Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q3 Day 3 – Unit 7 Test Review

Topic /Big Questions: (Question Stems & Question Creation Chart)

- **What is the mass of each element in a compound?**
- **What is the total mass of a compound?**
- **What is the percent of each element in the compound?**
- **What is the law of multiple proportions?**
- **What is the difference between an empirical formula and a molecular formula?**
- **How can empirical and molecular formulas be calculated?**
- **How is mass conserved in chemical reactions?**
- **What patterns can be seen in chemical reactions?**
- **How can identifying the reactants enable chemists to predict the products?**

State SOL	Unpacking the Standards (Video explanation shown at 3:18)
CH.3	CH.3 The student will investigate and understand that atoms are conserved in chemical reactions. Knowledge of chemical properties of the elements can be used to describe and predict chemical interactions. Key ideas include f) **reaction types can be predicted and classified**.
CH.4	CH.4 The student will investigate and understand that molar relationships compare and predict chemical quantities. Key ideas include a) Avogadro's principle is the basis for molar relationships; and b) stoichiometry mathematically describes quantities in **chemical composition** and in chemical reactions

Visible Learning (For the three items with asterisks*, think from a student perspective. Use simple language)

***What am I learning today?** Molar Mass, Percent Composition, Empirical Formulas, Molecular Formulas, Type of Reactions, Balancing Equations, and Predicting the Products

***Why is it important?** The Law of Mass Conservation means that the number of atoms must be balanced on both sides of the chemical equation. Chemists identify types of reactions to predict the products. Evaluating the empirical formula and molar mass will help identify the actual molecular formula of the product.

***How will I know I've learned it?** I will calculate molar mass, percent composition, empirical formulas and molecular formulas. I will identify the nature of the reactants and products in order to identity the types of reactions, balance the number of atoms on both sides of the chemical equation, and write a balanced chemical equation.

Differentiation strategies:

Quizlet Live Games

Unit 7 Extra Practice Problems

Unit 7 Test Review

Accommodations and/or modifications are being met for students with IEP's/504's.
Small group activities; frequent checks for understanding; materials available on Schoology;

Daily Plan/Sequence of Instruction:

Students will play **Quizlet Live games** to review Unit 7 materials. Teacher will use a few extra practice problems to review math concepts. Students will be allowed to work on the other **Extra Practice Problems** at their own pace or with a partner. Teacher will offer assistance as needed. Students may begin working on the **Unit 7 Test Review.**

Assessments (List all formative/summative assessments used to check for understanding during this lesson. Summative assessments may occur during a different class period.):

Quizlet Live Games – (formative)

Extra Practice Problems – (formative)

Unit 7 Test Review – (summative)

After assessing today's lesson are you and your students comfortable moving forward with your next objective?

Yes - students scored 80% or higher on the Unit 7 Test Review

No, remediation required to proceed – tutoring will be available during One Lunch

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