

TESTA WIDE FIELD MICROSCOPE

A Sturdy, Standard-sized, American-made Microscope with WIDE FIELD and 15x, 45x, 75x MAGNIFICATION for Live Nature and Whole Specimen Study in or outdoors.



Unusual versatility in use is one of its outstanding features. In addition to normal position for desk work, arm or tube may be inclined or reversed to operate in any direction of a 360° circle. Tube removable for field trips.

Price of Model A, illustrated, is \$64.85. This includes not one but all three magnifications, 15x, 45x and 75x, coarse and fine focusing, Achromatic objectives. Send for Bulletin A-145.

If interested in our complete line of quality school microscopes at low cost, send for Bulletin M-80.

Please address Dept. SNL.

TESTA MANUFACTURING CO.
10122 E. Rush St., El Monte, Calif.

LINGUAPHONE

MAKES IT EASY TO LISTEN and LEARN to Speak

SPANISH (American or European) • **FRENCH**
GERMAN • **ITALIAN** • **JAPANESE**
MODERN GREEK • **ICELANDIC**

—any of 34 languages available, AT HOME Only LINGUAPHONE, The World's Standard Conversational Method, brings 8 to 12 of the world's best native language teachers into your home on life-like, conversational recordings.

It's like living in another land. You Listen . . . You hear native men and women converse about up-to-date, everyday matters. You Understand. You SPEAK. You acquire a true accent no Textbook Can Teach.

Exciting Business, Travel Opportunities Here and Abroad.

World-wide endorsement by scientists, educators, governments, business. Over a million home-study students of all ages have learned another language this ideal, conversational way.

Stop Wishing—Start Talking! Send for FREE Book and Details of FREE TRIAL, Linguaphone Institute, T-31-028 Radio City, New York 29, N. Y.

MICRO - ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists.

25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).

SNL, 1719 N St., N.W., Washington 6, D. C.

OPTICAL EQUIPMENT

REPAIRS, ADJUSTMENTS, MICROSCOPES. Transits, Levels, Binoculars, Fast, Economical Service. All makes, Foreign, Domestic. Close Scientific Instrument Co., 2129 3rd Ave., Seattle, Wash.

SEE THE WONDERS OF OUTER SPACE through Skyscope, a reflecting telescope. Free information with photos of parts. Skyscope, Inc., Box 55, Brooklyn 28, N.Y.

BOOKS AND MAGAZINES

CUT GEMS, MAKE JEWELRY—FOR PROFIT or fun. 100 page magazine tells how; where to get supplies. Sample 25¢ or request free literature. Lapidary Journal, Del Mar 1, Calif.

PLANTS

SURPRISE FRIENDS—PARENTS WATCHING exotic plant start growing from leaf in air! Guaranteed. Send \$1.00. Exotic Nurseries, P.O. Box 365, Covina, California.

PLASTICS

NEW LIQUID CASTING PLASTIC. CLEAR, colors. Embed real flowers, minerals, biological specimens, delicate instruments, electronic parts. Also cold setting resin and fiberglass for laminating, casting, molding, coating. Manual 25¢. Castolite Co., Dept. B-131, Woodstock, Illinois.

POULTRY

PHOTOELECTRIC DEVICES—PART 1, THE Electronic Egg Candler. Mimeographed, Introduction from pamphlet 10¢. Pamphlet \$1.00. Fitzell Poultry Farm, Birkinfield, Oregon.

VITAMINS

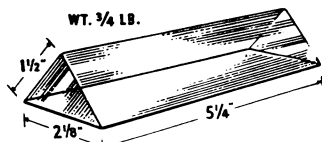
VITAMINS—SAVE 45%. ALL FORMULAS. Buy Direct. Free Catalog. Mention product now using for free sample. Vitaspec, Box 4435N, Philadelphia 40, Pa.

60,000

Bottles of our Immersion Oil have been ordered by one microscope maker. If you are not already using this excellent immersion oil, write for free sample.

R. P. Cargille Laboratories, Inc.
117 Liberty Street, New York 6, N. Y.

PRISMS \$1.50



Made for U. S. govt. for tank periscopes. Fine optically ground, big precision prisms with silvered base. Terrific for all types of spectrographic work, in homemade telescopes & other optical systems for bending rays. Makes unusual paper weight (paint your name on it) or conversation piece for mantel. You'll find many other uses. NEW PERFECT! Cost U. S. govt. \$25 ea. NOW—\$1.50 ea. ppd. or 4 for \$5.00 ppd. Calif. res. add sales tax.

VOLUME SALES CO.
War Assets Div., Dept. L15
3930 Sunset Blvd. Los Angeles 29, Calif.

Self Illuminating 5x POCKET MAGNIFIER

SCIENTISTS • BANKERS • DOCTORS • COLLECTORS



Powerful magnifier carries its own illumination. It has hundreds of uses: for examining textiles, fibers, etc.; inspecting tools and machines parts; for Lab study of insects, etc.; photo retouching; for coin and stamp collectors. Sturdy chromed steel and bakelite construction. Uses standard flashlight batteries.

- STUDY SPECIMENS
- CHECK SIGNATURES
- EXAMINE STAMPS, COINS
- INSPECT DETAILS

Postpaid \$2.45

\$3.95 10-X Model
Less Batteries

JOHN SURREY, LTD., 11 West 32nd Street, Dept. SN-42, New York, N. Y.

Questions

PHYSICS—Why is the psi meson also known as a "cascade particle"? p. 99.

NEUROLOGY—How is it possible that someone who sings tenor may speak with a deep voice? p. 104.

BIOPHYSICS—What effects did artificially high gravity have on mice? p. 103.

SURGERY—What are two methods that have been used to try to give someone with an artificial hand the ability to feel? p. 106.

Photographs: Cover, Smithsonian Institution; p. 99, University of California; p. 101, U. S. Army; p. 103, University of Wisconsin; p. 106, Walter Reed Army Medical Center; p. 112, Trimble, Inc.

GENERAL SCIENCE

Richer and Healthier Americans Seen in 1983

► TWENTY-FIVE years hence Americans will be richer, physically and mentally healthier, and more numerous, William Benton, former U. S. Senator, told 200 scientists, educators and industrialists conferring in New Haven, Conn.

In order to bring this about and assure the future, he advised scientists to cultivate and instruct politicians in order to be sure that there is adequate science education and provision for basic, as well as applied research. He urged scientists to concentrate on the politicians rather than try to win greater public understanding for science by appealing to intellectuals and the general public.

If we make opportunity for learning as freely available to those with talent and ability as the water we drink, Mr. Benton said, we return to an historic American assumption that our natural resources reside in the capacities and aspirations of the coming generations.

If our national safety and continued progress is assured, Mr. Benton sees in 1983 family income at an average level of \$15,300 a year, two and one-half times the present level. Half the people now being killed or maimed by the three main causes of disability, heart and circulation disorders, cancer and mental disorders, will avoid them and survive in good health. There will be a population of 250,000,000 Americans, at least 100,000 of whom alive in 1983 will reach the age of 100.

Science News Letter, February 15, 1958

Do You Know?

It takes about 50,000,000 years for heat to get from the core of the sun to the surface.

An electronic altimeter, accurate to within 40 feet at 60,000 feet altitude, has been developed.

The cranberry produces from four to 20 million blossoms per acre.