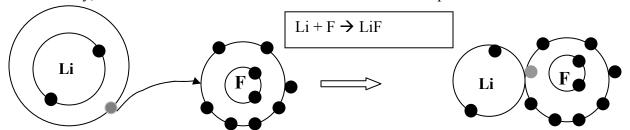
Tonic Bonding Worksheet

For each pair of elements below draw an atomic diagram showing electrons in different energy levels. Draw arrows to show where the outer electrons will go during a chemical reaction, then draw the resulting compound. Finally, fill in the table below each reaction. Refer to the sample shown.



Atoms

Valence electrons

Electron transfer from/to each atom

Ions formed in the product

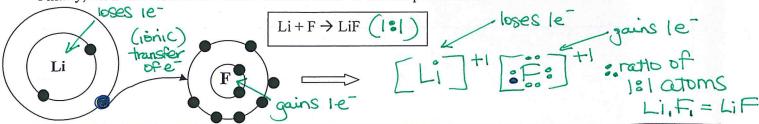
Li F

Reactions	Atoms	Valence	Electron transfer	Ions formed
1) Li + Cl => LiCl		electrons	from/to each atom	in the product
I) El Vel VElel				
2) Ca + O => CaO				
2) Ca + 0 -> CaO				
2) D + E > D E				
3) Be + F \Rightarrow BeF ₂				
$4) Mg + S \Rightarrow MgS$				
5) K + F => KF				

Reactions	Atoms	Valence	Electron transfer from/to each atom	Ions formed in the product
6) Al + Cl => AlCl ₃		Ciccions	romy to cach atom	in the product
7) $Na + O \Rightarrow Na_2O$				
8) Li + N =				
9) Mg + F=				
10) Na + F =>				
10) 144 + 1 =>				
11) Al + O =>				
12) Li + O =>				
13) K + S =>				
14) Mg + O =>				
- ·/ -·- o				

Jonic Bonding Worksheet

For each pair of elements below draw an atomic diagram showing electrons in different energy levels. Draw arrows to show where the outer electrons will go during a chemical reaction, then draw the resulting compound. Finally, fill in the table below each reaction. Refer to the sample shown.



Atoms Valence electrons Electron transfer from/to each atom Ions formed in the product to F.

F Tye accepts Ive from Li F-

Reactions	Atoms	Valence electrons	Electron transfer from/to each atom	Ions formed in the product
1) Li +Cl => LiCl Li +Cl => LiCl	Li	Ive	donate le-	Lit
	CI	lve	accepts 1e	a-1
$2) Ca + O \Rightarrow CaO$ $2) Ca + O \Rightarrow CaO$	Ca	Dre	Standb 205	Cata
(a) + (a)	0	6ve	accepts	0-2
3) Be + F => BeF ₂	Be	due	donates de-to each F.	Beta
Be +F: > [Be] +F:]	H	7 Je	each F accepts Ive each	#1
4) $Mg + S \Rightarrow MgS$	Mg	Zve	donates ae to S	2
$mg \rightarrow [mg]^{+2}[S:]^2$	S	6 ve	accepts a e-	5-2
$5) K + F \Rightarrow KF$	K	lvē	donates Ive-	K+1
K (t) []	F	7vē	accepts Ive-	F-1

Solutions (continued)

Reactions	Atoms		Electron transfer	lons formed
6) Al + Cl => AlCl ₃	Ve V		from/to each atom	in the product
1	A1	3ve	3e-to	A1+3
Al -+ C1: >[A]+3C1:-1	CI		each cl.	0.1
CI	CI	Ive	Ive-	C1-1
7) $Na + O => Na_2O$		g	each Na	. +1
Na + 0: -> [Na] [O] -	Na	Ive-	donates Ive	Nati
		2	accepts	0-2
Na	0	ave	a ve	
8) Li + N → Li ₃ N	ntarsi	Si jeng	each Li	1:41
$Li \longrightarrow [Li]_3^{+1} [Ni]^{-3}$	Li	lue	donates 1 ve:	L)
	N	3ve	accepts	N-3
9) Mg + F= 100 F3	17	0,0	3 ve:	
7) Mg 17 (1g -2	Ma	2ve	donates -gue	M9+2
mg - + Fi - > [mg] f.F.]	119		1000	<u> </u>
F: []	F	7ve	each F	F-1
10) Na + F => Na F			Tue".	
00 00 1 71 00 71	Na	ve	Stards	Nat
Na +: F: -> [Nastifie]			100	
	F	7ve	lve.	F
$11) Al + 0 \Rightarrow A \downarrow_2 \bigcirc_3$	Λ I	2 -	किर्यन्त्री	01+3
A1 → [A] t3 [O]	HI	3ve	3 ve	H
Ale Ale		be	each o	8-2
		ac	accepts 2 ve -	
12) Li + O => Li2	Li	lvē	denates	1:+
1:0: -77	W1	100	1e (each	<u>ا</u>
1 1 2 2 600	0	De	accepts 2 ve	0-2
13) $K + S \Rightarrow K_{a}S$	1.7	1 -	Sacota &	,,+
k +; S: -> [K7+[:S:7-2]	K	lue	10e	K.
	S	2	accepts	5-8-
$14) Mg + O \Rightarrow MQO$	2	2ue	200	<u> </u>
$14) \text{ Mg} + 0 \Rightarrow \text{ Mg} = 742 \times 3272$	mg	<i>due</i>	donates ave-	Mgta
mg • _ tho O: → [mg]:0:1		6 -	accepts	6-2
	U	Ove	ave-	