

What Is the Electromagnetic Spectrum?

Have you ever gone outside after a rain shower and noticed a rainbow in the sky? Maybe you have had an x-ray to see if you had broken a bone. More than likely you have at least watched the television or used a cell phone. What do these all have in common? Well they all involve the electromagnetic spectrum.

The electromagnetic spectrum is a diagram that charts electromagnetic waves.

Electromagnetic waves are waves that can travel through the emptiness of space, at the speed of light.

Seven types of electromagnetic waves are:

1) radio waves 2) microwaves 3) infrared waves, 4) visible light waves,
5) ultraviolet waves, 6) x-rays 7) gamma rays.

[The Electromagnetic Spectrum \(youtube.com\)](#)



Wavelengths



The electromagnetic spectrum takes all the electromagnetic waves and lines them up based on their wavelengths. So what is a wavelength? If you have ever been to the beach and watched the water move, you have seen a wavelength. Electromagnetic waves move similarly to the rising and falling of water waves.

From the top of one wave to the top of the next wave is called a wavelength.

If the wavelength is long, you will experience less waves.

If the wavelength is short or closer together, you will experience more waves.

