

NAME: \_\_\_\_\_

**SPECTROSCOPY PRELAB**

- 1) What is a spectrum?
  
  
  
  
  
  
  
  
  
  
- 2) Name the 3 types of spectra and, in 1 sentence each, describe them.
  - a.
  
  
  
  
  
  
  
  - b.
  
  
  
  
  
  
  
  - c.
  
  
  
  
  
  
  
  
  
  
- 3) Use Wien's law to calculate the surface temperature of the star Alnilam ( $\epsilon$  Orionis). The peak wavelength ( $\lambda_{\text{peak}}$ ) of the star is  $0.116 \mu\text{m}$ . How does this temperature compare to the surface temperature of the Sun?
  
  
  
  
  
  
  
  
  
  
- 4) What happens to absorption lines when the gas is fully ionized? Why?