

Introduction to Light & Optics

Carolina Scientific

Evaluated by Jim Keating (Washington HS, South Bend)

Price: \$145.95

Many Labs in Kit: Polarized Light
Transmission Grating
Color by Addition & Subtraction
Mirrors (plane, concave, convex)
Lenses (convex, concave)
Refraction

Materials supplied: 4 acrylic prisms, 8 combs, 3 color paddle sets, 16 polarized filters, 8 flexible mirrors, 8 dual convex lenses, 4 concave lenses, 8 diffraction gratings, 16 D batteries, 8 flashlights, 8 foamboards, 40 pins, 3 mirror supports

Materials needed: index cards, white paper, rulers, colored pencils, plastic wrap, zip lock bags, incandescent light, fluorescent light, candle, Bunsen burner

Evaluation: This is all you would need to cover light and optics in a general high school physics class. The activities in the kit cover the major concepts in this area. The thickness of the color paddles in the kit causes them to not let much light through when three are superimposed; however, the manual suggests getting around this problem by superimposing the light from three flashlights each covered by a single color paddle. The other activities worked as expected. It might be nice to have more than four acrylic prisms for the refraction experiment. The student manual seems fine.

