Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q2 Day 12 - Unit 5 Test

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

- How do chemists write chemical names and formulas?
- How does the ratio of ions balance a chemical formula?
- How does the chemical name indicate the number of ions or atoms?

State SOL	Unpacking the Standards (Video explanation shown at 3:18)
CH1	CH.1 The student will demonstrate an understanding of scientific and engineering practices by f) obtaining, evaluating, and communicating information
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 a) chemical formulas are models used to represent the number of each type of atom in a substance; b) substances are named based on the number of atoms and the type of interactions between atoms; c) balanced chemical equations model rearrangement of atoms in chemical reactions; d) atoms bond based on electron interactions; e) molecular geometry is predictive of physical and chemical properties; and f) reaction types can be predicted and classified.

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

*What am I learning today? Ionic Bonding, Covalent Bonding, Chemical Nomenclature, Chemical Formulas

*Why is it important? Understanding nomenclature and chemical formulas is important for lab safety, communicating with other chemists, and predicting products of chemical reactions.

*How will I know I've learned it? I will understand that ionic bonds occur when a metal atom transfers an electron to a nonmetal atom. This creates a positive cation (metal) and a negative anion (nonmetal). I will understand that ions combine in specific whole number ratios in order to cancel out the overall net charge.

Differentiation strategies:

Unit 5 Test Review - online in Schoology

Morning Test Review – open to all students

Short Review – beginning of each class

Accommodations and/or modifications are being met for students with IEP's/504's.

Unit Test available on Schoology or paper; small group testing; extended time

Daily Plan/Sequence of Instruction:

Teacher will answer last minute questions from the Unit 5 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 5 Test Review – (summative) due at the beginning of class

Unit 5 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 5 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.