

Metals, non-metals and metalloids

Staircase separates them

1		2												13-18						18									
Metals		Metalloids										Nonmetals																	
1 H		3 Li	4 Be																			2 He							
11 Na	12 Mg	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr	37 Rb	38 Sr	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe				
19 K	20 Ca	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og				
55 Cs	56 Ba	71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn	87 Fr	88 Ra	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Uub
		Lanthanide series										Actinide series																	
		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	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

Metals	Non-metals	Metalloids
<ul style="list-style-type: none"> -left of the stair case - shiny - conduct heat - conduct electricity - malleable - ductile - soft - very reactive with water and acid - high melting point - all solids except for mercury - donates e- to non-metals during a chemical reaction 	<ul style="list-style-type: none"> - Right of stair case - Found in 3 states of matter - Opposite properties of metals 	<ul style="list-style-type: none"> - characteristics of both metals and non-metals - almost surround the stair case - ex: might be malleable, but does not conduct

Families or Groups Names

Periodic Table with Group Names

Transition Metals

Inner Transition Metals

*Lanthanides
† Actinides

Alkali metals	Alkaline earth metals	Halogen	Noble or inert gas
<ul style="list-style-type: none"> - has all characteristics of metals - most reactive family because has only 1 ve - as you go down the family element becomes more reactive - H is not part of the family, put there because has 1 ve - donates 1 e- to a non-metal - found as a compound to stabilize it 	<ul style="list-style-type: none"> - same as alkali metals - less reactive than alkali metals because has 2 ve - donates 2 e- to non-metals 	<ul style="list-style-type: none"> - same characteristics as non-metals - becomes more reactive as you go up the family - accepts 1 ve from metals - halogen + metal = salt - used as antiseptics - found as a compound to stabilize it 	<ul style="list-style-type: none"> - found as elements not as compounds because their orbits are full and stable - do not donate or accept e- - if electricity is passed through them a bright light is produced - He placed there even though does not have 8 ve because its orbit is full at 2 ve

Comparing the four halogens (28).mp4

Brainiac Alkali Metals.mp4

Francium Bomb in Ocean.mp4

Group 2 Reactions with water - Periodic Properties

Huge Chunk of Sodium in Pond.mp4

Families 3-6 group names are named after the first element in the group.