

Spectrum: Range of  $\lambda$  +  $\nu$  Vs Range of

### Light Bulb Demo

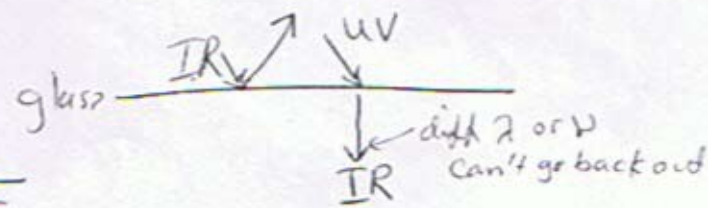
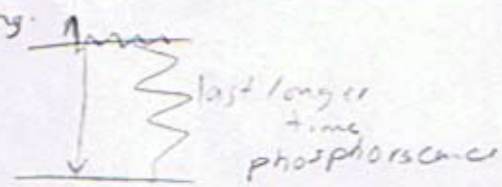
HW

CFL = Compact Fluorescence Light.

#### Goals:

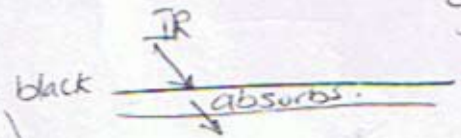
- Use a spectrometer to collect spectra
- Differentiate between photon emission and blackbody radiation
- Describe the differences in the inner workings of incandescent and CFL bulbs
- Create a group outline/graphic organizer/concept map/etc to explain the results of the demo
- Use the group outline to write an individual paper (1/2 - 1 page, single-spaced)
  - The following terms should be included (as well as any others that are relevant)

- Absorption
- Emission
- Blackbody radiation ← oscillating.
- Incandescence ← resistance
- Fluorescence ← direct
- Phosphorescence ← slower
- Atom or molecule
- Spectrum
- Electron ←
- Color
- Wavelength



line light:

oscillating



Theor up  
logically

10<sup>11</sup>s

temp