Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q3 Day 20 - Unit 9 Test

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

- How does heat energy affect the movement of molecules?
- How are pressure, temperature, and volume related for ideal gases?
- How does heat energy affect the movement of molecules?
- How are pressure, temperature, and volume related for ideal gases?
- How does the size of a gas molecule affect its velocity?

State SOL	Unpacking the Standards (Video explanation shown at 3:18)
CH.6	CH.6 The student will investigate and understand that the phases of matter are explained by the Kinetic Molecular Theory. Key ideas include a) pressure and temperature define the phase of a substance; b) properties of ideal gases are described by gas laws; and c) intermolecular forces affect physical properties.
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? Behavior of Gases, Kinetic Molecular Theory, Boyles Law, Charles Law, Gay Lussac Law, Combined law, Ideal Law, Dalton's Laws, Graham's Law, Temperature, Pressure, Volume, Moles, etc.

*Why is it important? The movement of atoms and the relationship of energy and the phases is outlined in the Kinetic Molecular Theory. The gas laws describe the relationships of pressure, volume, temperature and number of particles of a gas.

*How will I know I've learned it? I will understand how energy affects the movement of molecules. I will understand the relationship between temperature, pressure, volume, and moles of an ideal gas at STP.

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 9 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 9 Test Review – (summative) due at the beginning of class

Unit 9 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 9 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.