

Basic Detail Report

Title Spectroscope

Date about 1968

Primary Maker Richard Welling

Medium plastic; cardboard; paper

Description Spectroscope with original instruction manual. Spectroscope is made of a black cardboard body with two gray, removable caps on the ends. One end has a slit in the plastic, and the other end has a circular hole with a plastic disk beneath. Originally owned by Richard Welling. From the instruction manual: "White light can be separated into all of the colors of the spectrum/ by a prism or a diffraction grating. The spectroscope/ is a tubular instrument used to observe this color separation. It uses/ a diffraction grating with a narrow slit in the front through which light/ enters and is separated into the spectral colors. The diffraction grating/ is a plastic disk with 13,400 grooves per inch which breaks/ the light down into its color components./ Intricate and precise spectroscopes are used by astronomers/ and other scientists to investigate and chart the properties of stars/ and other glowing objects. The student spectroscope can be used to examine/ the properties of continuous and bright-line spectra from various sources/ of light. The investigation also contains a study of dark-line spectra." (a) tubular body (b) end with slit (c) end with circle (d) instructions

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Dimensions Primary Dimensions ((a-c, together) length x diameter): $5 \times 1 \frac{1}{8}\text{in.}$

($12.7 \times 2.9\text{cm}$) Primary Dimensions ((d) height x width): $11 \times 8 \frac{1}{2}\text{in.}$ ($27.9 \times$

21.6cm)