Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q3 Day 4 – Unit 7 Test

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:

Unit 7 Test Review – online in Schoology

Morning Test Review – open to all students

Short Review – beginning of each class

Unit 7 Test

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

Daily Plan/Sequence of Instruction:

Teacher will answer last minute questions from the Unit 7 Test Review, which is due by the beginning of class. Teacher will offer a morning session test review for 45 minutes before school. (Open to all students – CP and Honors). Teacher will do a short review session at the beginning of each class (15 minutes). Students will use the rest of class time to complete the test.

For Fun: Teacher will pass out Chemistry Valentines. Cherry flavored Tootie Pops (lollipops) should be on sale at Walmart. I usually attach one lollipop to each valentine.

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

Unit 7 Test Review – (summative) due at the beginning of class

Unit 7 Test – (summative) due by the end of class

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

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

No, remediation required to proceed – students, who fail the unit test, may visit during One Lunch to do test corrections in order to earn a 65% passing score.

Teacher reflection: Small group testing must be requested at least two days in advance.