**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.