

WAVELENGTH AND COLOR

The visual effect of light which the brain interprets as color is directly related to the wavelength of the light. The visible spectrum starts with the reds which are the longer wavelengths and as the wavelengths get shorter (and the frequency gets larger) the colors transform into the familiar hues of the rainbow: orange, yellow, green, blue, indigo, and violet. Ultraviolet has a shorter than violet but it is a color to which the eyes do not respond. Infrared is of a longer wavelength than red, again invisible to the eye.

Lasers emit monochromatic light--light of only one wavelength, or just one line of the rainbow's many colors. Here are some typical laser lines and their wave patterns drawn to scale. \longleftrightarrow = one nanometer

