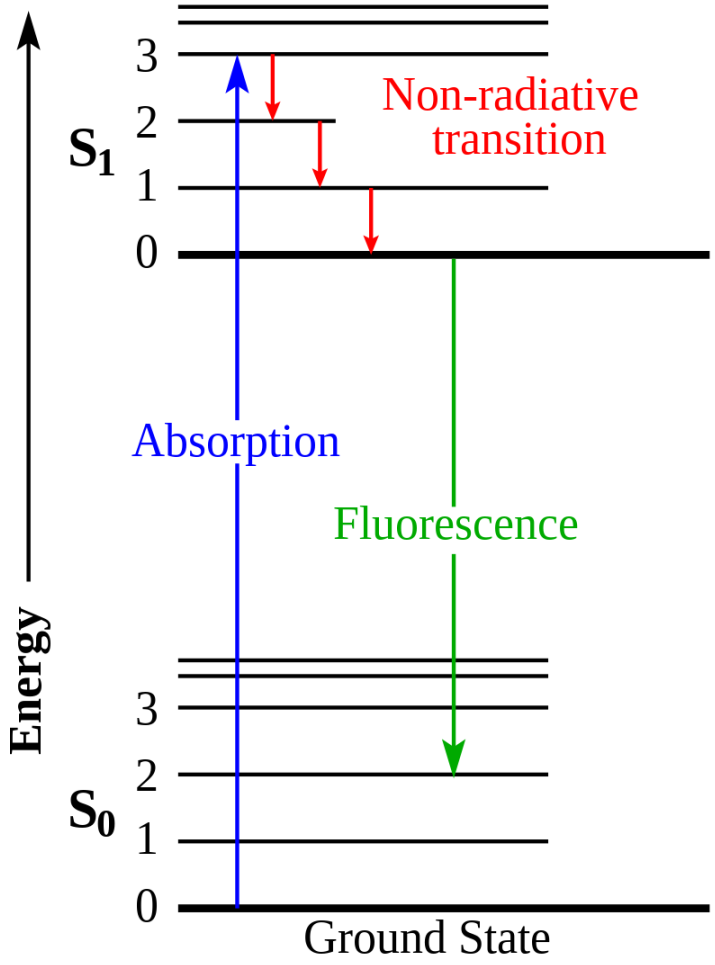
Name:

Fluorescence occurs when light is absorbed by a material moving electrons to a higher energy state. Some of the energy is removed via non radiative transitions, transitions where light is not given off. The remaining energy is then given off through a radiative transition, where light is emitted. Because some energy is lost through non radiative transitions, the emitted light is at a longer wavelength than the absorbed light. The most common example of fluorescence in your life would be white LEDs or black lights.



1) Based on what we saw in class, is fluorescence a broadband or narrowband phenomenon?

2) Based on what we saw in class, does the wavelength of fluorescence change with the light exciting it?

3) Pick a sample we looked at in class and describe how it looks when illuminated with the green light and the blue light

4) What are examples of fluorescence you see daily?

5) What is one way you can think of fluorescence being useful or an application of fluorescence spectroscopy?