WEEKLY REMOTE LESSONS

May 11-15, 2020

BROCKTON HIGH SCHOOL SCIENCE DEPARTMENT



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 protons, neutrons, and electrons.
- 2. predict an unknown element based on atomic numbers.

(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

- 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

The Periodic Table provides us critical information regarding the composition of things we use every day. Understanding how to read and use the periodic table is crucial to understanding how different products are made. There is a whole branch of chemistry devoted to <u>food science</u> which studies the interactions of elements inside different food products. Like tasty foods? Maybe this is <u>the career for you</u>!

Additional Support

Email:

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

Office Hours:

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

Other questions:

- Science Department Head
 - Dr. David Mangus
- <u>davidmangus@bpsma.org</u>

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Chemistry Café

Topic: Periodic Table

Assignments to do:

Click on the link to view the resource ...

- 1. Go through the periodic table slides and take notes.
- 2. Have access to the periodic table (You can download apps onto smart phone: Periodic Table or Elementium). <u>Watch the Periodic Table Song.</u>
- 3. Complete the <u>atomic structure tutorial</u>.
- 4. Complete Atomic Numbers, Protons, Neutrons, and Electrons worksheet.
- 5. Complete the Periodic Table Information worksheet.
- Choose 3 assignments from the café below to complete: You should select 1 appetizer, 1 main course, and 1 dessert

Appetizer

Complete the Periodic Table Elements worksheet.

Complete the Atomic Structure Worksheet.

PLIX simulation: Atomic Number

Main Course

PLIX simulation: Mass Number/Atomic Mass

Periodic Table Puzzle worksheet.

Complete the Create your own Element worksheet.

Dessert

Wanted Element Project: choose any element on the periodic table. Complete on a separate sheet of paper (Not on lined paper.)

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