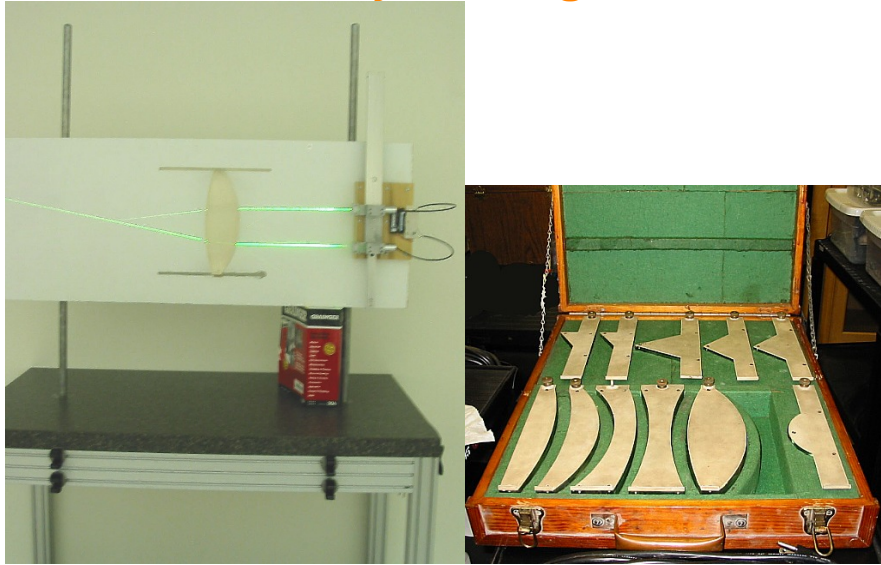
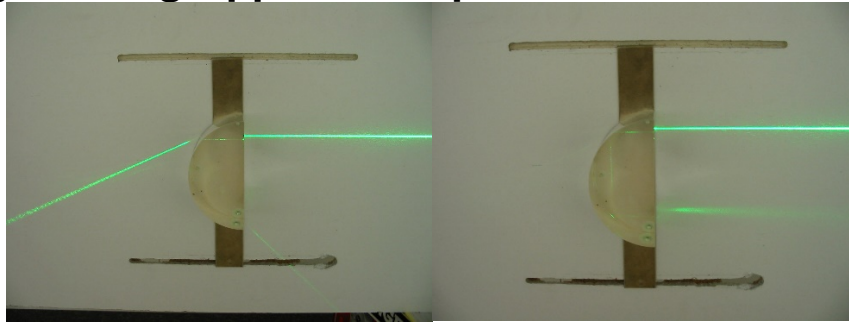


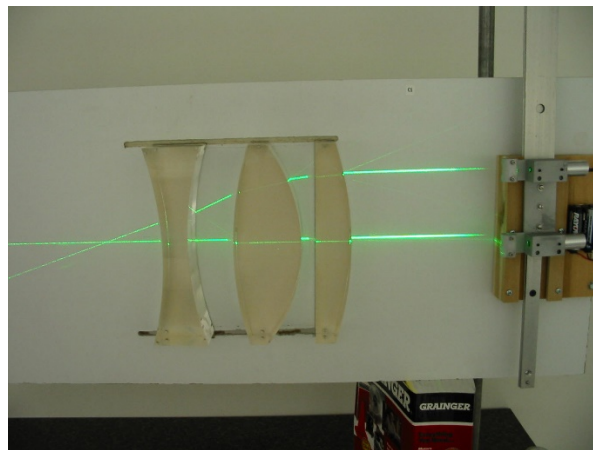
Ray Tracing



Ray Tracing Apparatus/Optic Element Collection



Total Internal Reflection Demo



Multiple Elements!

Purpose: Demonstrates refraction and lenses.

Laser pointers provide two parallel rays which are used to trace the path of light through an assortment of optical elements. The rays can be turned on separately and translated up and down. The backboard is plastic so that you can mark and write (and erase!) with whiteboard pens.

For instance, the phenomena of total internal reflection can be nicely demonstrated using the semicircular element as shown above. Here, as the beam is translated downwards, the refracted beam quickly reaches normal refraction and all of the beam is reflected internally.

Elements can be combined to demonstrate various things, *e. g.* that the focal point of a converging lens is moved in by adding another converging lens.

Setup: The board is designed to clip onto the insert ringstands of the demo table.

Note: Each lens fits its neighbor, and all of the lenses can be combined to form a flat optic surface.

Extra Equipment: None

Location: Shelf C5