

1. List all 7 types of electromagnetic wave from longest wavelength to shortest wavelength:
[spelling must be close enough to recognize the word]
[4 points total]

1.	Longest wavelength
2.	
3.	
4.	
5.	
6.	
7.	Shortest wavelength

2. List the 6 colors of visible light from longest wavelength to shortest wavelength.
[You must use the proper physics word for each color!]
[3 points total]

1.	Longest wavelength
2.	
3.	
4.	
5.	
6.	Shortest wavelength

3. Check the last item in number 2 and make sure that you wrote the color *correctly*.

4. [3 points total] [You must use proper diction in answering these questions.]

4a) As wavelength becomes shorter, explain what happens to *frequency* and *energy* of an electromagnetic wave?

4b) As the wavelength becomes longer, explain what happens to the *frequency* and *energy* of an electromagnetic wave?

5. Compare blue light and red light: [3 points total]

Choose one of these....	... and one of these...	...and one of these!
A) blue light has longer wavelength	C) blue light has a higher frequency	E) blue light has a higher energy
B) red light has longer wavelength	D) red light has a higher frequency	F) red light has a higher energy

6. Compare radio waves and infrared waves: [3 points total]

Choose one of these....	... and one of these...	...and one of these!
A) radio waves have a longer wavelength	C) radio waves have a higher frequency	E) radio waves have a higher energy
B) infrared waves have a longer wavelength	D) infrared waves have a higher frequency	F) infrared waves have a higher energy

7. Compare ultraviolet waves and X-rays: [3 points total]

Choose one of these....	... and one of these...	...and one of these!
A) X-rays have a longer wavelength	C) X-rays waves have a higher frequency	E) X-rays have a higher energy
B) ultraviolet waves have a longer wavelength	D) ultraviolet waves have a higher frequency	F) ultraviolet waves have a higher energy

8. The most dangerous type of electromagnetic wave is the one with the greatest energy. Which type of wave is this? [1 point]