Note Taking Guide – Episode 602   Name _____

All conservation problems are solved using: $p_{initial} = p_{final}$

Example Problems:
A 1200 kg car is stopped at a traffic light when a 3500 kg truck moving at 8.4 m/s hits it from behind. If the bumpers lock, how fast will the two vehicles move?

A 0.0050 kg bullet is fired at a velocity of _____ m/s from a 2.0 kg gun. What is the recoil velocity of the gun?

Physics Challenge:

Problem Set #1 (on back)

Use the impulse equation to answer:
                           Which as greater?
                           (car, bug, or =)   State your reason here.

Force		
Time		
Impulse		
Change in Momentum		
Mass		
Change in Velocity		

Show What You Know: 1-5 (on back)