Physics G

Work and Energy

(Chapter 5 Syllabus)

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| Block | Class  | Assignments |
| 1Jan 21/22 | -Why it is important to consider the weight of a barrel of bricks.-It's all Uphill lab-Calculating work-Work, Weight and Friction | **Turn In:** It's all Uphill (in class)**Read:** 5.1 |
| 2**Jan 25/26** | -Power-Power, work and weight Jambalaya!! | **Practice:**  W+P: 1-6, P5A: 1,3[[1]](#footnote-2)**Read:** 5.4 |
| **Finals****Week** | **Final – see chapter 4 website for details** |  |
| 3**Feb 2/3** | -Efficiency -Energy-Hand out A5.1 problems (Do at least #1, #2)-Kinetic energy-Potential Energy | **Practice:**  W+P: 7-15,P5F: 1(65 kW), 3**Practice:** A5.1 problems**Read:** 5.2 |
| 4**Feb 4/5** | -Conservation of energy-Staring death in the eye-Solving conservation of energy problems (WB) | **Practice:**  Energy: 1-9**Read** 5.3 |
| 5**Feb 8/9** | -Work on conservation of energy problems (A5.2: #1, 2) -Roller coasters explained | **Practice:**  Energy: 10-15 |
| 6**Feb 10/11** | -Human Power output lab (explained) -Get Human Power output data-Pass out FA 5.0, 5.1, 5.2 -Work on Human Power output calculations | **Practice:** A5.2 problems**Turn In:** Human Power Output Lab**Turn In:** A5.1 problems, #1 and #2 |
| 7**Feb 12/16** | -Intro to Trebuchets-Nova: Trebuchet video-Trebuchet simulations | **Practice:**  A5.2 problems |
| 8**Feb 17/18** | -Play with Roller coasters-Finish FA 5.0, 5.1, 5.2 | **Turn In:** A5.2 problems, #1 and #2 |
| 9**Feb 19/22** | Summative assessments on:5.0 - Work and Energy5.1 - Efficiency and Power5.2 - Conservation of Energy | **Turn in:** FA 5.0, 5.1, 5.2 |

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| Assignments:* 2 Labs:
	+ It's All Uphill/15 pts
	+ *Human Power Output lab*/30 pts
* 2 formative problems sets:
	+ A5.1 problems #1 and #2/(10 pts)
	+ A5.2 problems #1 and #2/ (10 pts)
* 3 Formative/Summative Assessments:
	+ 5.0 - Work and Energy
	+ 5.1 - Efficiency and Power
	+ 5.2 - Conservation of Energy
 | Handouts: This Syllabus FA5.0 FA5.1 FA5.2 Practice for 5.1 Practice for 5.2 Worksheet-WorkAndPower Worksheet-Energy Worksheet-Energy 2 Lab-HumanPowerOutput |

1. P5A means Practice 5A (it’s on page 170 in your book) [↑](#footnote-ref-2)