Spectroscopy Homework

1)	Green light has a wavelength of 510 nm and yellow light has a wavelength of 550 nm. Which color of light is more energetic?
2)	Briefly explain how a spectrometer works.
3)	Briefly explain how spectroscopy works.
4)	In the flame test lab, you used the colors of light given off when you heated each sample to identify the unknowns. Do you think that the procedure you used would be appropriate for identifying all elements? Why or why not?