



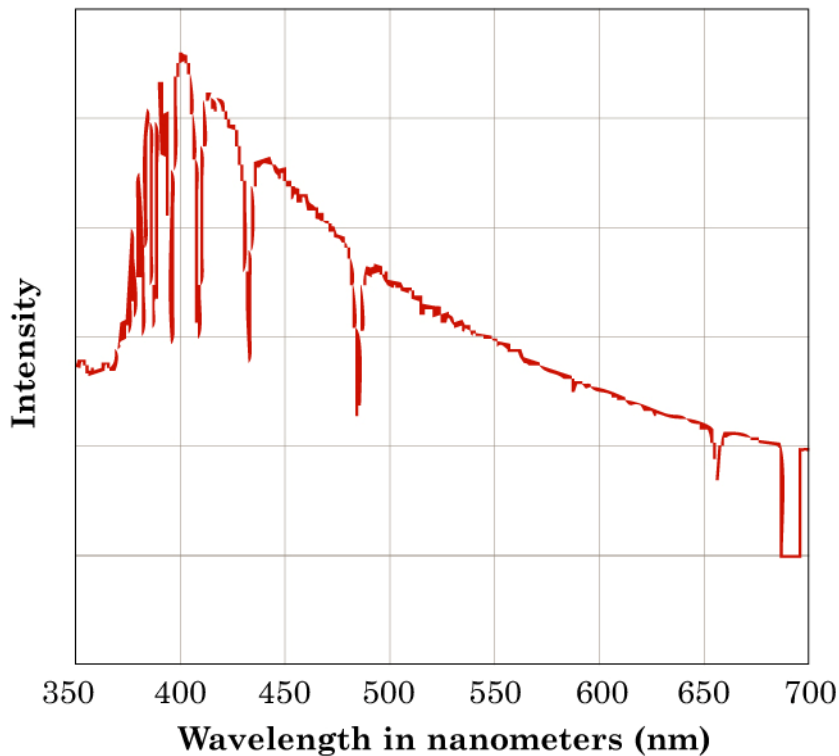
LESSON PLAN: STELLAR FINGERPRINTS: THE SPECTRA OF STARS

Activity Sheet 4

Name _____

Interpreting Stellar Spectra

Visible Spectrum — Type A Star

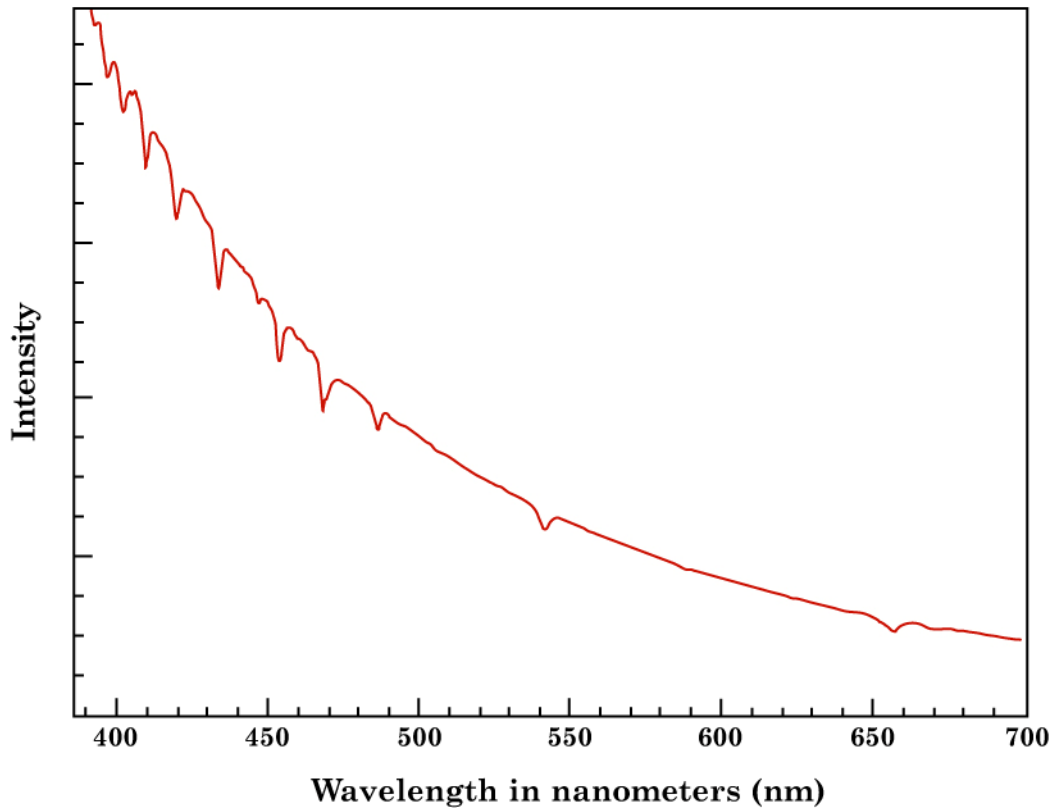


1. The stellar spectrum above shows dips in the line. The dips are points where atmospheric gases absorb the light coming from the star. These points correspond to particular wavelengths. List the wavelengths that show absorption in the visible range of 400 –700 nanometers.

2. Explain the significance of the wavelengths recorded above.

Activity Sheet 4 cont'd - Interpreting Stellar Spectra

Visible Spectrum — Star BD + 75 325



3. Is hydrogen the only element present in the atmosphere of star BD +75 325 whose spectrum is pictured above? Explain. What additional information would you need to identify any other element(s) that might be present? Where might you find this information?

4. Explain why astronomers can use spectroscopy to identify the composition of objects that emit light.