



a WOW Lab

BLUEPRINT

Light-Bending JELL-O

Glossary

angle of incidence - the angle, measured from the normal, at which light strikes the surface of a different medium.

critical angle - the smallest angle of incidence at which total internal reflection occurs.

optics - the branch of physics concerned with the physical properties and study of light.

refraction - change in the direction of a light or sound wave when it passes from one medium into another.

Snell's law - describes the relationship between the refraction and angle of incidence of light travelling through two different media. Mathematically, this relationship can be expressed as $n_1 \sin \theta_1 = n_2 \sin \theta_2$ where n_1 and n_2 are the indices of refraction for the two different media and θ_1 and θ_2 are the angles of incidence.

total internal reflection - occurs when light hits a different medium at an angle greater than the critical angle. The light is reflected back into the medium.

waveguide - a device, such as optical fibres, that confines waves.

waveguide phenomena - a wave travelling through a waveguide will experience total internal reflection until it hits a new medium.