

The angle between the incident ray and the normal line	Angle between the reflected ray and the normal line	Angle between the refracted ray and the normal line	center of the sphere of which mirror is a slice
angle of incidence	angle of reflection	angle of refraction	center of curvature, C
Lens where surface curves inwards/diverges light away from a point	Mirror where surface curves inwards/ focus light to a point	Focusing light into a single point	Transparent material with a bulge in the center/ focus light to a point
concave lens	concave mirror	converging	convex lens
Mirror where surface bulges outwards//diverges light away from a point	Smallest angle at which a light ray passing from one medium to another less refractive medium can be totally reflected	If a bundle of light rays is incident on a microscopically rough surface	Image smaller than the object
convex mirror	critical angle	diffuse reflection	Diminished image
Each color refracts slightly differently	The distance from the mirror/lens to the image	The distance from the mirror/lens to the object	Diverts light away from the focal point/rays never meet
Dispersion	distance of image, di	distance of object, do	diverging

Distance between f and vertex of mirror/lens	All rays of light that run parallel to the principal axis will be refracted through this	All rays of light that run parallel to the principal axis will be reflected through this	The location in space where it appears that light diverges from
focal length, f	focal point (of lens), F	focal point (of mirror), F	image
The direction that a wave travels as it approaches a boundary	Ratio of the speed of light in a vacuum to the speed of light in that substance	Upside down image	When you view an image of yourself in a plane mirror, there is an left-right reversal of the image
incident ray	index of refraction	Inverted image	Lateral inversion
Angle of incidence and angle of reflection are equal	Optical instrument that refracts waves	Ratio of height of object, h_o to height of image, h_i	Image bigger than the object
law of reflection	lens	magnification, m	Magnified image
Optical instrument that reflects waves	Imaginary line drawn perpendicular to a boundary	Everything that can be seen is seen only when light from this travels to our eyes	The greater this value that a material has, the slower that a wave will move through it.
mirrors	normal	object	Optical density

Mirrors, lenses, prisms or combinations of these	Rays that neither converge nor diverge/ to go or extend in the same direction	Being at right angles to a given line or plane	A flat mirror
Optical Instruments	parallel	perpendicular	Plane mirror
Normal that runs through the center of the mirror or lens	Diagram that traces the path that light takes in order for a person to view a point on the image of an object.	Image is formed by actual rays of light and can be projected	Shows the direction that light travels after it has bounced off the boundary
principal axis	Ray diagram	Real image	reflected ray
Change in direction of a wave upon striking the interface between two materials	Shows the direction that light travels after it has crossed over the boundary	Deviation of the path of a wave as it passes across the boundary separating two media	Relationship between the angle of incidence and the angle of refraction
Reflection	refracted ray	Refraction	Snell's Law
If a bundle of light rays is incident upon a smooth surface	A line that touches a sphere or circle at only one point	Reflection of a ray at the boundary of two media, when the ray comes from greater refractive index	Right-side-up image
specular reflection	tangent	total internal reflection	upright image

An empty space in which there is no air or other gas	Point where principle axis strikes mirror/lens	An image that appears to be behind the mirror/lens	
vacuum	vertex	Virtual image	