

It's All Relative

Homework 1: Due Monday 8/25/2014 in class

For this mini assignment, do the following:

- a. Using your favorite computational program (Excel, MatLab, Fortran, etc.), design a spreadsheet/program that 'knows' the relative size scales in the solar system. Specifically, you should explore the relative radial sizes of the planets as well as their relative distances from the Sun.
- b. With this 'scaling routine' in place, scale those sizes to some common/random object you decide to make equivalent to the Earth's radius. Consider some useful ways to explain via common objects the relative sizes of the planets.
- c. Now the difficult part: put in perspective the distances from the Sun based on the 'common item' scaling you used for the planetary radius. For example, if an orange represents the Earth, how far away is Mars?

Please turn in your programs and answers. If your program exceeds 5 pages you can email it and just hand in your answers.

Reading:

Read Chapter 1 of your textbook ASAP!

Feel free to begin reading Chapter 2, which we will start covering next week.