Honors Chemistry Daily EQs

Unit # \_\_9\_\_\_\_

Dates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



1. Answer the questions each day during the first 10 minutes of class.
2. If you are absent, you must make-up the missed questions the day you return.

**Score**

1. Write the correct answers for any questions you missed.
2. Turn in this assignment with your unit pack at the end of each unit.

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|  | Daily Warm-Ups: |
| Unit 9 Day 1 | A compound that contains only nitrogen and oxygen is 30.4 % N by mass; the molar mass of the compound is 92 g/mol. 1. What is the empirical formula of the compound?
2. What is the molecular formula?

A seashell composed largely of calcium carbonate is placed in a solution of hydrochloric acid. As a result 1500 ml of dry carbon dioxide gas at STP is produced. The other products are calcium chloride and water.1. Write a balanced equation for this reaction
2. Based on the above information how many grams of CaCO3 are consumed in this reaction?
3. What volume of 2.00 M HCl solution is used in this reaction?
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| Unit 9 Day 2  | What is the molarity of a solution made by dissolving 25 g of sodium nitrate in 350 ml of solution?A solution is prepared by mixing 10.00 g of ethanol (C2H5OH) with 100.0 g of water to give a final volume of 110 ml. Calculate the M of ethanol in this solution.How much 5M hydrochloric acid is needed to make a 500 mL of a 0.5M solution of hydrochloric acid? |
| Unit 9 Day 3 | List 4 characteristics of acidsList 4 characteristics of bases. |
| Unit 9 Day 4 | Nitrogen and oxygen react to form nitrogen monoxide.1. Write a balanced equation for this reaction.
2. Write the equilibrium expression for this reaction.

Explain any shift that would occur for the following and explain why:1. more phosphorus pentachloride is added.
2. The temperature is decreased
3. The pressure is increased
4. Chlorine gas is removed
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