Teaching Notes for Orbital Motion

Equipment Needed:

- 12 computers with Starry Night preloaded
- Starry Night User Manual (just in case!)
- Graph Paper

This lab is a pretty simple one. The main source of complexity will come from using the software, Starry Night Pro, which is why you should have the manual with you!! The software itself is pretty easy to use, and for what the students are actually asked to do in this lab, it should be a no-brainer.

The students are asked to graph information to try and determine the functional form of Kepler's Third Law: $P^2=a^3$. They get this from taking the log of the orbital data they will be measuring using the Solar System views presented by the software.

There are some broader questions posed towards the end of the lab, and you should be ready to tackle them: how gravity works, inverse square law, etc.

