Krug Chemistry – Deep Run Daily Planning Guide

Date of Lesson: Q2 Day 16 – IMF, VSEPR Review and Unit 6 Quiz

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

- **How do chemical bonds determine the shape of molecules?**
- **How do bonding electrons and lone pair electrons influence the shape of the bond?**
- **How does the shape of the molecule reflect the its polarity and IMFs?**

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 d) atoms bond based on electron interactions; and **e) molecular geometry is predictive of physical and chemical properties;**
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**.

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

***What am I learning today?** Lewis dot diagrams are used to represent valence electrons in an element. Lewis structures can be used to determine the shape of molecules using the VSEPR model (bent, linear, trigonal planar, tetrahedral, and trigonal pyramidal).

***Why is it important?** Understanding the shape of a molecule helps identify its physical and chemical properties.

***How will I know I've learned it?** I will identify properties of each VSEPR shape (bent, linear, trigonal planar, tetrahedral, and trigonal pyramidal) and apply them to new molecular structures.

Differentiation strategies:

VSEPR Sorting Kits

Quizlet Live Games

Unit 6 Quiz

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; small group testing and extended time

Daily Plan/Sequence of Instruction:

This is the first day back after winter break! Students will use VSEPR sorting kits and Quizlet Live games to review IMF and VSEPR concepts. Teacher will answer any last minute questions. Student will put away notes and take the Unit 6 VEPR Quiz. This quiz will be on paper and require students to draw each molecule, list its chemical name, molecular shape, bond angle, and IMF.

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

VSEPR Shorting Kit – (formative)

Quizlet Live Games – (formative)

Unit 6 Quiz – (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 6 VSEPR Quiz

No, remediation required to proceed – if students fail the quiz, teacher will contact parent/guardian. Because this was a written quiz (not multiple choice), students will be allowed to correct their mistakes for up to a 65% passing score. *Usually they are only allowed to correct test questions - not quiz questions.*