

## Sunscreen Pre-lab

1. What is the relationship between energy and wavelength?
2. Why does the light around us only cause a few electronic transitions?
3. What is a photon?
4. What is Intensity? How is it measured?
5. State Beer's Law and define all of the parts.
6. What units will appear on the extinction coefficient for our lab?
7. Is concentration directly or indirectly proportional to absorbance?
8. What is the solvent in which the sunscreen will be dissolved?
9. What wavelength will the spectrometer be set and the sunscreen absorb?
10. What is the electromagnetic spectrum?
11. How does sunscreen work?

### Prelab Notebook Preparation:

Fill out all of the header information you will need.

Write out a brief statement of purpose

Make a list of any key words from the lab manual that will help with theory

Write down any pertinent equations (chemical or mathematical). Define the variables.