Examine the positions of Mars, Venus, Jupiter, or Saturn over the course of a few weeks.

**Purpose:**
As astronomers of old you will watch the motion of a planet against the background stars. You will most likely work with Venus or Mars. These two planets have the most noticeable and dramatic motion over a short period of time. This should increase your understanding of the motion and give you a feel for what the ancient astronomers had to explain.

**Equipment and Time Needed:**
A star map or a sketch of the eastern or western sky
(star maps: http://skymaps.com/downloads.html)

**Procedure:**
1. Pick a planet to observe. The best two planets would be Venus or Mars if they are in the sky. If you watch for a long period of time (the entire semester) you could also watch Jupiter or Saturn.
2. Go out as many times as possible and find your chosen planet. Plot its position on your star map or sketch and label the date of each observation. Do this at least 10 times during your observing period, but try to make observations over at least one month worth of time.
3. Turn in the map with this sheet along with answer to the questions below.

**Warning:** Make sure the planet you choose is up at a convenient time and that it is up for the duration of the time you wish to observe it.

**Questions:**
1. Which planet(s) did you choose to observe?
2. What did you observe?
3. Did the planet always move in the same direction with respect to the background stars or the Sun (depending on which planet you did)?
4. Is there anything you would do differently if you did this project again?