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 principle of conservation of energy.
- 2. calculate potential and kinetic energy.

(2016 MA STE Standard: HS-PS3-2)

# **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

Conservation of Energy is one of the most fundamental laws of science. You should know how different energies are involved as objects move. Take a rollercoaster for example. Is there really <u>enough energy</u> in the system to make it over the next rise? As with all science, we are always learning how laws and theories fit with the world around us. Wondering if it possible to break the Law of Conservation of Energy? Check out this <u>article</u> to learn more!

## **Topic: Kinetic and Potential Energies**

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Day	What to do
Monday	Complete worksheet on kinetic and potential energy (25 min).
Tuesday	Read <u>article on conservation of energy</u> (20 min). Watch <u>Professor Dave Explains</u> video on conservation of Energy and answer the question at the end of the video (10 min).
Wednesday	Watch <u>Hewitt-Drew-It! Physics 31 video</u> on Conservation of Energy pausing to answer the questions as it goes along. Do the same for the <u>Hewitt-Drew-It! Physics 32 video</u> (20 min).
Thursday	Complete the conservation of energy worksheet (20 min).
Friday	Take the online multiple choice quiz on energy conservation (20 min).

# **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