Unit 3 Exam Review

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| ***Teacher:*** | Ms. Athwal  | ***Date:*** | November 4 - November 8 | ***Course:*** | Chemistry | ***Grade:*** | 11 |
| ***CA Standard(s):*** 3a *Students know* how to describe chemical reactions by writing balanced equations.Math Remediation – Dimensional Analysis 3b *Students know* the quantity *one mole* is set by defining one mole of carbon 12 atoms to have a mass of exactly 12 grams.3c *Students know* one mole equals 6.02 × 1023 particles (atoms or molecules).3d *Students know* how to determine the molar mass of a molecule from its chemical formula and a table of atomic masses and how to convert the mass of a molecular substance to moles, or number of particles,~~or volume of gas at standard temperature and pressure.~~6a *Students know* the definitions of *solute* and *solvent.*6d *Students know* how to calculate the concentration of a solute in terms of grams per liter, molarity, parts per million, and percent composition. |
| ***Learning Objective (s):*** LT 3.1 – I can discuss the law of conservation of mass and how it relates to chemical reactions.LT 3.2 – I can explain how to balance a chemical reaction.LT 3.3 – I can discuss how to convert between two related units and explain how to complete a multi – step conversion problem involving unrelated units.LT 3.4 – I can discuss the concept of a mole, the number that it represents, and how the overall size of it can vary between substancesLT 3.5 – I can identify the solute and solvent in a given solution.LT 3.6 – I can calculate the molarity and percent composition of a solution and discuss what the final concentration indicates.LT 3.7 – I can calculate the molar mass of given element or compound.LT 3.8 – Given an element, I can convert between the number of moles to grams and grams back to molesLT 3.9 – Given an element, I can convert between the number of moles to particles and particles back to molesLT 3.10 – I can analyze a substances molarity and determine the number of grams of a compound that are contained within a solution. |
| ***Essential Question(s):*** What am I actually eating?  |
| **Assessment**: * Learning Tracker Log
* Unit 3 Exam
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| * ***Do Now***:

**Catalyst Questions (Monday/Tuesday):** 1. What is the molarity of 42 g of NaOH in 5 L of water?  2. What is the molarity of 2 moles of HBr in 10 L of solvent?**Catalyst Questions Wednesday:*** 1. How many particles are in 2 moles of NaOH?
* 2. How many moles are in 36.044 x 1046 particles of HBr?
* 3. What is the percent composition of H in HBr?
* **Catalyst Questions Thursday/Friday:**
* Write down 3 things you learned this unit
* Any Last minute questions before the test?
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| **WHOLE GROUP/ DIRECT INTRUCTION** |
| * Solutes and Solvent
* Molarity
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| **SMALL GROUP STATION** |  | **COLLABORATIVE STATION** |  | **COMPUTER ASSISTED STATION** |
| [Stations Review Worksheet](3.8.Stations%20Review.doc) Unit 3 All  |  |  [Connect Four worksheet](../3.6/3.6.AP.Connect4.doc)  |  | Unit 3 Blogging all  |