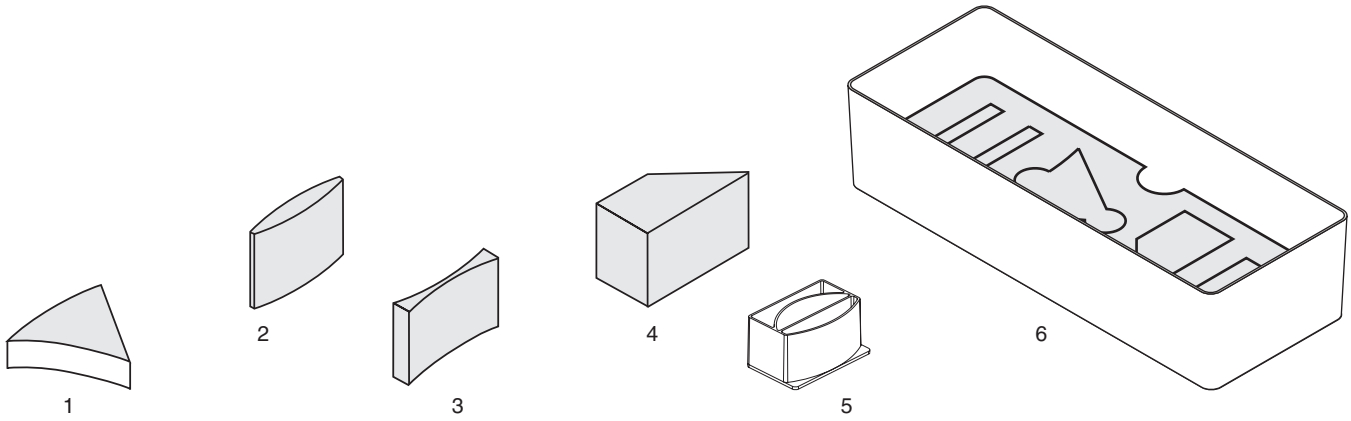
Ray Optics Kit

OS-8516A



Included Equipment	Part Number
1. Mirror	636-05100
2. Convex Lens	636-05501
3. Concave Lens	636-05502
4. Acrylic Rhombus	636-05611
5. Hollow Lens	OS-8511
6. Storage Box/Water Tank	740-177
with foam insert	740-07863
and white plastic sheet	648-09744

Recommended Equipment	
Basic Optics Light Source	OS-8470

Introduction

The Ray Optics Kit is a set of optics components designed for use with a ray box such as the Basic Optics Light Source. The storage box doubles as a tank for studying lenses under water.

About the Components

To use any of the components, place them on a flat tabletop in the path of rays from your ray box (either a single ray or parallel rays). Place a white sheet of paper on the table to facilitate ray tracing and to make the rays more visible. The concave and convex lenses have one flat edge. Place the flat edge on the table so the lens stands stably without rocking.

The hollow lens has three sections that you can fill with water or leave empty to make lenses of different shapes. To study a lens made of air and surrounded by water, use the storage box as a water tank. Remove the foam insert, but leave the white plastic sheet in the box to serve as a reflective surface. Put the hollow lens in the box with a small weight on top to stop it from floating. Fill the box with water to just below the top of the hollow lens. Use an eye dropper or pipette to empty and fill the sections of the lens. Use a pencil to trace rays on the plastic sheet under water.

Specifications

Mirror	
Sides	Convex, Concave, and Plane
Radius of curvature	12.5 cm
Width of each side	6 cm
Height	1.5 cm
Convex and Concave Lenses	
Shape	Convex-convex and concave-concave
Radius of curvature	12.7 cm
Width	5.7 cm
Height	3.8 cm
Material	Acrylic
Index of refraction	1.49
Acrylic Rhombus	
Angles of corners	90°, 90°, 45°, 135°
Width of sides	3.2 cm, 3.2 cm, 6.4 cm, 4.5 cm
Height	2.5 cm
Index of refraction	1.49
Hollow Lens	
Radii of curvature	5 cm and 3 cm
Width	5.1 cm
Total thickness	3.3 cm
Height	2.7 cm

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100

Phone: 916-786-3800 (worldwide)
800-772-8700 (U.S.)

Fax: (916) 786-7565

Web: www.pasco.com

Email: support@pasco.com

Limited Warranty
For a description of the product warranty, see the PASCO catalog.

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