

Wavelength and Frequency
Worksheet

Name: _____

Date: _____

Please answer all questions as completely as possible showing all work and equations. Don't forget your units.

1) What is the frequency of green light, which has a wavelength of $4.90 \times 10^{-7} \text{m}$?

2) An x ray has a wavelength of $1.15 \times 10^{-10} \text{m}$. What is its frequency?

3) What is the speed of an electromagnetic wave that has a frequency of $7.8 \times 10^6 \text{Hz}$?

4) A popular radio station broadcasts with a frequency of 94.7MHz. What is the wavelength of the broadcast? (Convert MHz to Hz first!)

5) What is the frequency of an electromagnetic wave with a wavelength of $4.55 \times 10^{-3} \text{m}$?