Name _____ Period _____

Electromagnetic Spectrum Worksheet #1

1. In each of the following pairs, circle the form of radiation with the LONGER WAVELENGTH:

    a. red light **or** blue light
    b. microwaves **or** radiowaves
    c. infrared radiation **or** red light
    d. gamma rays **or** UV radiation

2. In each of the following pairs, circle the form of radiation with the GREATER FREQUENCY:

    a. yellow light **or** green light
    b. x-rays **or** gamma rays
    c. UV radiation **or** violet light
    d. AM radio waves **or** FM radio waves

3. In each of the following pairs, circle the form of radiation with the LOWER ENERGY:

    a. red light **or** blue light
    b. microwaves **or** radiowaves
    c. infrared radiation **or** red light
    d. gamma rays **or** UV radiation
    e. yellow light **or** green light
    f. x-rays **or** gamma rays
    g. UV radiation **or** violet light
    h. AM radio waves **or** FM radio waves

4. Springfield's "Classic Rock" radio station broadcasts at a frequency of 102.1 MHz. What is the length of the radio wave **in meters**?

5. A beam of light has a wavelength of 506 nanometers. What is the frequency of the light? What color is the light?

6. Blue light has a frequency of 6.98×10^{14} Hertz. Calculate the wavelength of blue light **in nanometers.**