

# OPTICAL BARGAINS

## Photographers!

Adapt your camera to this Scope for excellent Telephoto shots and fascinating photos of moon!



## ... See the Stars, Moon, Planets Close Up! ASSEMBLE A BIG 100 POWER 3" REFLECTING TELESCOPE

... with this Complete 87 Piece "Do-it-yourself" Kit  
EXCELLENT SCIENCE CLUB PROJECT!

### Get Ready to See the Artificial Satellites!

Everything you need! No machining! Easily assembled! We furnish complete, simple instructions. Kit includes: 3" f/10 aluminized and over-coated Spherical Mirror—60X Eyepiece and 100X Barlow Lens—Cross-line Finder—sturdy 40" Tripod—fork type Equatorial Mount with locks on both axes—ventilated 3" Mirror Mount—heavy wall, black Telescope Tube. All nuts and bolts supplied. Nothing extra to buy. Our 3" Spherical Mirror (30" f.l.) is guaranteed to resolve detail right up to theoretical limit. Your finished scope can also be used terrestrially. Money-back guarantee. Shipping weight, 10 lbs.

Stock No. 85,025-Q ..... \$29.50 f.o.b. Barrington, N. J.



This is an actual photograph of the moon taken through our Astronomical Telescope by a 17-year-old student.

## NEW! STATIC ELECTRICITY GENERATOR



See a thrilling spark display as you set off a miniature bolt of lightning. Absolutely safe and harmless—perfect for classroom experimentation—ideal for Science Clubs. Sturdily made—stands 14" high. Turn the handle and two 9" plastic discs rotate in opposite directions. Metal collector brushes pick up the static electricity, store it in the Leyden jar type condenser until discharged by the jumping spark. Countless tricks and experiments. Instruction booklet included.

Stock No. 70,070-Q ..... \$10.95 Postpaid

## MAKE YOUR SCHOOL A POWERFUL ASTRONOMICAL TELESCOPE

Grind Your Own Astronomical Mirror  
Complete Kits Including Blank, Tool and Abrasives



All over America amateurs are grinding their own mirrors and making expensive Telescopes cheaply. You can do the same using our Kits. These contain mirror blank, tool, abrasives, diagonal mirror and eyepiece lenses. You build instruments ranging in value from \$245 to thousands of dollars.

Stock No.	Dia. Mirror	Thickness	Price
70,003-Q	4 1/2"	1 1/2"	\$ 7.20 postpaid
70,004-Q	6"	1 1/2"	11.40 postpaid
70,005-Q	8"	1 1/2"	18.70 postpaid
70,006-Q	10"	1 1/2"	29.45 postpaid
70,007-Q	12"	2 1/2"	51.45 postpaid

## INSTRUCTION BOOKLETS

Easy to follow—accurate—8 1/2 x 11 page size—many illustrations. Do-it-yourself—Save! and have Fun!

	Stock No.	Price Pstpd.
How to Build Projectors.....	9014-Q	30¢
Homebuilt Telescopes.....	9008-Q	40¢
Method to Clean Precision Optics..	9024-Q	15¢
Homebuilt Riflescopes.....	9018-Q	40¢

### NEW—JUST ISSUED

How to Condense and Project Light with Lenses.....	9044-Q	75¢
Reticles and Their Uses.....	9039-Q	45¢
ULTRA CLOSE-UP Photography.....	9042-Q	60¢
Infra-red Light and Its Uses.....	9040-Q	75¢
Homemade Stereo-Adapters.....	9032-Q	30¢
Homemade Stereo-Viewers.....	9034-Q	30¢
Photo Micrography with Pe.....		
Microscope.....	9028-Q	10¢
Dummy Cameras.....	9035-Q	20¢
Collimating Systems.....	9047-Q	35¢
"Building a Condenser Enlarger.....	9038-Q	40¢

"ALL ABOUT TELEPHOTO LENSES"  
21 pages—wealth of information, diagrammed instructions. Tells how to build Telephoto attachments—how to use them. Lots of other good dope on Telephotography.  
Stock #9036-Q.....60¢ Pstpd.

Order by stock No. Send Check or M.O. Satisfaction Guaranteed!

**EDMUND SCIENTIFIC CORP., BARRINGTON, N. J.**

## New! 2 in 1 Combination! Pocket-Size 50 POWER MICROSCOPE and 10 POWER TELESCOPE

ONLY  
\$4.50  
ppd.



Useful Telescope and Microscope combined in one amazing, precision instrument. Imported! No larger than a fountain pen. Telescope is 10 Power. Microscope magnifies 50 Times. Sharp focus at any range. Handy for sports, looking at small objects, just plain snooping. Send Check or M.O. Satisfaction Guaranteed

Order Stock No. 30,059-Q ..... \$4.50

## SPITZ MOONSCOPE

A precision-made 32 power reflecting telescope — by the makers of Spitz Planetarium. Clearly reveals the craters of the moon, shows Saturn, Jupiter, other wonders of the heavens. Based on same principles as world's giant telescopes. Stands 36" high on removable legs. Adjustable 3" polished and corrected mirror. Fork type Alt-Azimuth rotates on full 360° circle—swings to any location in the sky. Fascinating 18-page instruction book is included. Instrument packed in sturdy carrying case.

Stock No. 70,068-Q ..... \$14.95 Postpaid

## SPECIAL SALE 7x50 MONOCULAR

This is fine quality. American made instrument—war surplus! Used for general observation both day and night and to take fascinating telephoto shots with your camera. Brand new. \$95 value.

Stock No. 50,003-Q ..... \$15.00 Postpaid



## BUILD A SOLAR ENERGY FURNACE!

It's easy—inexpensive. We furnish instruction sheet. This sun powered furnace will generate terrific heat—produces many unusual fusing effects.

Stock No. 80,040-Q—Fresnel Lens, size 11 1/2" x 16 1/2" f.l. 19"  
\$3.50 Pstpd.

## SIMPLE LENS KITS!

Fun for adults! Fun for children! Kits include plainly written, illustrated booklet showing how you can build lots of optical items.

Stock No. 2-Q—10 lenses.....\$ 1.00 Postpaid  
Stock No. 5-Q—45 lenses.....\$ 5.00 Postpaid  
Stock No. 10-Q—80 lenses.....\$10.00 Postpaid

GET FREE CATALOG #Q—World's largest variety of Optical items. Bargains galore... War Surplus—Imported—Domestic! Microscopes, Telescopes, Hand Spectroscopes, Prisms, Lenses, Reticles, Mirrors and dozens of other hard-to-get Optical items. Ask for FREE CATALOG #Q.

# Questions

ASTRONOMY—What is the law of the red shift? p. 21.

EDUCATION—How many U.S. youngsters were studying foreign languages in grammar school last year? p. 25.

GEOLOGY—Where can badlands be found in the East? p. 20.

GEOPHYSICS—Where is the North Pole 150 miles in the atmosphere? p. 27.

MEDICINE—How can bodies of crash victims be identified? p. 22.

PSYCHOLOGY—How could recurring strikes be halted? p. 20.

Photographs: Cover, Westinghouse Electric Corporation; p. 19, Woods Hole Oceanographic Institution; p. 21, F. C. Livingstone; p. 23, University of Illinois; p. 26, Fremont Davis; p. 32, Eastman Chemical Products, Inc.

## BIOPHYSICS

### Cut Crop Intake Of Radiostrontium

➤ A POSSIBLE MEANS of controlling crop absorption of a dangerous by-product of nuclear fission is indicated in the research of Wallace H. Fuller, associate biochemist and associate professor of agricultural chemistry at the University of Arizona.

Radioactive strontium, the most biologically hazardous product of an atomic explosion, will not contaminate food crops if the soil contains enough exchangeable calcium.

The more exchangeable calcium there is in the soil, the less strontium will be absorbed, Dr. Fuller's investigations show. Dr. Fuller emphasizes, however, that the total amount of calcium in the soil has nothing to do with this radiostrontium uptake. What does count is the presence of exchangeable calcium available to plants.

Radioactive strontium 90 is considered exceedingly dangerous to plants and animals because it accumulates easily in tissues and because it has a half-life of 25 years. Concentrations of radiostrontium in food crops will poison persons eating the contaminated foods. Accumulation of strontium in bones can cause bone tumors and possible injury to blood-forming organs.

Crops investigated were clover, beans, barley, wheat, lettuce, tomatoes, spinach, radish and rye grass.

Dr. Fuller also found that radiostrontium applied to leaves of plants was not transferred to other parts of the plants.

"This lack of translocation is very important," Dr. Fuller points out. "It means that under many circumstances contaminated crops that otherwise would have to be discarded or removed from the land could be used for the food provided by their uncontaminated parts, without danger of radioactivity."

Science News Letter, July 14, 1956