

Course: CP/CPA Chemistry

We hope that you, your families and loved ones are well! During the COVID-19 pandemic school closure, we will be doing our best to provide you engaging activities that will enrich your understanding of Chemistry. During term 4, you will primarily be exploring matter, including characteristics of elements and the formation of ionic and covalent compounds.

Goal for this week

Learning Objectives:

Students will be able to ...

- 1. identify groups of elements in the period table and understand their properties.
- 2. understand trends in the organization of the periodic table.
- 3. understand isotope formation.

(2016 MA STE Standard: HS-PS1-1)

Literacy Objectives:

- 1. Reading: to understand a concept and construct meaning
- 2. Writing: to take notes
- 3. Writing: to generate a response to what one has read, viewed, or heard
- 4. Reasoning: to identify a pattern, explain a pattern, and/or make a prediction based on a pattern

(https://www.bpsma.org/schools/brockton-high-school/about-us/mission-literacy-charts)

Lesson:

Chemistry Café: Periodic Table 2

- See the page(s) below for a complete description of what to do and the resources you will need.
- Your science teacher will be in contact to clarify expectations (like when and how to submit your work for credit) for your class.

WHY THIS MATTERS

Understanding how the periodic table is organized allows you to predict properties of the elements. You may think if the elements as unlimited resources, but that is not true. Several are "endangered" and we are at risk of running out. Check out this video on the helium crisis.

Additional Support

Email:

Please reach out to your science teacher with specific questions about the lesson.

Office Hours:

Here is a list of the science teachers' office hours. Please email your teacher to set up meeting times.

Other questions:

 Science Department Head Dr. David Mangus davidmangus@bpsma.org



Chemistry Café

Topic: Periodic Table 2

Assignments to do:

Click on the link to view the resource ...

- 1. Go through the Periodic Table Groups and Isotopes and the Periodic Trends slides and take notes.
- 2. Have access to the <u>periodic table</u>. (Can download apps onto smart phone: Periodic Table or Elementium).
- 3. Complete the Periodic Table Arrow Trends worksheet.
- 4. Complete the <u>Isotopes or Different Elements</u> worksheets. Choose 3 assignments from the café below to complete:

You should select 1 appetizer, 1 main course, and 1 dessert

Appetizer

Periodic Table Groups Worksheet

Periodic Groups worksheet

Groups of the Periodic Table Game

Main Course

PLIX Simulation: Periodic Trends: Size of an atom

Periodic Trends Worksheet

Periodic Trends 2 Worksheet

Dessert

Complete the PLIX Simulation: Isotope:Isotope Notation Practice and Isotope

Practice Worksheet

Isotopes Worksheet

Isotopes Chart Worksheet

Recommended Pacing

Monday: Start pre-work assignments, **Tuesday:** Finish pre-work assignments, **Wednesday:** Complete an appetizer, **Thursday:** Complete a main course, **Friday:** Complete a dessert