

Name _____

Period _____

Electromagnetic Spectrum Worksheet #1

- In each of the following pairs, circle the form of radiation with the LONGER WAVELENGTH:
 - red light **or** blue light
 - microwaves **or** radiowaves
 - infrared radiation **or** red light
 - gamma rays **or** UV radiation
- In each of the following pairs, circle the form of radiation with the GREATER FREQUENCY:
 - yellow light **or** green light
 - x-rays **or** gamma rays
 - UV radiation **or** violet light
 - AM radio waves **or** FM radio waves
- In each of the following pairs, circle the form of radiation with the LOWER ENERGY:
 - red light **or** blue light
 - microwaves **or** radiowaves
 - infrared radiation **or** red light
 - gamma rays **or** UV radiation
 - yellow light **or** green light
 - x-rays **or** gamma rays
 - UV radiation **or** violet light
 - AM radio waves **or** FM radio waves
- Springfield's "Classic Rock" radio station broadcasts at a frequency of 102.1 MHz. What is the length of the radio wave **in meters**?
- A beam of light has a wavelength of 506 nanometers. What is the frequency of the light? What color is the light?
- Blue light has a frequency of 6.98×10^{14} Hertz. Calculate the wavelength of blue light **in nanometers**.