



**UNITED SCIENTIFIC SUPPLIES, INC.**

**OPERATING INSTRUCTIONS AND ACTIVITY GUIDE**

## **HARTL OPTICAL DISK**

**HOD001**



*Figure 1*

### **DESCRIPTION**

The HOD001 Hartl Optical Disk is a compact apparatus that demonstrates the behavior of optical elements by means of ray paths through clear acrylic models.

It consists of a circular, graduated disk (1, *Figure 1*) mounted on a stand (2) and fitted with a ray box (3) on an adjustable arm. Narrow, parallel rays of light are created across the surface of the disk by a cylindrical lens in the ray box and a pair of slit diaphragms (4) placed in front of the lens. The various optical element models (5) have a magnetic backing that allows them to be attached to the disk in any suitable position.

The mounting of the disk allows it to be rotated through 360° about an axis passing horizontally through its center to investigate the effect of angle variation on the ray paths through the optical element models.

The ray box requires a separately-supplied power source capable of providing 12V/2A for the lamp.