

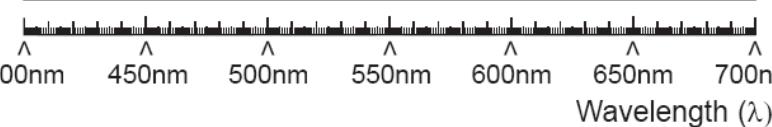
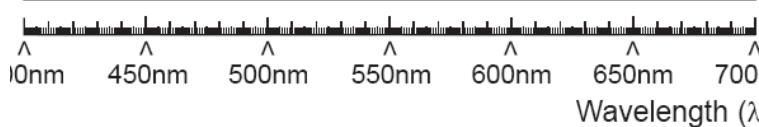
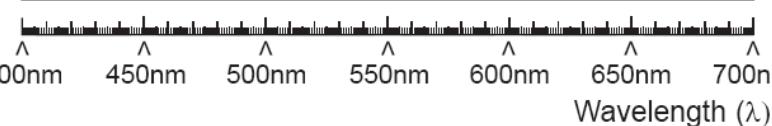
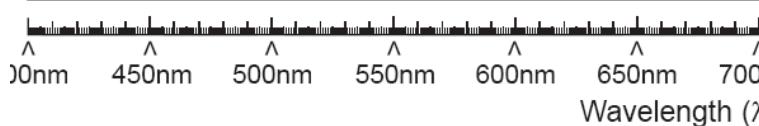
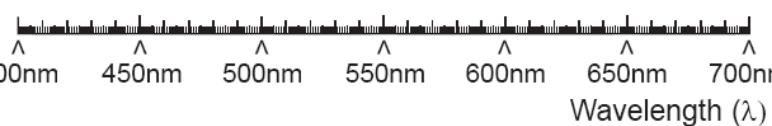
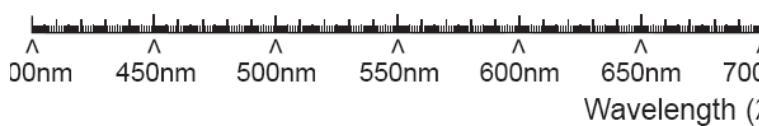
NAME: \_\_\_\_\_

Spectroscopy Lab

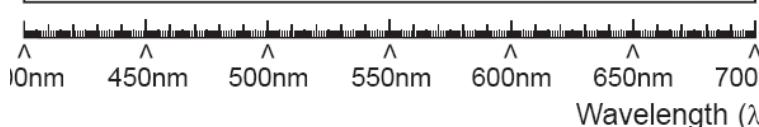
# SPECTRUMS: SO EXCITED!!

In this section you will be looking at different spectra of elements and determining what the spectra means and where it comes from.

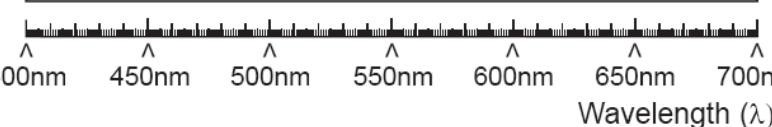
Below is a blank ruler where you will record your data. Draw what you see at the appropriate wavelength and you do not have to draw every line. **Write the name of the spectra on top of the box with the ruler.**



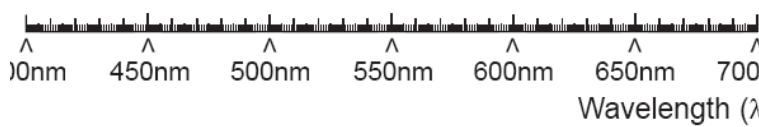
**DISCHARGE TUBE:** \_\_\_\_\_



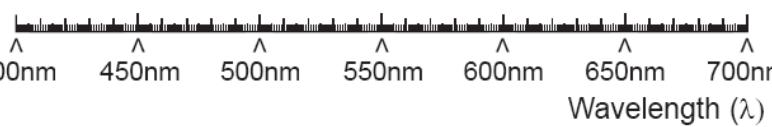
**SUN SPECTRA**



**FLUORESCENT LIGHT BULB SPECTRA**



**LIGHT BULB**



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

Spectroscopy Lab

# **CRITICAL THINKING QUESTIONS**

1. Why are there differences between the spectra? (*Hint: Think about the electrons*)
  2. Where do the emission lines come from? (*Hint: Think about question 2 and the title Spectra: SO EXCITED.*)
  3. Where did the energy come from? (*Hint: What are the discharge tubes attached too?*)
  4. Sunlight and incandescent light give off light of continuous wavelength. What do the spectra look like?
  5. What is special about the fluorescent light bulb?