Physics   Name: _____

Homework Set - Work and Energy

Section Outlines:

§ 6.1 - 6.9   pp. 154-179
§ 10.1, 10.3   pp. 274-276, 282-283

Questions: Ch 6 – 1, 2, 4, 5, 6, 9, 10, 12, 13, 14, 17, 18
                   Ch 10 – 2, 9

Supplemental Questions:

1.) Can a normal force or a centripetal force ever do work? Explain.

2.) Explain how to find the ideal and actual mechanical advantages of a pulley system and a class I lever.

Problems: Ch 6 – 2, 3, 12-14, 20, 25, 29, 34, 35, 42, 48, 56, 59, 67, 69, 78
                  Ch 10 – 28, 75

Extra Credit (max of 5 pts)
Problems: Ch 6 - 24, 44, 54, 62, 79

Notes:
In this chapter pay special attention to the concepts of potential and kinetic energy. Make sure you know what conservative and nonconservative forces are and what it means when one says, "energy is always conserved." Know what work is from a physicists point of view and how the Work-Energy Theorem unites the separate the concepts of work and energy. The problem set is long but you may be interested to when you find out that solving problems with conservation of energy techniques is often easier than using kinematics and Newton's Laws!

Outlines		10
Questions		20
Problems		25
Total		**55**