Chapter 15 Extra Credit:

The Saturn 5 rockets used to put man on the moon (yes, it happened Dillon) burned about 15 tons of fuel in the first 3 seconds of liftoff. When fully fueled, the mass of the rocket was 6.5 million pounds. The first stage of the rocket burned for 2.5 minutes creating a speed of 6164 mph. At this point, the Saturn 5 rockets had a mass of only 1.5 million pounds, as the first stage fueled was burned up and the stage was jettisoned. What was the KE at this point? Don’t be afraid of big numbers. We are talking about a lot of fuel, mass, and speed.