The speed at which a photon traveling in a medium depends on the friction that the photon is subjected to. Different colors of photons have different frequencies (the speed at which the photons rotate). Therefore, when light from a low-density medium enters a high-density medium, the higher the frequency of the photon, the greater the resistance it suffers. According to Snell's Law,, represents the speed of light after it entered a high-density medium,

represents the angle of refraction, Therefore the bigger v2 we have, the bigger

We will get. As mentioned above, the more frequency it has, the less speed it has. Thus, the less it will be. ( )

For the situation that when light travels from a high density medium to a low density medium, will be on the contrary.

Therefore, when a beam of light passes from one medium to another, different colors have different frequencies and different angles of incidence.

The seven primary color frequencies from low to high are:

Red, Orange, Yellow, Green, Blue, Indigo, Violet.

Thus, the size of for the seven primary colors from small to large are:

Violet, Indigo, Blue, Green, Yellow, Orange, Red

the size of for the seven primary colors from small to large will be:

Red, Orange, Yellow, Green, Blue, Indigo, Violet.

This is what happens when a beam of light travels from one medium through a different medium.

air

water

air

water