

QUESTIONS TO HAND IN – EXPERIMENT 16

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. Does a red photon have more or less energy than a blue one?
2. This experiment uses a sodium vapor lamp to produce light of a known wavelength. Why can't you just use an incandescent light bulb?
3. A prism disperses violet light through a larger angle than red light. How does the diffraction grating differ in this regard?
4. Name a simple example in nature where white light is dispersed into its components.
5. The ground state energy of the hydrogen atom is equal to _____ eV = _____ J.