***Lesson Plans for the Week of: 11/14/16 Teacher: Hough Course: Chemistry Period: 9***

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| Elements ofa Lesson | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| Objective/Focus/Essential Question | CH.2a;4a--Use periodic table to determine the number of grams in 1 mole of an element or compound | CH.2a;4a--Convert between mass and moles of a substance | CH.2a;4a--Convert between mole and # particlesSenior pictures | CH.3c;4aDifferentiate between empirical, molecular, and structural formulas | CH.3cConvert empirical formulas to molecular formulas |
| Lesson/Act.Type of Presentation | Whole group:Review the concept of the mole. Now state that the periodic table gives information about moles in each squareParts of one square of periodic table: note that the atomic mass is given in tiny units called atomic mass units (amu)For elements, atomic mass is the molar mass (the number of grams in one mole). For compounds, the molar mass involves adding the atomic masses of the elements in the formula. (Make reference to particle diagrams on p. 313-314)Sample problem: Determine the molar mass of Be, nitrogen (review that pure nitrogen is diatomic), the work up to compounds like NaOH, CO2; repeat the significance of the capital letters and the numbersStudent practice: p. 315#7,15Differentiation: copies of sample problems | Individual:Bellwork: calculate the molar mass for oxygenWhole group:Model mass↔mole conversions using the following demonstrations:1) Find #g in 0.750 mol CsI;2) Find #moles in 58.2 g CaF2 Individual:Students practice p. 338 #62 d, #65#dPractice as needed:Unit 5, worksheet 2, side 1differentiation: (a)increased explanation for lower level students, as required; (b) copies of sample problems | Whole group:Go over homeworkCalculator instruction in putting NA into calculator using the EE key, especially when NA is in the denominatorModel particle↔mole conversions using the following demonstrations:1) Find #particles in 0.750 mol C12H11O22;2) Find #moles in 3.61 x 1024 particles of KCl (tell students that a formula unit is a term used to refer to the smallest unit of one type of compound)List the various terms which can be used to mean “particles”Students practice p. 309#3-4, adapt p. 311#5-6 to use molecules | Whole group:Define and give examples of empirical, molecular, and structural formulasIndividual:Practice converting mixed g↔mole and mole↔particle problemsGo overExit pass | Whole group:Review types of formulas from yesterday’s lessonModel how to convert from empirical formula to molecular formulaIndividual:Practice converting empirical formula to molecular formula |
| Evaluation |  |  |  | Accuracy of exit pass | Student accuracy in practice |
| Extension/Homework |  |  |  | Extension: convert empirical formulas to molecular formulas |  |

MATERIALS:

Monday: textbook, chemistry modelling worksheet?

Tuesday: unit 5ws2

Wenesday:

Thursday: modeling ws3

Friday: Student practice: p. 339 #76-79: p. 333#41-42