Reading Assignment for October 4
Sections 3.7 and 6.1 through 6.3

Please notice that this file is two pages long.

3.7 Motion in Two Dimensions: Circular Motion

- The basic idea of what we'll need in chapter 6 was introduced here.
- When going around a circle, the direction is changing $\Rightarrow$ acceleration.
- Centripetal Acceleration - Acceleration towards the center of the circle necessary for circular motion.

6.1 Uniform Circular Motion

- Uniform circular motion = going around a circle with constant speed.
- Period, T - Time for one revolution.
- Frequency, f - How frequently the object goes around the circle. Period and frequency are inversely related.
- Centripetal Acceleration - Acceleration towards the center of the circle necessary for circular motion.

6.2 Circular Dynamics

- The centripetal acceleration - inward acceleration necessary for circular motion.
- Don't put any new forces on your free-body diagrams.

6.3 Apparent Forces in Circular Motion

- There is no such thing as an outward *centrifugal* force. It's all an illusion caused by the object's inertia trying to make it go in a straight line.

- Circular motion is another situation where the normal force acting on an object doesn't have to be equal to its weight. Remember that "apparent weight" is just the normal force.