3.Students will be able to characterize an ionic compound as ionic crystal and covalent compounds as molecules, including properties of each as a result.

Use a T Chart to divide the properties into the correct side (or on both sides):

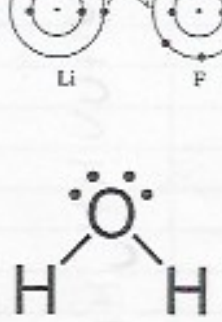
e⁻ shared
e⁻ transferred
formulas always simplest ratio
cation is named 1st, anion 2nd
bond uses valence e⁻
uses prefixes like "di" and "tetra"
alkanes, alkenes and alkynes
have overall charges that = 0
salt
molecules
bonds using (whole) polyatomic ions
bonds within polyatomic ions
2 nonmetals bonded
metal and nonmetal bonded
opposite charges attract
uses Coulombic forces of attraction
$Mg(OH)_2$
CO_2
Zn_3P_2
NH_4^{+1}

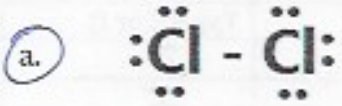
Ionic	Both	Covalent
e transferred	Bond uses val. e⁻	e⁻ shared
formulas always simplest ratio		use "di" "tetra"
cation 1st, anion 2nd	uses Coulombic forces of attraction	alkane, alkene alkynes
charge = 0		molecule
salt		bonds within polyatomic
bond using whole polyat. ion		2 nonmetals bonded
metal-nonmetal bond		
opposite charges attract		
Zn_3P_2	$Mg(OH)_2$	CO_2
	NH_4^{+1}	

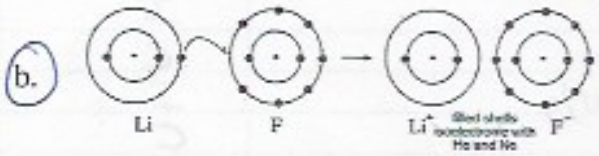
(b) (Li → F)

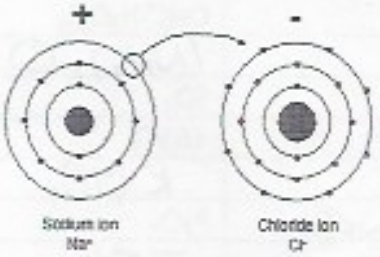
(d.) sodium → chloride

(a) (Cl-Cl)

(c) 

a. 

b. 

d. 

2 ~~major~~ major differences between Ionic + Covalent

transfer e⁻ | share e⁻

bond between metal/NM | bond between 2 nonmetals