Reading Assignment for October 28 Sections 10.6 Through 10.10

Please notice that this file is two pages long.

10.6 - Using the Law of conservation of Energy

- I realize that this is like the 50th time I've encouraged you to read this section, but we still need to do the "combination" problem of gravity, spring, and friction.
- Finally, I encourage you to read the first paragraph of this section. I won't be talking about thermal energy in class yet, but the rest should make sense by now.
- There used to be a good example in this section of a combination problem. It's gone now, so I guess I'll have to do it myself in class!

10.7 - Energy Diagrams

• This section is new in this edition. I really don't have time to go over it in class, but some of you might find it interesting. I will say that this is *NOT* the same as the bar graphs I have been using in lecture.

10.8 - Molecular Bonds and Chemical Energy

• This section is also new in this edition. I'm not sure why it's here because this is not a chemistry class. You might enjoy it.

10.9 - Energy in Collision

- I won't have time to go over this in lecture, but it's a straightforward application of the last two chapters.
- Please be aware that when objects collide, the total momentum of the system will always be conserved. The total kinetic energy of the colliding objects may or may not be conserved. It depends on whether heat is created during the collision. If in doubt use momentum.

10.10 - Power

- Power The rate at which work is done or the rate at which energy is transformed.
- The quicker work is done, the more power is required.
- Unit of power J/s = Watt.

THE QUIZ IS AT: www.masteringphysics.com/site/login.html