

Mr. Schneider presents...

# Light Wave Topics

- Electromagnetic waves
- Electromagnetic spectrum
  - Frequency
  - Wavelength
  - Energy
- Doppler effect
- Emission, absorption & resonance
- Transparency & resonance
- Reflected color
- Rod cells vs. red, green & blue cone cells
- Additive primary colors (red, green & blue)
- Subtractive primary colors (cyan, magenta & yellow)
- Scattering & selective transmission
- Least time principle
- Reflection, refraction & surface normal
- Index of refraction
- Wave fronts
- Partial reflection & refraction
- Total internal reflection & the critical angle
- Dispersion
- $n = \frac{c}{v}$