



- What do you think of when you hear energy?
- How do we use the word energy in real life?

A ball starts from rest at point #1 and rolls down a hill. Identify the point(s) with...

- Greatest Potential Energy
- Least Potential Energy
- Greatest Kinetic Energy
- Least Kinetic Energy
- Both Kinetic and Potential Energy

Wednesday, November 13

I hope you all enjoyed the snow day yesterday. I'm happy to see you all made it back to school safely today.

Today's activities:

- 1. Review your notes from Monday
- 2. Complete the practice questions
- 3. Check your answers to the practice questions with the answer key.
- 4. Get the assignment (more problems) from my desk. Assignment due tomorrow.

I am available if you need help/have questions

Find your new seat and complete the Do Now

A pendulum starts from rest at #1 and moves to #5. #3 is the lowest point.

Identify the...

- Maximum Potential Energy
- Minimum Potential Energy
- Maximum Kinetic Energy
- Minimum Kinetic Energy
- Both Kinetic and Potential Energy



Venn Diagram: Kinetic vs Potential Energy



Hour 3!!!!!

- No Do Now
- Pick Up 2 out of 3 Energy Practice
- You should be using your potential and kinetic energy equations from Monday (I also wrote them on the board)!
- When you are done, organize your binder and complete any unfinished work! Your binder check and quiz are next Thursday :)

Physics Ess Do Now

A 10 kg box is sitting on top of a 1.1 meter table. How much potential energy does it have?

Givens:

Unknown:

Equation:

Solve:

Physics Ess Do Now

A 2.0 kg ball hits the ground with a velocity of 3 m/s. What is the kinetic energy of the ball?

Givens:

Unknown:

Equation:

Solve:

Physics Essentials Monday, November 18, 2019

The daily Do Now will be provided to you on paper.

It must be completed and turned in <u>everyday</u>.

A 65 kg person stands at the top of Mount Everest, which is 8848 m tall. What is his potential energy?

If the same man is halfway up Mount Everest, what is his potential energy?



Define (equation and units)

- Energy
- Work
- Power



At the beginning of the school year teachers are moving desks around their rooms.

- 1) Ms. Logan moves a desk 5 m with a force of 100 N in 10 seconds. What is her work done? What is her power?
- 2) Ms. Yu moves a desk 10 m with a force of 50 N in 5 seconds. What is her work done? What is her power?

Work and Power Mini-Mini Lab

Materials: 1 mass, Spring Scale, Meter Stick, Stopwatch (Phone)

- 1) Measure one group member's height in **meters**:
- 2) Record the **force** from your spring scale when it is hanging : _____
- 3) Pull the mass across from your feet to your head and time it!
- 4) Record the time it takes to do this in **seconds**: _____
- 5) Calculate the work done: _____
- 6) Calculate the power exerted: _____
- 7) Perform the same experiment taking more time. Calculate the work and power.

You (with a force of 70 N) climb a staircase that is 8 meters high. How much work did you do?

You first run up the stairs in 6 seconds. What is your power?

You are tired and walk slower so it takes you 12.5 seconds to walk up the stairs. What is your power?

Work = F d Power = Work/time



- Look at sideboard
- Write on sticky note things you need to finish today

Physics Essentials Tuesday

Complete Power/Work Lab from yesterday
Complete 2 out of 3 work/power practice
Organize binder finish anything you need to!
Test and Binder Check is on THURSDAY!

- 1) Get a lab from the front desk
- 2) Read the first page
- 3) Complete the predictions portion

You will still get a stamp!

No Do Now

- Turn in your November Stamp Sheet
- Take out your lab from yesterday!

Extra Credit for Lab

For each trial (Walking and Running):

- Energy: Energy = Work (in Joules)
- Energy in calories (cal): 4.19 J = 1 cal
- Energy in Calories (Cal, Food Energy): 1000 cal = 1 Cal
- Power in Kilowatts: 1000 watts = 1 kilowatt
- Create a bar graph with data from 4 other students comparing Power in walking and running

For the roller coaster on the right identify...

- The max and min PE
- The max and min KE
- Rank the PE from greatest to least
- Rank the KE from greatest to least





- 1) Organize your binder
- 2) Create a list of what you need to complete
- 3) Work on your incomplete assignments for your Binder Check tomorrow
- 4) Unit 5 Review on Google Classroom



Turn in your Do Now Stamp Sheet from the last two weeks into the Turn In Bin!

Get your binder ready.

Review for test

Bonus: Explain this physics joke on the last page of your test.

