**2024-2025 Weekly Lesson Planning Document**

Template for the following:

Science, Social Studies, CTE, World Languages,

HPELW, Fine Arts, JROTC

Week of Monday, March 3, through Friday, March 7

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **MONDAY** | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY** |
| **Lesson Title:** **Unit:****Chapter:****Page Number(s):** (It is suggested that you use your curriculum map.) | **Unit 7****Chapters 9:****Stoichiometry****p. 296-299** | **ACT Science Blitz** | **Unit 7****Chapter 9:****Stoichiometry****p. 289-291** | **ACT Science Blitz** | **ACT Science Blitz** |
| **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.PS1.3** Perform stoichiometric calculations involving the following relationships: mole-mole; mass- mass; mole-mass; mole-particle; and mass- particle. Show a qualitative understanding of the phenomenon of percent yield, limiting, and excess reagents in a chemical reaction through pictorial and conceptual examples. (states of matter liquid and solid; excluding volume of gasses).  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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…**Practical application of mole-to-mass problem solving using cooking recipes. | **I Can…**Demonstrate prior knowledge of science concepts and skills. Analyze data found in tables, charts, and graphs. | **I Can…**Practical application of mole-to-mass problem solving using cooking recipes. | **I Can…**Demonstrate prior knowledge of science concepts and skills. Analyze data found in tables, charts, and graphs. | **I Can…**Demonstrate prior knowledge of science concepts and skills. Analyze data found in tables, charts, and graphs. |
| **Possible Misconception (s):**What misconception(s) are you anticipating during this lesson? | Some students use their calculators inefficiently when they have numbers that are multiplied in the denominator of fractions. For example, a student might calculate the problem \_62 × 70 15 × 35 by dividing the product of the numerator by the product of the denominator. This requires that the products be written down. Show students that a number in the numerator is multiplied and a number in the denominator is divided. The problem then becomes a single process of pressing the keys: 62 × 70 divided by 15 divided by 35 = 8.3.Students often think all reactions go to completion. They will learn in a future chapter that reversible reactions and equilibrium systems limit the masses of products in chemical reactions. Reintroduce the concept of percentage yield at that time. |
| **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 over the Chocolate Chip Cookie Lab handout. Discuss with your table partner how you could determine the mass of ingredients you need! | Prepare for your Science ACT Pre-Test. | Finish your Chocolate Chip Cookie calculations & show your work to Mrs. Mitchell. Afterwards, read the directions for making the cookie dough. | Read the “helpful” hints on how to be successful when answering ACT Science questions. | Prepare to begin Passage 1a of your ACT Science Prep packet! |
| **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)*
* 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)*
 | * 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)*
 |
| **Beginning of Lesson****I Do****Science:** Engage & Explore | **I will model how to make calculations needed to determine the masses of ingredients for the Chocolate Chip Cookie Lab activity.** | **I will provide an ACT Science Pre-Test for the students to take in preparation for the ACT Science Blitz (March 17-25).**  | **I will provide the necessary ingredients for students to make Chocolate Chip Cookies.****I will bake the cookies.** | **I will provide baked cookies and let students write up a conclusion on if they calculated the recipe correctly.****I will provide students with strategies to help solve ACT Science passages successfully.** | **I will provide students with practice ACT Science passages to complete.** |
| **Middle of the lesson**We Do**Science:** Explain and Elaborate | **Work together to make the calculations needed to determine the masses of ingredients for the Chocolate Chip Cookie Lab activity.** |  | **Work together to measure and blend the proper masses of each ingredient to make two chocolate chip cookies.** | **Determine whether the cookie experiment was performed properly (or not) by the group.**  |  |
| **End of the lesson**You Do  **Science:** Evaluate | **Ask any questions I have concerning how to determine the masses for each ingredient needed to make chocolate chip cookies.** | **Complete the ACT Science Pre-Test.** | **Turn in the calculations for the Chocolate Chip Cookie Lab activity.** | **Write a conclusion about the success of your Chocolate Chip Cookie calculations and provide evidence to support your claim.****Ask any questions I have concerning solving ACT Science problems.** | **Complete ACT Science Passage 1a.** |
| **(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 Forms. Will be based on what was discussed in lesson for the day. |  | Complete literacy-based Exit Ticket question on paper or in Microsoft Forms. Will be based on what was discussed in lesson for the day. | Complete literacy-based Exit Ticket question on paper or in Microsoft Forms. 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 |
| Formative assessment of responses to the CFUs and Exit Ticket. | Formative assessment of calculations made for the Chocolate Chip Cookie Lab activity. | Formative assessment of responses to the ACT Science Pre-Test. | Formative assessment of calculations made for the Chocolate Chip Cookie Lab activity. | Formative assessment of the Chocolate Chip cookies. | Formative assessment of responses to the ACT Science Passage 1a. |
| **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?  | * Have students research how chemists increase the yield of a chemical reaction. One example involves the Haber process used to make ammonia, which is then used to make fertilizers. Point out the importance of fertilizers in growing food crops. To increase the percent yield, the Haber process involves very high temperature and pressure.
 |
| **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.
 |

|  |
| --- |
| **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. Classroom Catalyst, TE p. 289
2. Demonstration: Mass Relationships in Chemical
3. Reactions, TE p. 290
4. Classroom Catalyst, TE p. 294
5. Demonstration: Limiting Reactant, TE p. 302

**Explore**1. Quick Lab: Limiting Reactants in a Recipe, p. 306
2. Lab: Stoichiometric and Gravimetric Analysis
3. (Forensics)
4. Lab: Stoichiometry (Open Inquiry)
5. Lab: Gravimetric Analysis-Hard-Water Testing

**Explain**1. Classroom Practice: Stoichiometric Calculations Using Mole Ratios, pp. 295, 297, 299, 301
2. Classroom Practice: Limiting Reactant, pp. 303, 305
3. Classroom Practice: Percentage Yield, p. 308

**Elaborate**1. Alternative Assessment, TE p. 300

**Evaluate**1. 9.1 Section Formative Assessment, p. 291
2. 9.2 Section Formative Assessment, p. 301

3. 9.3 Section Formative Assessment, p. 308 |
| **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 |