Name: _____ Date: _____

Chemical Bonding Worksheet

REMEMBER….

Ionic Bond	between a Metal and Non-Metal	**(M + NM)**
Covalent Bond	between a Non-Metal and Non-Metal	**(NM + NM)**

PART 1: Determine if the elements in the following compounds are metals or non-metals. Describe the type of bonding that occurs in the compound.

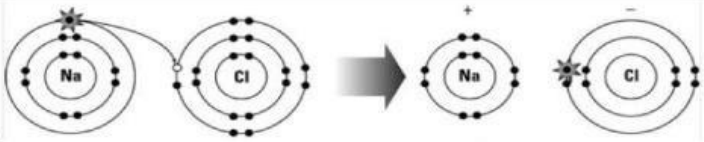
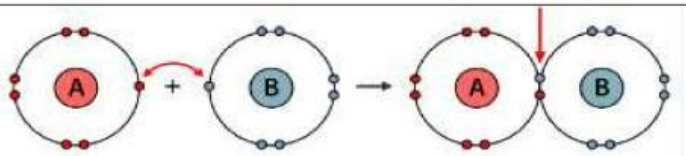
Compound	Element 1	M or NM	Element 2	M or NM	Bond Type
NO_2	Nitrogen	NM	Oxygen	NM	Covalent
NaCl					
SO_2					
PI_3					
$MgBr_2$					
CaO					
H_2O					
K_2O					
AlF_3					
O_2					
$CuCl_2$					
NO_2					
CO_2					
HF					
Rb_2S					
NBr_2					
Fe_2O_3					
CCl_4					

LIVEWORKSHEETS

Name: _____ Date: _____

Chemical Bonding Worksheet

PART 2: Determine whether the following are properties of Ionic or Covalent Bonds.

Chemical Property	Type of Bond
1. Attraction between oppositely charged ions	Ionic
2. High Melting Point	
3. Low Melting Point	
4. High Boiling Point	
5. Low Boiling Point	
6. Transfer electrons	
7. Share Electrons	
8. Form crystal lattice	
9. Form Molecules	
10.Does not conduct electricity	
11.Conducts electricity in molten state (liquid state)	
12.Typically solid at room temperature	
13.Hard, brittle solid with definite crystal shape	
14.Dissociate into ions when dissolved in water	
15.Prefixes used when naming compounds	
16.Roman Numeral may be used when naming compounds	
17.Metal + Non-metal	
18.Non-metal + Non-metal	
19.Uses 'crisscross' method when writing formulas	
20.Uses prefixes to determine number of atoms in formula	
21.Typically liquid, gas, or soft solid at room temperature	
22.Solubility in water depends on polarity (polar or non-polar)	
23.Cations and Anions	
24. 	
25. 	

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