Due 11/14

Know the basics of momentum.

1) READ CHAPTER 6! Read it **thoroughly**. STUDY the examples. Rework the examples. Be ready to come in with questions.

(*You should know already to go to Teacher Notes, then "Momentum" to find information.*)

2) Read the IPC worksheet on Momentum. That will give you the very basics, including two objects at rest pushing off from each other.

4) Read "Momentum Basics". Know how to find net momentum and change of momentum.

5) Read "Conservation of Momentum". Be able to do the first and second example. There are other examples in "Conservation of Momentum Examples."

Most of this chapter comes down to this:

Think of momentum a bit like kinetic energy: momentum is directly proportional to mass and velocity. Momentum is how hard it is to stop something.   The biggest difference between momentum and Ek is that p can be negative.

Conservation of Momentum means $p_{before} = p_{after}$, just like Conservation of Energy.

This means that $\Delta p = 0$ (unless an outside force pushes on it) and $\Sigma p_{before} = \Sigma p_{after}$.   Put in all of the momentums before $(p_1 + p_2\ldots)$ and keep track of the negatives and positives. Put in all of the momentums afterwards and they must be equal.

Start to learn impulse. Impulse $= Ft = \Delta p$.   Think of impulse like work: an impulse increases momentum just like work increases kinetic energy.