

Name: _____

Review: Bonding

1. What happens to the bonding electrons in each type of bond:
 - a. ionic bond
 - b. metallic bond
 - c. covalent bond

2. How does electronegativity affect the tendency for atoms to form an ionic bond or a covalent bond?

3. Fill in the table of properties for ionic, metallic, and covalent compounds.

Property	Ionic	Metallic	Covalent
Hardness			
Brittleness			
Melting & Boiling Point			
Conductivity			

Formulas of Ionic Compounds

1. $\text{K} + \text{S}$
2. $\text{Fe(III)} + \text{S}$
3. $\text{Ca} + \text{O}$
4. $\text{Sr} + \text{PO}_4^{3-}$
5. $\text{Na} + \text{SO}_4^{3-}$
6. $\text{NH}_4^+ + \text{PO}_4^{3-}$
7. $\text{Pb(IV)} + \text{O}$
8. $\text{Ca} + \text{P}$

Lewis Structures of Covalent Compounds

1. CHCl_3
2. ClO_3^-
3. NH_3
4. H_2CO
5. CO
6. BH_3
7. BeCl_2
8. ICl_3
9. SF_4
10. resonance
 CO_3^{2-}