

science news

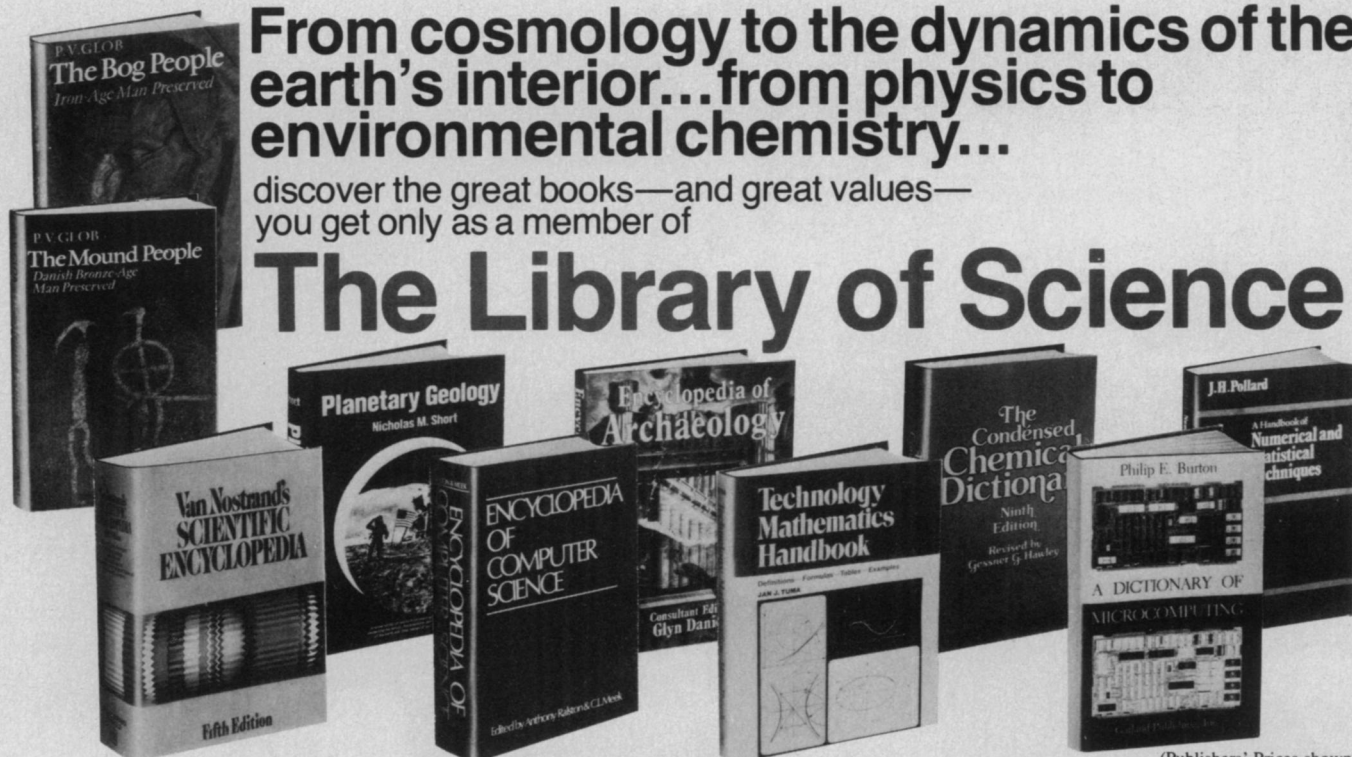
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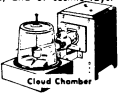
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ATOMIC ENERGY LAB

ATOMIC CLOUD CHAMBER with **PROJECTOR ILLUMINATOR**. See the vapor trails of alpha and beta particles, and of cosmic rays. **SPINTHARISCOPES**. Shows exploding atoms. **ELECTROSCOPE**—metal housed with **Scale** and **Magnifying Viewer**. Measures background radiation and tests sample sources. **SAFE RADIOACTIVE MATERIALS**. Alpha Source in handy container and Uranium Ore. Full instructions and explanations open up the fascinating field of nuclear physics.



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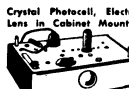
SPECTROSCOPE

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PHOTOELECTRIC RELAY

Crystal PhotoCell, **Electronic Amplifier**, **Relay**, **Large Condensing Lens**, **Cabinet Mount**. Features automatic on-off or holding circuit operation. Sensitivity Control, Plug-in Outlet for controlled circuit. Use for alarms, counters, etc. Operates on 115V AC. A basic unit for many exciting experiments.



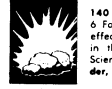
DC POWER SUPPLY

Changes regular 110-120V AC to the direct current required for electronic projects and experimenting. Consists of a **Power Transformer**, **Vacuum Tube Rectifier**, **30/20 MFD Capacitor Filter** Circuit, and a **potentiometer Voltage Selector**. A **Safe Isolated Power Supply** eliminates the need of expensive multi-volt batteries.



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140 watt filter type UV LAMP. Heavy metal cabinet. 6 Foot Cord, **Rotary Switch**. Produces dazzling color effects with invisible black light. Has many uses in the fields of Mineralogy, Crime Detection and Science. Accessories include **Invisible Ink**, **Tracer Powder**, **Fluorescent Crayons**.



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Electronic Computer multiplies, divides, calculates powers, roots. Set up the problem on the scales of two potentiometers and find the answer on the scale of third potentiometer as indicated by a sensitive meter. Instruction Manual covers computer theory and practical use. Over 150 sample problems and answers demonstrate use with fractions, trigonometry, logarithms, physics formulas, ballistics, etc.



MICROCRAFT LAB

Microprojector shows microscopic subjects enlarged with brilliant detail on wall or screen. Has sturdy **Steel Cabinet**, large **Condensing Lenses** for extra brightness, and a **GE Projection Lamp**. **Microscope** features **Ramsden Eyepiece** for wide field viewing. **Substage Light** and **Polarizing Filters**. Magnifies up to 200X. Includes **Slides**, **Cover Glasses** and **Microscopy Manual**.



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A **practical Transit**. 6X erect image telescope with **Range Finder Reticle** for measuring remote distances and heights. **Vernier** reading for both horizontal and vertical scales. **Leveling Head** with **Thumb Screw** Adjustment and **Spirit Level**. **Clamps** under head hold wooden legs of Tripod. (Legs not included.) Instructions cover elementary surveying, range-finding.



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Exciting optical projects for the study of light. Equipment includes: five **Precision Lenses**, **Prism**, **Polarizing Filters**, **Diffraction Grating**, **Mirror**, **Telescoping Tubing**, **Lens Mounts**, **Tube Holders** and **Brackets**. All the parts and instructions to build a **Camera Obscura**, **Camera Lucida**, **Polariscope**, and many other optical devices.



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Photographs subjects mounted on microscopic slides. Enlarges up to 100X. Takes clear, sharp pictures of specimens too small to be seen with the naked eye. A fully self-contained unit—no microscope required. Uses standard roll film, either 120 or 620, black and white or color. Make a photographic record of your projects with microscopic subjects.



TELESCOPE AND MOUNT

30X erect image. Extends to 30" length. Five ground and polished lenses. **Ramsden Eyepiece**. **Sturdy Equatorial Mount** makes it easy to follow the movement of heavenly bodies. Mount has fittings for wooden legs that complete the tripod (legs are regular 1x2 lumber not included).



PHOTOGRAPHY LAB

A **PRECISION 35MM ENLARGER**... horizontal type with twin condensing lenses and 3" F/L projection lens. Produces quality enlargements up to 8" x 10". **Contact Print Frame** takes negatives up to 3 1/2" x 4 1/2". 3 **Plastic Developing Trays**, **Neon Safelight**, **Tray Thermometer**, **Film Clips**, **Developing Chemicals**, **Printing and Enlarging Paper**, and **Darkroom Handbook**. Make quality enlargements for 6¢. Make prints for only 2¢. Full instructions.



LIGHT TRANSMITTER-RECEIVER

The **TRANSMITTER** consists of a **Light Source**, a **Modulating Reflector**, **Diaphragm** and an **Optical Projection System**. The **RECEIVER** is a **Two-Stage Audio Amplifier**, controlled by a **Photoelectric Cell** that catches the projected light beam and causes the original sound waves to be reproduced in the loudspeaker. *Talking on a Light Beam*



WEATHER STATION

A **REMOTE READING ANEMOMETER** and **WIND-VANE**... **Flashing Neon Lights** on indoor indicator board show wind speed and direction. **Safety Power Cord** makes all connections safe. 100 ft. of **Lead-in Wire**. **Plus-Air Tank Barometer** with 4ft. indicator column. **Sling psychrometer** measures relative humidity. **Rain Gauge** measures rainfall to 1/100 inch. Also **Cloud Chart** and **Forecast Manual**—a complete set up for amateur meteorology.



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- A. The direct-to-you, "no middleman", club plan is just part of the answer. The other key is ABS Club's especially designed multi-use equipment. For example: the Microprojector quickly and easily converts into the Spectroscope, Photo Enlarger and Cloud Chamber Illuminator. Similarly, the Transit doubles as a Telescope Mount. Such multi-purpose design... plus club plan economy... makes possible this all-science program at a price everyone can afford.
- Q. May members choose the order in which they receive their kits?
- A. Yes. With the first kit members receive a list of the equipment and projects contained in each of the remaining nine kits. With this information they are able to choose the kit sequence that best suits their particular interest.
- Q. Can members get their kits all at once instead of one-a-month?
- A. Yes. At any time members can have the balance of their kits sent in one shipment. We recommend that you start on the kit-a-month plan because the monthly spacing will give you time to get the full measure of knowledge and enjoyment that each kit has to offer.

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