

List of Materials

General Supplies

- Tape, glue, rubber bands
- scissors and (or) single-edge razor blades
- grease pencil or water soluble markers
- shoe box
- $3" \times 5"$ note cards
- aluminum foil
- sheet of thin cardboard and of corrugated cardboard
- glass or clear plastic jar with lid
- ruler or meter stick, protractor
- straight pins
- six-sided die

Activity 1

- $2 \text{ cm} \times 2 \text{ cm}$ square of holographic or regular diffraction grating
- 1/2 sheet of regular graph paper, 10 squares per cm

optional "The Spectra of the Stars" slide set

optional Preassembled units for spectroscope

Activity 2

• 1 sheet of isometric graph paper

Activity 3

- Thermometer with a range to 50° C
- 3/4" cork stopper with hole for thermometer

Activity 4

- sheet of clear cellophane, about 8 cm square
- 6 cm \times 12 cm \times 2 cm block of paraffin

Activity 5

- $3 \text{ cm} \times 3 \text{ cm}$ squares of colored acetate (or cellophane): red, green, blue
- $3 \text{ cm} \times 3 \text{ cm}$ square of Polaroid filter
- $3 \text{ cm} \times 3 \text{ cm}$ square of Solarskreen filter

optional "The Sky at Many Wavelengths" slide set and book



Activity 6

- clear hemisphere—plastic or glass—about 15 cm or larger in diameter
- magnetic directional compass

Activity 7

- small bar magnet, about 1 cm \times 1 cm \times 4 cm
- small plane mirror, about 3 cm square
- 30 cm or thin nylon thread
- 20 cm of 20 AWG copper wire

optional pen-sized laser (under \$50 from Metrologic Corp.)

Activity 8

• Solar Hα photo set

or

• *Sky and Telescope* reprint LE 0 14 "Laboratory exercises in Astronomy—the Rotation of the Sun"