Snell’s law

Is the theory that different materials (mediums) refract light different amounts depending on what they are made of.

Index of Refraction: can be expressed by comparing the ratio of the sine (trig. Function) of the angle of incidence and the sine of the angle of refraction.

Equation:

Index of refraction =

Sine OIncidence

**Sine ORefraction**

The index of refraction is a value that indicates how much a material will change the direction of light.

**The higher the index of refraction the larger the change will be.**

**Example:**

**Air**

**H2O**

**When light travels from a less dense medium to a more dense medium it slows down and bends towards the normal.**

**When light travels from a more dense medium to a less dense material it speeds up and bends away from the normal.**