$	$\text{P}_2\text{O}_3$ $\text{P}_2\text{O}_5$	$\text{SO}_2$ $\text{SO}_3$	$\text{Cl}_2\text{O}_7$
$\text{K}_2\text{O}$	$\text{CaO}$	$\text{Ga}_2\text{O}_3$	$\text{GeO}_2$	$\text{As}_2\text{O}_3$ $\text{As}_2\text{O}_5$	$\text{SeO}_2$ $\text{SeO}_3$	$\text{Br}_2\text{O}$
$\text{Rb}_2\text{O}$	$\text{SrO}$	$\text{In}_2\text{O}_3$	$\text{SnO}_2$	$\text{Sb}_2\text{O}_5$	$\text{TeO}_3$	$\text{I}_2\text{O}_5$
$\text{Cs}_2\text{O}$	$\text{BaO}$	$\text{Tl}_2\text{O}_3$	$\text{PbO}_2$	$\text{Bi}_2\text{O}_5$	$\text{Po}$	$\text{At}$

■ basic oxide      ■ amphoteric oxide      ■ acidic oxide