

But, it's more complicated...

Covalent

Ionic

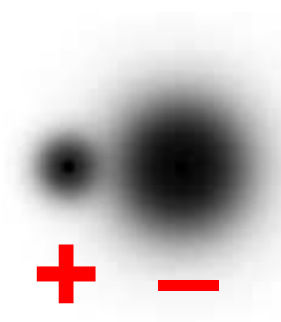
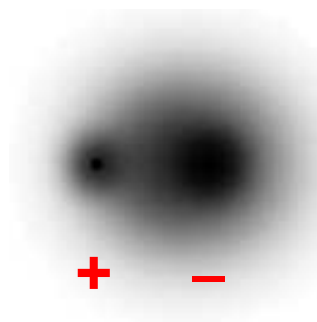
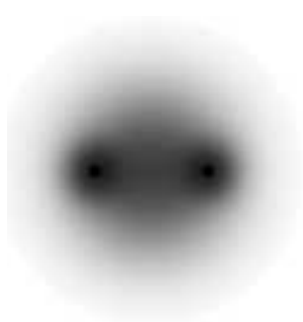


Who wants the electron(s) more?
How much more?

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WebElements

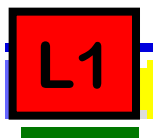
Electronegativity (Pauling) [Pauling scale] coded by intensity of red



0.7 3.98
Pauling scale

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Uun	Uuu	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No



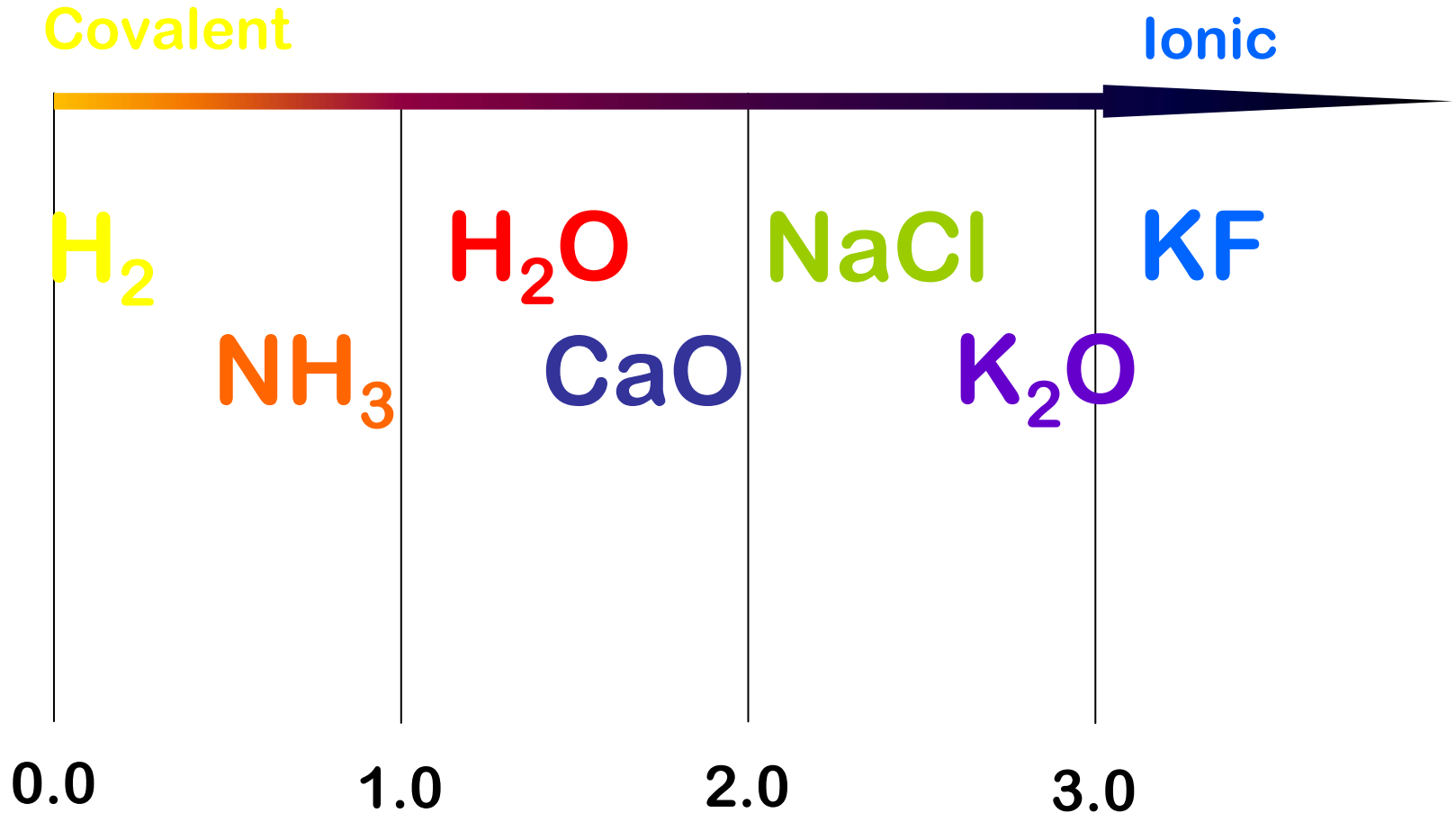
H 2.20	Electronegativity Values for Some Elements						
Li 0.98	Be 1.57		B 2.04	C 2.55	N 3.04	O 3.44	F 3.98
Na 0.90	Mg 1.31		Al 1.61	Si 1.90	P 2.19	S 2.58	Cl 3.16
K 0.82	Ca 1.00		Ga 1.81	Ge 2.01	As 2.18	Se 2.55	Br 2.96

How Ionic is It?

Subtract the two electronegativities:

H_2	$2.20 - 2.20$	0
NH_3	$3.04 - 2.20$	0.84
H_2O	$3.44 - 2.20$	1.20
CaS	$2.58 - 1.00$	1.58
NaCl	$3.16 - 0.90$	2.26
K_2O	$3.44 - 0.82$	2.62
KF	$3.98 - 0.82$	3.16

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