Introduction

The Ray Table is designed for use with the included D-shaped lens (and other components) to measure angles of incidence, refraction, and reflection. To change these angles, you can rotate the upper half of the ray table while non-skid feet keep the base firmly in place. Pencil marks are easily erased from the table’s white surface, so you can mark angles and trace rays directly on it.

Equipment Setup

Set up a light source or ray box to project a single ray. Place the light source and the ray table close together on a lab bench or other flat surface. Position the light source so that the ray crosses the center of the ray table; rotate the ray table to place one of the 0° marks on the incident ray.

Place the D-shaped lens over the lens outline on the ray table. Note that the flat surface of the lens is aligned with the “Com-
To use the ray table with a plane mirror, position the reflective surface of the mirror over table’s “Component” line.

Rotate the table to change the angle of incidence and observe how the angles of the refracted and reflected rays change. If you look down through the lens, you can see that the rays are refracted only at the flat surface, not at the curved surface.

To use the ray table with a plane mirror, position the reflective surface of the mirror over table’s “Component” line.