1) Use the spectrograph you built in class to observe various sources of light around campus. Describe what sort of spectra you see from each.

2) Use the spectrograph to look at a piece of paper in bright Sunlight (DO NOT LOOK DIRECTLY AT THE SUN!). Describe what you see. Can you see the Fraunhofer “lines”? Why or why not?

3) Use the spectrograph to look at the Moon (OK to look at directly) and describe what you see. What sort of spectra would you expect from the Moon?

4) Suppose you were to record an emission line spectrum with your spectrograph. How would you calibrate the wavelengths of the emission lines?

5) Suppose you compared two spectra of the same absorption line source: one observed while you were standing still and another while you were moving (but looking at the same source) in a car at 100 m.p.h. (obviously, do not actually try this!). Would you expect to see a difference in the two spectra? Why or why not?