Quiz Pod: Color and the EM Spectrum   v2   Name _____

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 green light and yellow light: [3 points total]

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

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

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

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

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