Unit 7 Waves

Archdiocese of Cincinnati- grade 8

37. know that an object is visible because of the light reflected from it

38. identify the properties of light

39. understand light travels in waves

40. identify components of the EMS

42. explain refraction and absorption

43. know how colors are produced

45. know how sound waves are produced

48. explain how frequency, wavelength, and amplitude connect

State of Ohio – grade 9

* Refraction, reflection, diffraction, absorption, superposition
* Radiant energy and the EMC
* Doppler shift

Concepts

Chapter 15,16,17,18 in part

* Waves and wave components/properties- transverse and longitudinal, electromagnetic
* Calculating wave properties- amplitude, period, frequency, wavelength
* Electromagnetic spectrum, visible light, photo electric effect, double slit experiment
* Wave behaviors and interference patterns

Activities:

STEMM: building CD spectrometers

Inquiry: PHET simulators, diffraction gratings