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Basic Principles

What is the refractive index of a transparent material?

It is the ratio of the speed of light in a vacuum to the speed of light in that material.

What materials have a refractive index less than 1.000?

Light always goes faster in a vacuum, so no material has a refractive index less than 1.000.

List the refractive index for different parts of the eye and for common lens materials.

See Table 1-1.

Table 1-1

Refractive Index of Various Materials

MATERIAL	REFRACTIVE INDEX (N)
Air	1.00
Water	1.33
Aqueous	1.34
Vitreous	1.34
Cornea	1.37
Crystalline lens	1.42
PMMA	1.49
Crown glass	1.52
High index lenses	1.6 to 1.8