Wavelength: the distance over which the wave's shape repeats, [1] and the inverse of the spatial frequency.

Visible spectrum is the portion of the electromagnetic spectrum that is visible to

the human eye. Electromagnetic radiation in this range of wavelengths is called visible light or simply light. A typical human eye will respond to wavelengths from about 390 to 780nm. In terms of frequency, this corresponds to a band in the vicinity of 430–770 THz. Specific wavelengths within the spectrum correspond to a specific color based upon how humans typically perceive light of that wavelength. The long wavelength end of the spectrum corresponds to light that is perceived by humans to be red and the short wavelength end of the spectrum corresponds to light that is perceived to be violet. Other colors within the spectrum include orange, yellow, green and blue.

The Visible Light Spectrum						
Red	Orange	Yellow	Green	Blue	Violet	
780 mm- 620 mm	620 mm- 597 mm	597 mm- 577 mm	577πm− 492πm	492πm- 455πm	455 пт- 390 пт	
Long A	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				Short A	

Thermal Radiation: Any object that is hot gives off light known as thermal radiation.

The hotter an object is, the more light it emits. And, as the temperature of the object increase, it emits most of its light at higher and higher energies.

Temperature (° C)	Color		
480	Barely red in the dark		
600	Dark red		
800	Cherry red		
950	Orange, barely visible in sunlight		
1100	Orange-yellow, visible in bright sunlight		
1300	Light yellow, nearly blinding, welding goggles required.		
1500	Nearly white, blinding		