**2024-2025 Weekly Lesson Planning Document**

Template for the following:

Science, Social Studies, CTE, World Languages,

HPELW, Fine Arts, JROTC

Week of Monday, January 27, through Friday, January 31

**EDUCATOR’S NAME:** \_\_\_ Ms. Burton, Ms. Daughrity, Ms. Mitchell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **SUBJECT:** \_\_\_\_\_\_Chemistry I\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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|  | **MONDAY** | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY** |
| **Lesson Title:** **Unit:****Chapter:****Page Number(s):** (It is suggested that you use your curriculum map.) | **Unit 6****Chapters 3/7/12:****All About the Mole****p. 85-88** | **Unit 6****Chapters 3/7/12:****All About the Mole****p. 85-89** | **Unit 6****Chapters 3/7/12:****All About the Mole****p. 86-87** | **Unit 6****Chapters 3/7/12:****All About the Mole****p. 85-89** | **Unit 6****Chapters 3/7/12:****All About the Mole****p. 85-89** |
| **TN Standard(s):**Grade level standard (include standard notation and language). Which State Standard is your lesson addressing? This should also be on your Whiteboard Protocol. | **CHEM1.PS1.1** Understand and be prepared to use values specific to chemical processes: the mole, molar mass, molarity, and percent composition. |

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| **Objective (s):**What specifically should students be able to do at the end of the lesson? The objective is standards-based.Write the objective in student friendly terms. For example, I can multiply binomials.This is should also be on your Whiteboard Protocol. What do you want students to know, understand and be able to do as a result of this lesson? The objective should be written using the stem…**I CAN….** | **I Can…**Recall and apply all previous knowledge from Chapter 2 in order to show mastery of Measurements and Calculations concepts on the Dimensional Analysis quiz. | **I Can…**I can plan and carry out an investigation in order to determine the number of Froot Loops™ in a family size cereal box. | **I Can…**Use the periodic table in order to convert between number of moles and the mass of an element. | **I Can…**Use the periodic table in order to convert between number of particles and the mass of an element. | **I Can…**Perform conversions between particles, moles, and the mass of a substance (using periodic table when needed). |
| **Possible Misconception (s):**What misconception(s) are you anticipating during this lesson? | It is easy to confuse the terms formula mass and molecular mass. Although they are calculated the same way, they refer to the mass of either an ionic compound or a molecular compound. |
| **Literacy-Based DO NOW:** This literacy-based activity should be ready for students to begin working on upon entering class. Students should have an opportunity to read, write, and/or speak. |  | Read the problem posed in the “Purpose” section of the Froot Loop™ lab activity. Brainstorm with your table partners the possible ways to solve this problem. | Write a conclusion describing the results of your Froot Loop™ investigation. | Determine the molar mass of Ca(NO3)2. | How many moles of gold, Au, are in 3.60 x 102 grams of Au? |
| **Agenda for the Day**Simple outline of lesson segments or activities that is time stamped.Teacher/class should take 2 minutes or less to review.  | * Do Now *(8 minutes)*
* Review Learning Objective *(2 minutes)*
* I Do *(12 minutes)*
* We Do *(12 minutes)*
* You Do *(13 minutes)*

Exit Ticket *(5 minutes)* | * Do Now *(8 minutes)*
* Review Learning Objective *(2 minutes)*
* Lab Activity *(40 minutes)*
 | * Do Now *(8 minutes)*
* Review Learning Objective *(2 minutes)*
* I Do *(12 minutes)*
* We Do *(12 minutes)*
* You Do *(13 minutes)*
* Exit Ticket *(5 minutes)*
 | * Do Now *(8 minutes)*
* Review Learning Objective *(2 minutes)*
* I Do *(12 minutes)*
* We Do *(12 minutes)*
* You Do *(13 minutes)*
* Exit Ticket *(5 minutes)*
 | * Do Now *(8 minutes)*
* Review Learning Objective *(2 minutes)*
* I Do *(12 minutes)*
* We Do *(12 minutes)*
* You Do *(13 minutes)*
* Exit Ticket *(5 minutes)*
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| **Beginning of Lesson****I Do****Science:** Engage & Explore | **I will provide students with practice problems that involve converting between units of particles, moles, and formula units.** | **I will provide students with a sample of Froot Loops™ and the equipment to measure masses. I will also provide the problem to solve: How many Froot Loops™ are present in a “Family Size” box of Froot Loops™?**  | **I will model the process of calculating molar mass and using it as a conversion factor to convert between moles and grams.** | **I will model the process of calculating molar mass and using it as a conversion factor to convert between particles and grams.** | **I will provide students with practice problems that involve converting between units of particles, moles, and formula units.** |
| **Middle of the lesson**We Do**Science:** Explain and Elaborate | **Work together with classmates to complete the formula and molecular mass assignment.** | **Work together to determine a procedure that will allow the lab group to calculate the number of Froot Loops™ found in a “Family Size” box of Froot Loops™.** | **Respond to CFUs embedded in the guided notes to indicate mastery of the concepts covered in class today.** | **Respond to CFUs embedded in the guided notes to indicate mastery of the concepts covered in class today.** | **Work together with classmates to complete the “More Mole Problems” assignment.** |
| **End of the lesson**You Do  **Science:** Evaluate | **Complete the formula and molecular mass calculation assignment.** | **Complete the Froot Loop™ Lab report.** | **Respond to CFUs embedded in the guided notes to indicate mastery of the concepts covered in class today.****Ask any questions I have concerning calculating molar mass and using it as a conversion factor to convert between moles and grams.** | **Complete the mole conversion assignment.** **Ask any questions I have concerning calculating molar mass and using it as a conversion factor to convert between particles and grams.** | **Complete the “More Mole Problems” assignment.** |
| **(05 MINUTES MAX)****Literacy Based closing activity:**Engage students in reading and writing tasks that assess their understanding of the lesson. Students are drawn back to the objective for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forums. Will be based on what was discussed in lesson for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forums. Will be based on what was discussed in lesson for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forums. Will be based on what was discussed in lesson for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forums. Will be based on what was discussed in lesson for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forums. Will be based on what was discussed in lesson for the day. |
| **SPED Modification (s):**What modifications are being made to accommodate the students receiving special services? | Extended time on assignments; ability to correct assignments; reduced number of problemsPlanned/preferential seatingAllow breaks during classExtended time for testing; reduced choices on multiple choice testsRepeating directions verbatim |
| **ESL Modification (s):**What modifications are being made to accommodate the students receiving special services? | Small group instructionRead aloud for assessmentsInteractive reader for computer assignmentsExtended time on assignments and testsOpportunity to redo assignments and correct tests based on teacher feedbackBilingual support provided by translated copies, peers, and dictionaries |
| **Assessment (s):**How will you know that students have reached the objective? Assessments may include:  Pre-assessment, formative assessments, summative assessment, post-assessment, discussions, performance, demonstration, etc.  |  | Formative assessment of lab report. | Formative assessment of responses to the CFUs and Exit Ticket. | Formative assessment of responses to the CFUs and Exit Ticket. | Formative assessment of responses to the “More Mole Problems” assignment. |
| **Corrective Activity (s):** What will I do if the student doesn’t understand the lesson? | -Weekly tutoring sessions -Peer tutoring partners.-Opportunity for corrections. | -Weekly tutoring sessions -Peer tutoring partners.-Opportunity for corrections. | -Weekly tutoring sessions -Peer tutoring partners.-Opportunity for corrections. | -Weekly tutoring sessions -Peer tutoring partners.-Opportunity for corrections. | -Weekly tutoring sessions -Peer tutoring partners.-Opportunity for test corrections. |
| **Extension/Enrichment Activity (s):** What will I do with students who understand quicker than others?  | * Ask students to explain why the problem… ”Find the formula mass of potassium chlorate, KClO3” …cannot be written as “Find the molecular mass of potassium chlorate, KClO3 .” Students should recognize that KClO3 is an ionic compound, consisting of a metal cation and a polyatomic anion. Molecular mass applies only to molecules, not to ionic compounds.
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| **Technology Integration:**How will the students use technology to help them master the objective. | * Use district-issued electronic device to complete online assignments, formative assessments (exit tickets), and summative assessments.
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| **IN THE FOLLOWING PAGES:** **ONLY COMPLETE SECTION(S) BELOW IF YOUR SUBJECT IS IDENTIFIED/LISTED** |
| **ALL SCIENCE (S):** What is your **resource plan for each of the 5 Es** of inquiry-based science instruction?1. Engage
2. Explore
3. Explain
4. Elaborate
5. Evaluate
 | **Engage** 1. Ch. 2 Section 2 Classroom Catalyst, TE p. 37
2. Ch. 2 Section 3 Classroom Catalyst, TE p. 48
3. Differentiated Instruction TE pp. 38-42; 48; 52; 57; 59-60.

**Interactive Video**1. Chapter 2: Why It Matters: Measurements and Calculations

<https://my.hrw.com/content/hmof/science/hss2017/tn/gr9-12/hmd_chem_9781328833594_/dlo/whyitmatters/index.html?vid=1>**Explore** **Laboratory Activities/Investigations/Animations & Simulations**1. Virtual Lab: Using Units and Measurements

<https://my.hrw.com/content/hmof/science/hss2017/tn/gr9-12/hmd_chem_9781328833594_/dlo/virtuallab/c02_00vl16/index.html>1. PhET Simulation: “Density”

<http://phet.colorado.edu/en/simulation/density>1. Uncertainty in Measurements

<http://antoine.frostburg.edu/cgi-bin/senese/tutorials/sigfig/index.cgi>1. Precision and Accuracy

<http://www.learner.org/courses/learningmath/measurement/session2/part_c/accuracy.html>1. “Rags to Riches” Game (Scientific Notation and the Metric System)

 <http://www.quia.com/rr/83587.html>**Explain**  **Textbook**1. Units of Measurement, pp. 37-46
2. Using Scientific Measurements, pp. 48-61
3. Interactive Reader: Section 2.2 and 2.3

**Elaborate** 1. Cross-Disciplinary Connection: Classical Ideas About Matter (SE)

 (HRW RESOURCE)1. Differentiated Instruction (TE wrap) (HRW RESOURCE)
2. WebLinks  (HRW RESOURCE)

**Evaluate** 1. Ch. 2 Section 2 Formative Assessment, TE/SE p. 46
2. Ch. 2 Section 3 Formative Assessment, TE/SE p. 61
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| **ALL SCIENCE (S):** ***(Multiple opportunities to engage in science, Makes since of science content)*** What is yourplan to incorporate technology while incorporating the 5E instructional model? | **SUGGESTED OPPORTUNITIES FOR TECHNOLOGY**1. PhET Simulations2. Microsoft Forms3. Virtual Lab |