Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q3 Day 12 - Unit 8 Test

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

- What is a chemistry mole?
- How do chemists convert units into moles?
- How many (atoms, liters, or grams) are in a mole?
- How are mole ratios used in balanced chemical equations?
- How can a chemist identify the limiting reactant and excess reactant after a reaction?
- What is the mass of the theoretical yield?
- How much excess reactant is leftover?

State SOL

Unpacking the Standards (Video explanation shown at 3:18)

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? Dimensional Analysis, One Step Stoichiometry, Two Steps Stoichiometry, Mole Ratios, Limiting Reactant, Excess Reactant, Theoretical Yield, Percent Yield

***Why is it important?** In order for chemical equations to be useful, there needs to be a way to measure the quantities of reactants and products. Stoichiometry involves quantitative relationships in a balanced equation which are based on mole ratios.

*How will I know I've learned it? I will recognize the pattern in the dimensional analysis equation in order to convert between units of moles, liters, grams, atoms, and molecules. I will use dimensional analysis to determine the limiting reactant. I will use dimensional analysis to determine the amount of excess reactant. I will calculate the percent yield of the desired product.

Differentiation strategies:

Unit 8 Test Review

Unit 8 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:

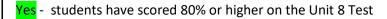
Teacher will answer last minute questions from the Unit 8 Test Review, which is due by the beginning of class. Teacher will offer a morning session test review for 45 minutes before school. (Open to all students – CP and Honors). Teacher will do a short review session at the beginning of each class (15 minutes). Students will use the rest of class time to complete the test.

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

Unit 8 Test Review – (summative) due at the beginning of class

Unit 8 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?



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.