OER Ch 3

CHE 111 - Homework - Ch 3h Formation of Compounds

Score: _____/40

Name	:	Date:
4 pt]	1. List the 7 metalloids. Why is important to know them?	
3 pt]	2. Define Compound. What is the driving force behind the formation of con-	npounds?

[7 pt] 3. What are the differences between Ionic compounds and Covalent/Molecular compounds?

Property	Ionic	Covalent/Molecular
1. Formed by		
2. Between		
3. Bond Strength		
4. Melting Point		
5. Solubility		
6. Conductivity		
5. Structure		

[5 pt]	4. Identify the following compounds as either (I)onic or (M)olecular. Explain.				
	(a) Potassium Chloride (KCl)	4(a)			
	(b) Sugar $(C_{12}H_{22}O_{12})$	4(b)			
	(c) Nitrogen Dioxide (NO $_2$)	4(c)			
	(d) Iron (III) Bromide ($FeBr_3$)	4(d)			
	(e) Water (H_2O)	4(e)			

[3 pt] 5. What are polyatomic ions? What is the name **AND** formula of the only positively charged polyatomic ion? Give an example of a negatively charged polyatomic ion (name and formula).

[18 pt] 6. Complete the following table, filling in each box with the proper formula.

	Br^-	O^{-2}	$\mathrm{NO_3}^-$	PO_4^{-3}	$\mathrm{CO_3}^{-2}$
K ⁺					
Mg^{+2}					
Al ⁺³					
Zn ⁺²					
H^{+}					