Notes Chapter 22 Section 2 Part B

______________________ is the very narrow range of wavelengths and frequencies in the electromagnetic spectrum that humans can see.

**Biology Connection**

Visible light is the source by which plants make their own food. __________________________ is the process by which plants make their own food and in turn release oxygen as a by-product.

________________________ has the longest wavelength and thus the lowest __________________________ of all the colors.

________________________ has the shortest wavelength and thus the highest __________________________ of all the colors.

________________________ light, like light from the sun, is actually composed of all the colors of the visible spectrum.

The imaginary name, __________________________, can help you to remember all the colors in the visible spectrum.

________________________ is another EM wave that is produced by the sun. They have __________________________ wavelengths and __________________________ frequencies than visible light. This means they carry __________________________ energy than visible light.

Describe 2 positive effects of UV light

1)

2)

Name 3 negative effects of UV light

1)

2)

3)

Why should you wear sunscreen on overcast days?
Are EM waves that have more energy than UV light, but less than gamma rays.

Too much exposure to X-rays can be harmful to humans by ________________________________.

X-rays can be helpful to humans. Figure 13 shows an example of how an X-ray can be useful. Include figure 13 in your notes. Make sure you know how it works

Name something X-rays cannot penetrate __________________________.

_________________________________________ are EM waves that carry even more energy than X-rays.

How are gamma rays useful in the medical field?

Are there any side effects to using gamma rays to fight growing tumors?