Honors Chemistry Daily EQs

Unit # \_7\_\_\_\_

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 7 Day 1 | Write the formula for calcium sulfite.  Calculate the percentage of sulfur, calcium and oxygen in calcium sulfite?  How many liters are present in 115 g of nitrogen monoxide?  How many molecules in 0.943 moles of water?  How many formula units in 64.3 g of lithium phosphide?  What is the molarity of 9.94 g of cobalt (II) chlorate in 250. ml of solution? |
| Unit 7 Day 2 | List 4 indicators of a chemical reaction.  Write balanced equations for the following reactions: use state symbols when possible   1. Calcium is added to water to form hydrogen gas and calcium hydroxide 2. A solution of sodium chloride is added to a solution of iron (III) carbonate to produce sodium carbonate and iron (III) chloride. 3. Chlorine gas is bubbled into a solution of lithium iodide to produce lithium chloride and iodine. 4. Methane in the presence of oxygen gas will produce carbon dioxide and water 5. Sodium oxide reacts with magnesium sulfate to produce sodium sulfate and magnesium oxide. 6. Potassium chloride decomposes into potassium and chlorine gas. |
| Unit 7 Day 3 | List the 5 types of chemical reactions and give an example of each.  Predict the products of the following reactions:   1. sodium reacts with chlorine gas. 2. Calcium phosphate reacts with aluminum sulfate. 3. Iron (III) chloride is heated. |
| Unit 7 Day 4 | What is the Activity Series? Explain how it is used?  Will a reaction occur when copper metal is dipped into a solution of silver nitrate? Explain.  Explain why gold, silver and platinum are the metals of choice for jewelry.  The molar mass of nicotine is 162.1 g/mol. It contains 74.0% carbon, 8.7% hydrogen and 17.3% nitrogen. Determine nicotine’s empirical and molecular formulas. Show all work!  A compound is 53.3 % O and 46.7 % Si A. find it’s empirical formula  If its molar mass is 180 g/mol what is its molecular formula? |
| Unit 7 Day 5 | Calcium oxide, CaO, is an ingredient in cement mixes. When water is added, the mixture warms up and calcium hydroxide, Ca(OH)2, forms.   1. Is there any evidence of a chemical reaction? 2. In the reaction, how can you prove that a chemical reaction has taken place?   Iron (III) chloride is a chemical used in photography. It can be produced by reacting iron with chlorine. Identify the correct chemical equation for this reaction.  Find the formula of a hydrate that is composed of 48.86 % Magnesium sulfate and 51.14 % water. |
| Unit 7 Day 6 | Write the balanced equation for each of the following:   1. the complete combustion of propane gas, C3H8 2. the decomposition of magnesium choride 3. the synthesis of platinum (IV) fluoride from platinum and fluorine gas 4. the reaction of zinc with lead (II) nitrate |
| Unit 7 Day 7 | When wood burns, the ash weighs much less than the original wood did. Explain why the law of conservation of mass is not violated in this situation.  Although cesium is not listed in the activity series in this chapter, predict where cesium world appear based on its position on the periodic table. |