November 6, 2018

AP Chem 2-2-2

Objective: Notes

Warm up:



Three compounds - D, E, and F - all contain element G. The percent (by mass) of element G in each of the compounds was determined by analysis. The experimental data are presented in the following chart.

<u>Compound</u>	<u>% by weight of element G</u>	<u> Molecular Mass</u>
D	53.9%	131.7
E	64.2%	165.9
F	47.7%	74.5

- a. Determine the mass of element G contained in 1.00 mole of each compound, D, E, and F.
- b. Determine the most likely value for the atomic weight of element G. Justify your reasoning mathematically and by written explanation.
- c. Identify element G.
- d. Compound F contains carbon, hydrogen, and element G. When 2.19 g of compound F is completely burned in oxygen gas, 3.88 g of carbon dioxide gas and 0.80 g of water are produced. What is the most likely formula for compound F?

Sulfur dioxide gas is bubbled through cold water.

As the reaction progresses, will the hydroxide ion concentration increase, decrease, or remain the same? What test would you use to indicate the result?

Assignment: Take Home Quiz due Tuesday. Worksheet Practice Stoichiometry due Thursday, 2-1-4. Lab Empirical/Molecular and Hydrate due Nov. 8. Lab Redox on Nov. 7-9, due Nov. 15. Lab Hard Water Nov. 14-16, due Nov. 20. Study Session Mondays, 7:30.