

Mechanical Energy

Mechanical Energy

- Day 1 – Work and NRG Introduction
 - Momentum 20Q Analysis
 - Mechanical Energy: Activity based Lecture
 - Need a meterstick, blue book, and timer for heavy lifting
 - Daily question
 - Hwk: Mechanical NRG Wkst #1-7
 - Show K-U-E-S on your own paper
 - Dress for possible outside activity tomorrow, stair climbing shoes

Mechanical Energy

- Day 2 – Work and Power
 - Scan Homework
 - Work Practice problems
 - People Power
 - Find and calculate your stair climbing power
 - You need to have the graph done by the end of class
 - Hwk: Wkst #2-7...the power parts

Work Problems

Show K-U-E-S in your notes

Harry Henderson weighs about 245 lb and applies an average force of 450 N to the ground as he runs. If he runs 60 meters, how much work did he do during his run?

Sally Sanderson does 828 J of work while lifting a barbell 2.3 m off the ground. How heavy is the barbell?

Mechanical Energy

- Day 3 – Power and NRG
 - People Power Lab
 - 30 minutes to finish questions – start now
 - Discuss Results and Power
 - Conservation of energy lab
 - No Free Lunch (you can't get something for nothing)
 - Should get to #9 if all goes well
 - HWK: Wkst #8-17

Mechanical Energy

- Day 3.1

- Scan homework/Daily question

- No Free Lunch lab (60 minutes)

- Get laptop and login before Daily Question

- Conservation of energy

- Lab results as guide

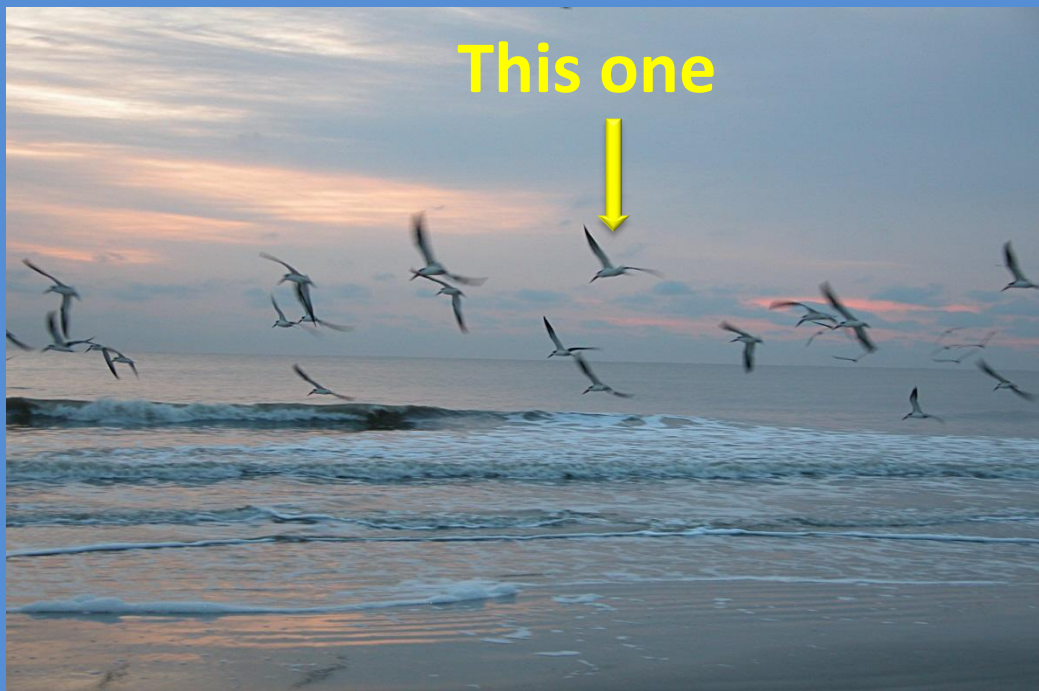
- How to find speed of roller coaster.

- Practice problems

- Hwk: wkst #18-21,32-35

Mechanical Energy

- Day 4
 - Practice problems
 - Conservation of energy
 - Various Examples
 - Bowling ball...
 - Wkst #36
 - 12Q Formative Assessment (25 min)
 - Use your results to help prepare for 20Q



**Show K-U-E-S
in your notes**

A 2 kg seagull is flying 4 m above the seashore with a speed of 5 m/s.

- Calculate its kinetic energy, its potential energy, and its total energy of the bird at this moment.

Mechanical Energy

- Day 5 – Remediation and 20Q
 - Work on remediation assignments
 - Turn in:
 - Labs – People Power and No Free Lunch
 - Remediation work
 - Review sheet
 - 20Q Summative Assessment
 - HWK - Define Electrostatics Key terms