ASTR2050 Intro A&A NAMES: _____ _____

Scale Model of the Solar System
Work sheet

Build a scale model of the solar system, including the sizes and orbital radii of the sun and planets. Most of the data you need can be found in Kutner, Appendices B and D, and Figure 17.3.

Show the units in the following lists.

1. What celestial object did you use to set the scale, and what did you use in your model? What conversion factor does this give you to convert actual dimensions to model dimensions?

Celestial object:
Actual radius of celestial object:
Model object:
Radius of model object:

Conversion factor:

2. List the actual planetary/solar and orbital radii, and the model planetary/solar and orbital radii. Also indicate where on campus, earth, or elsewhere, you would place these objects.

Object	Actual radius	Model radius	Actual orbit	Model orbit	Where?
The Sun	_____	_____	_____	_____	_____
Mercury	_____	_____	_____	_____	_____
Venus	_____	_____	_____	_____	_____
Earth	_____	_____	_____	_____	_____
Mars	_____	_____	_____	_____	_____
Jupiter	_____	_____	_____	_____	_____
Saturn	_____	_____	_____	_____	_____
Uranus	_____	_____	_____	_____	_____
Neptune	_____	_____	_____	_____	_____
Pluto	_____	_____	_____	_____	_____

3. Where on earth, or elsewhere, would you place

- α-Centauri, the nearest star:

- The center of our galaxy:

- M31, the nearest (large) galaxy: