WEEKLY REMOTE LESSONS



Course: CP/CPA 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 work and energy. This will include kinetic and potential energy and momentum.

Goal for this week

Learning Objectives:

Students will be able to ...

- 1. understand the Law of Conservation of Momentum.
- 2. calculate the momentum of an object.
- 3. calculate impulse as the change in momentum of an object.

(2016 MA STE Standard: HS-PS2-2)

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

The Law of Conservation of momentum applies to all moving objects. We utilize transportation (cars, buses, trains, planes) almost daily. <u>Which types of cars are safest</u>? Is that an important consideration for you if or when you buy a vehicle? How will you make the decision when it comes for you to choose?

Topic: Conservation of Momentum	
Day	What to do
Monday	Watch <u>Hewitt-Drew-it! PHYSICS 24. Momentum</u> (5 min.) and <u>Hewitt-Drew-it! PHYSICS</u> <u>25. Conservation of Momentum</u> (7 min). Attempt the <u>FISH PROBLEM</u> . Pause the video after the problem is stated and see if you can solve for the answer. After you finish, continue the video to see if you solved it correctly (10 minutes).
Tuesday	Select and answer 4 of the first 6 questions from the <u>Conservation of Momentum</u> <u>worksheet</u> (20 minutes).
Wednesday	Select and answer 4 of questions 7-12 from the <u>Conservation of Momentum worksheet</u> (20 minutes).
Thursday	Complete conservation of momentum problems 1-4 at <u>The Physics Classroom</u> . They are at the bottom of the page of the website in the section called "CHECK YOUR UNDERSTANDING" (20 min).
Friday	Complete conservation of momentum problems 5-9 at <u>The Physics Classroom</u> . They are at the bottom of the page of the website in the section called "CHECK YOUR UNDERSTANDING" (20 min).



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>