

Grade 9

Distance Learning Module 4: Week of: 4/20<sup>th</sup> - 4/24<sup>th</sup>

## Science: Conceptual Chemistry - Modified from [Unit #1 - Nature of Matter](#)

### Targeted Goals from Stage 1: Desired Results

#### Content Knowledge:

1. A chemical reaction (chemical change) is a transformation that alters the composition of one or more substances such that one or more new substances with new properties are produced.

**Vocabulary:** products, reactants, stoichiometry, dimensional analysis

#### Skills:

1. Solve simple stoichiometry problems using mole ratios and molar mass.
2. Calculate the molar mass of common chemical substances.

#### Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Students will complete a phet simulation to help understand and visualize what stoichiometry tells us. Student will need to think logically to predict what products will occur based on given amounts of reactants. Students will complete an associated worksheet while working on the simulation.	Phet Simulation on Stoichiometry: <a href="http://phet.colorado.edu">phet.colorado.edu</a> - <a href="#">reactants-products-and-leftovers</a>	Associated Worksheet: Link posted in Google classroom
Tuesday: Students will watch a final video discussing how to effectively use dimensional analysis to solve simple stoichiometry problems. After,	Edpuzzle: What is Stoichiometry? Mol-Mol problems	Associated Worksheets: <b>Initial Practice:</b> Link posted in Google classroom <b>Advanced Practice:</b>

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
<p>students will complete two practice sets of stoichiometry problems. The first will be simpler, the second will be a bit more advanced.</p> <p><b>Online Q&amp;A/ Office Hours: 9:25 a.m.-10 a.m.</b></p>		<p>Link posted in Google classroom</p>
<p>Wednesday: Students will continue to work on stoichiometry problems. The difficulty of this worksheet will increase from Tuesday's.</p>	<p>Link posted in Google classroom</p>	<p>Associated Worksheet: Link posted in Google classroom</p>
<p>Thursday: Students will continue to work on stoichiometry problems. The difficulty of this worksheet will increase from Wednesday's.</p> <p><b>Online Q&amp;A/ Office Hours: 9:25 a.m.-10 a.m.</b></p>		<p>Associated Worksheet: Link posted in Google classroom</p>
<p>Friday: Review from the week Check answer keys for worksheets, retry if needed Office hours 9:25 a.m. to 10:00 a.m. Google Form quiz of the week's topics</p>		

**Week criteria for success** (attach student checklists or rubrics):

- ☐ watched all of the recorded videos and taken notes
- ☐ completed all google forms and checked for accuracy. Each incorrect answer on the google form will provide feedback as to why the correct answer is preferred. Students will incorporate this feedback into future attempts.
- ☐ Students will complete an end of the week assessment that checks on content understanding for the topics of the week.
- ☐ incorporated feedback, submitted second attempt, if needed on google classroom

**Supportive resources and tutorials for the week** (plans for re-teaching):

- online virtual Q and A help sessions (see Google Classroom for times and invite codes)