Physics 151 Reading Assignment for July 7
Sections 10.3, 10.4, and 10.6

Please notice that this file is two pages long.

10.3 Kinetic Energy

- Kinetic Energy, K = energy of motion.
- $K = \frac{1}{2}mv^2$.
- The book doesn't quite make this clear, but the *total work* done on an object is what equals the change in its kinetic energy.
- Skip the section on rotational kinetic energy. It will make more sense when we go back and do chapter 7.

10.4 - Potential Energy

- Potential Energy - Saved/stored energy.
- Only Conservative forces create potential energy.
- We'll deal with only two conservative forces this term - gravity and the springs.
- $U_g = mgy$ - the gravitational potential energy depends on the object's height above the ground.

10.6 - Using the Law of Conservation of Energy

- I tend to mix introducing potential energy and using it to solve problems. In other words, I mix sections 10.4 and 10.6 of the textbook.

- For Monday's class, read the first few paragraphs of this section in order to introduce the concept of conservation of energy.
- In energy, it is the total energy, kinetic plus potential, which is conserved.