Chapter 22: Electromagnetic Waves

1. Be able to describe electromagnetic waves in general terms.
2. Be able to describe what polarized light is by contrasting it with unpolarized light.
3. Be able to describe the orientation of polarization of light after unpolarized light reflects off a horizontal or a vertical surface.
4. Be able to state the direction of polarization of light after it passes through sun glasses and why sun glasses are designed to polarize it that way.
5. Be able to describe how rod antennae and how loop antennae are able to detect EM waves.
6. Be able to list the seven categories of EM waves in order of increasing frequency (decreasing wavelength) and to state uses of each category of EM wave.
7. Be able to state the range of wavelengths of visible light from red to violet.
8. Be able to state the speed of electromagnetic waves to at least three significant figures.
9. Be able to use $c = f\lambda$ to solve for an unknown f or λ.