Course: Honors Physics

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 Physics. During term 4, you will primarily be exploring forces and energy, specifically as they relate to electricity.

Goal for this week

Learning Objectives:

Students will be able to ...

- 1. understand electric charge influence electric force.
- 2. understand the concepts of electric field and electric field direction.
- 3. be able to use Coulomb's law and electric field equations to solve problems related to electric force and field

(2016 MA STE Standard: HS-PS3-5)

Literacy Objectives:

- 1. Reading: to understand a concept and construct meaning
- 2. Writing: to generate a response to what one has read, viewed, or heard
- 3. Reasoning: to compute, interpret and explain numbers

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

Lesson:

- Your science teacher will be in contact to clarify expectations (like when and how to submit your work for credit) for your class.
- Click on the links to view the resources.

WHY THIS MATTERS

Electric fields are an important tool in understanding how electricity begins and continues to flow. Knowing that, we can design, power and control electricity in any past, present, or future technology. Wonder how your cell can be charged wirelessly? Check out this <u>article</u> and <u>video</u> to learn more!

Topic: Electric Force and Field

Day	What to do
Monday	Read and take notes on Khan Academy <u>Electric Force and Charge</u> review article (20 min).
Tuesday	Watch and take notes on Khan Academy videos " <u>Electric Field Definition</u> " (13 min) and " <u>Electric Field Direction</u> " (12 min). Then write a brief summary of the key concepts about electric field (5 min).
Wednesday	Read and take notes on Khan Academy <u>Electric Field</u> review article (20 min).
Thursday	Watch and take notes on the Khan Academy videos "Magnitude of a charge field created by a charge" and "Electric Field" (30 min).
Friday	Take the test (just for credit- no grade) on <u>Coulomb's law and electric force</u> (30 minutes).

WEEKLY REMOTE LESSONS

May 18-22, 2020



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 davidmangus@bpsma.org