

## SCIENCE FAIR HEADQUARTERS

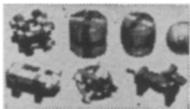
### CRYSTAL-GROWING KIT

Do a crystallography project illustrated with large beautiful crystals you grow yourself. Kit includes the book "Crystals and Crystal Growing" and a generous supply of the chemicals you need to grow large display crystals of potassium aluminum sulfate (clear), potassium chromium sulfate (purple), potassium sodium tartrate (clear), nickel sulfate hexahydrate (blue-green) or heptahydrate (green), potassium ferricyanide (red), and copper acetate (blue-green).  
Stock No. 70,336Q .....\$9.50 Ppd.



### WOODEN SOLID PUZZLES

12 Different puzzles that will stimulate your ability to think and reason. Here is a fascinating assortment of wood puzzles that will provide hours of pleasure. Twelve different puzzles animals and geometric forms to take apart and reassemble, give a chance for all the family, young and old, to test skill, patience and, best of all, to stimulate ability to think and reason.  
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Stock No. 60,568Q.....8" Diam.....\$2.00 Ppd.  
Stock No. 60,632Q.....16" Diam.....\$7.00 Ppd.



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#### Actual Miniature Version of Giant Electronic Brains

Fascinating new see-through model computer actually solves problems, teaches computer fundamentals. Adds, subtracts, multiplies, shifts, complements, carries, memorizes, counts, compares, sequences. Attractively colored rigid plastic parts easily assembled. 12" x 3 1/2" x 4 3/4". Incl. step-by-step assembly diagrams, 32-page instruction book covering operation, computer language (binary system) programming, problems and 15 experiments.  
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Stock No. 9080Q.....(50 Pages).....\$1.00 Ppd.



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#### BIG, NEW DIGICOMP III

If you think DIGICOMP I was something—wait 'til you use DIGICOMP III! Loads of fun! Terrific challenge! Actually works like electronic digital computer but needs no power. Adds, subtracts, multiplies, divides, memorizes. 1st mechanical computer w/auto. switch action. 1st model designed for programming. Speed reduced by factor of million to 1—you can see what's happening. Demonstrates new math, computer techniques.  
Stock No. 70,946Q.....(Intro. price).....\$16.00 Ppd.



### BUILD YOUR OWN ATOMIC ENERGY LAB

Create cosmic ray showers in the cloud chamber—see atoms explode with the spintharoscope—check ionization and radioactivity of every day materials. These are just a few of the fascinating projects possible with this amazing 43 part kit. Contains everything needed to construct your personal atomic energy laboratory. Absolutely safe. Includes atomic cloud chamber, projector, illuminator, electroscope, spintharoscope. 22 page instruction booklet with suggested experiments. Ideal gift to stimulate students' scientific interest.  
Stock No. 70,899Q.....\$8.75 Ppd.



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#### Go Treasure Hunting on the Bottom

Great idea! Fascinating fun and sometimes tremendously profitable! Tie a line to our 5-lb. Magnet—drop it overboard in bay, lake, river or ocean. Trawl it along the bottom—your "treasure" haul can be outboard motors, anchors, fishing tackle, all kinds of metal valuables. 5-lb. Magnet is war surplus—Alnico V Type. Govt. cost \$50. Lifts over 150 lbs. on land—much greater weights under water.  
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## ideas OF THE WEEK

An editorial service to readers; more information on items can be secured from the manufacturers. Prices are sometimes changed without notice.

### Electric glue gun

Housewife, handyman or hobbyist will find this electric, thermostatically controlled gun for gluing or caulking easy to handle. Seven inches long and weighing only eight ounces, the gun uses solid slugs of nontoxic glue or white caulking which are fed into the tool by thumb pressure and melted for use.

Price: \$7.95  
United Shoe Machinery Corp.  
221 Oley St.  
Reading, Pa. 19601

### Voltage tester

Made with a retractable probe and coil, this compact voltage tester fits into a shirt pocket. The unit has an illuminated readout for voltage levels, AC or DC, and emits a distinct buzz from 25 to 800 cycles.

Price: \$9.50  
Amprobe Instrument  
630 Merrick Rd.  
Lynbrook, N.Y. 11563

### Fuel shut-off for boats

The fuel supply can be quickly and conveniently turned off at the helm in an emergency or normal shutdown by this remote control system. Easily installed, the unit, which comes with a 5-foot cable, is connected to the shut-off valve at the fuel tank and its T-handle mounted on the dash. A pull of the handle shuts off the gasoline. Longer cables are available at additional cost.

Price: \$26.55  
Morse Controls, Inc.  
Hudson, Ohio 44236

### Extreme temperature tape

Designed for applications where control of environmental conditions is not feasible, this digital magnetic computer tape should find use in computers in aviation and aerospace. The tape which is 1/2-inch wide performs in temperature ranges from minus 55 degrees to plus  
(see p. 246)

## films OF THE WEEK

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

**A BREATH OF AIR.** 16mm, color, sound, 22 min. Demonstrates that cigarette smoking is "the greatest single preventable cause of death today." Shows a middle-aged victim of emphysema, a disease wherein inhaled cigarette smoke leads to a breakdown of the lung's ability to absorb oxygen, and how the disease limits his physical ability today. Audience: teenagers. Free loan from local sections of the American Cancer Society.

**DIAMANT.** 16mm, color, sound 13 min. Shows the construction and functioning of the rocket Diamant which served to launch the French satellite at Hammaguir. Audience: general. Free loan with \$3 handling charge from Society for French American Cultural Services and Educational Air, 972 Fifth Avenue, New York, N.Y. 10021.

**THE GUAYMAN STORY.** 16mm, color, sound, 27 min. A visit to the NASA tracking station at Guaymas, Mexico, and a study of the relationship between the community and the space facility. Audience: high school, adult. Free loan from NASA field libraries, or NASA Headquarters, Code FAD-2, Washington, D.C. 20546.

**HEALTH ON WHEELS.** 16mm, b&w, sound, 14 min. Depicts the basic principles applied in mobile multiphasic chronic disease screening. Pre-screening organization, screening techniques, types of educational approaches, reporting systems, and follow-up are all discussed. Audience: professional personnel and lay audiences interested in health. Purchase \$95 from International Film Bureau, 322 S. Michigan Ave., Chicago, Ill. 60604 (Sponsored by the Oklahoma State Department of Health).

**PEOPLE ARE DIFFERENT AND ALIKE.** 16mm, color or b&w, sound, 11 min. By showing many kinds of people who, despite their seeming differences, are engaged in similar activities and have similar reactions, the film makes vividly clear that human beings are basically similar the world over. Audience: Grades 4-6. Purchase and rental information from Coronet Films, 65 E. South Water Street, Chicago, Ill. 60601.

**TOTEMS.** 16mm, color, sound, 14 min. Totems originated on America's Northwest Coast from Seattle through British Columbia and southeastern Alaska. Film explores the origin and meaning of totems, how they were made and now being made, and their past and present uses. Audience: upper elementary, high school, college, and adult. Purchase \$150 from Northern Films, Box 98, Main Office Station, Seattle 11, Wash.

**WAVES ACROSS THE PACIFIC.** 16mm, color, sound, 32 min. Account of a 3-month scientific expedition which follows the 10,000-mile journey of ocean waves across the Pacific, from generation in an Antarctic storm to attenuation in Alaska. Demonstrates methods used for wave study, and includes stop-motion and slow-motion photography of waves. Audience: high school, college. Purchase \$260 from McGraw-Hill Films, 330 West 42nd St., New York, N.Y. 10036.

## SCIENCE NEWS

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and at the same time provide cosmetic qualities desirable in the front teeth.

Unlike all silicate fillings now in use, the new material does not craze. Although crazing is not in itself always visible to the naked eye, it penetrates deep into the surface and weakens the structure, causing short life and staining.

Today's fillings for the front teeth can be ruined in a matter of seconds in the period between mixing the filling, inserting it into the tooth and applying a protective coat.

The new material has a greater mixing tolerance, and fillings made from it can be trimmed and polished at one sitting. It also can be used for almost any type of restoration, including the repair of the cutting edge of incisor teeth.

Another new material, also sponsored by the National Research Development Corporation and developed at Warren Spring, is a dental porcelain. More than 50,000 crowns and bridge teeth have been made of it and fitted by dentists in Britain and overseas during an experimental period of three years. It is said to combine the advantage of the postwar acrylic plastics and of ordinary porcelain without the disadvantages of either.

These dental porcelains are based on alumina, an oxide of aluminum. Alumina itself is widely used in the ceramic industry for the manufacture of furnace linings, grinding wheels and insulators. Many gemstones, including sapphires and rubies, consist largely of alumina.

F. C. Livingstone

## AUSTRALIA

### Free hormone for dwarf children

Dwarf children are to get a growth hormone as a free benefit. The human growth hormone (HGH) will be extracted from human pituitary glands by the Federal Government's Commonwealth Serum Laboratories.

State governments are cooperating by collecting pituitary glands from hospitals and pathologists. The pituitary, a small gland at the base of the brain, is normally removed in postmortem examinations.

Health Minister A. J. Forbes says Australia would be the first country to make HGH available to the whole community, not just to selected groups for experimental purposes. Only limited supplies are available. The Humane Pituitary Advisory Committee of endocrinologists, scientists and clinicians will advise on availability and distribution. In general, HGH will be made available to treat children dwarfed by a demonstrated lack of pituitary growth hormone in their systems.

William A. Scholes

(continued from p. 228)

180 degrees F. and is not affected by rapid temperature fluctuations between these extremes, nor by humidity.

Price: \$1.25/linear foot  
U.S. Magnetic Tape Co.  
Huntley, Ill. 60142

### Peristaltic pump

A wide variety of liquids and gases are delivered without pulsation by this pump 5 x 5 x 6 inches. Compact and simple in construction the unit can be set for constant pumping speeds of 5, 10, 20, 40, 80 or 150 milliliters per hour. Tube life of the system is increased due to the elimination of friction caused by pulsation.

Price: \$250  
LKB Instruments, Inc.  
12221 Parklawn Dr.  
Rockville, Md. 20852

### Chemical spreader

Designed for gardeners and experimenters, this lightweight two-wheel spreader for liquid lawn chemicals applies spray accurately to an exact area. From a spray head five inches above the ground, the chemical can be applied without drift over a 36-inch wide swath.

The unit holds five gallons and has a 4 1/2-inch handle.

Price: \$125  
Amchem Products Co.  
Ambler, Pa.

### Boiling point indicator

Automatic determinations of boiling and melting points are made by this instrument which displays values digitally to .1 degree C. A very small sample of the substance is placed in a capillary tube and inserted into the furnace attached to the system. The experimenter presses a lever for the boiling or melting point and reads off the result.

Price: \$1,475  
Mettler Instrument Corp.  
20 Nassau St.  
Princeton, N.J. 08540

### Metric indicating caliper

Developed for physicians and surgeons, this direct-reading caliper will measure both outside and inside areas up to 15 centimeters. Suitable also for industrial and research uses, the easy-to-read instrument is made of stainless steel and can be folded compactly for sterilizing or storage.

Price: \$24.00  
Indicating Caliper Company  
Box 51  
Oak Park, Ill. 60303

## CLASSIFIED

Classified advertisements are accepted for the following classifications: Books, Business Opportunities, Camps, Colleges, Micro Ads, Personals, Positions Wanted, Services, Travel. All advertisements must be consonant with the character of Science News Rates . . . single insertion 25c a word. Minimum charge is \$5.00. Classified advertising is payable in advance. Closing date 3 weeks prior to publication (Saturday).

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To speed up insertion, address classified advertising . . . Classified Ads, Science News, 1719 N Street, N.W., Washington, D. C. 20036.

## BOOKS

**MUSHROOMS AND FUNGI.** Comprehensive lists. LEW's, 2510 Van Ness Avenue, San Francisco, Calif. 94109.

**PUBLISH your book!** Join our successful authors: publicity, advertising, promotion, beautiful books. All subjects invited. Send for free manuscript report and detailed booklet. Carlton Press, (Dept. SNA), 84 Fifth Avenue, New York 10011.

**FIND TREASURE**—Where's buried or sunken treasure in your area? Book gives details on information, maps available. \$2 to Treasure Surveys, Box 446, Silver Spring, Maryland 20910.

## CAMPS

**SCIENCE EXPLORING FOR BOYS** ages 12-16 at SPRUCE MOUNTAIN CAMP, Bryant Pond, Maine. Field and mountain trips, ham radio, photography, plants, animals, astronomy, weather, geology, ecology. Exciting program and outstanding staff. Catalog: William T. Harty, Director, 12 Highland St., West Medway, Mass. 02053.

**HIGH/SCOPE**—Arts and Science camp for youth 11-16 who wish to learn, to create, to experience. David P. Weikart, Ph.D., 1305 Sherman, Ypsilanti, Michigan 48197.

**ADVENTURE ON TOMS RIVER** for boys 9 to 16. Sailing emphasized. 50-boat fleet includes 25 sailboats. Trips on 63-foot flagship. Music. 2 gyms, 2 athletic fields. Approved summer school. Catalog, Farragut Naval Camps, Box QC, Toms River, New Jersey 08753.

## MICRO ADS

**OUR "SKY HOOKS"** defy Gravity. Prove otherwise and receive one FREE. Only \$1.00. Benco Products, 2500 Fourth, Louisville, Kentucky 40208.

**PETS & TROPICAL FISH . . .** Live Seahorses, marine specimens, aquarium supplies. Illustrated catalog 15c. Marine, Box 248-106, Dania, Florida 33004.

**FAIRCHILD SEQUENCE CAMERA** \$75.00. Cost government \$650.00. Send 25c for our surplus optics-electronics 82 page catalog. Meshna, Nahant, Mass. 01908.

## PERSONALS

**MONEY—SPARE TIME OPPORTUNITY. WE PAY CASH FOR NOTHING** but your opinions, written from home, about samples of our clients' products. Nothing to sell, canvass or learn. NO SKILLS. NO EXPERIENCE. Just honesty. Details from: RESEARCH 669, Mineola, N. Y. 11502. Dept. LE-21-M.

**CAN'T SLEEP? NOISY?** Get comfortable Mack's Pillow Soft Earplugs, \$1.00. Black sateen Shut Eye Sleep Shade, \$2.98. Guaranteed! McKeon Products Company, Dept. N, 23220 Ithaca St., Oak Park, Michigan 48237.

## SERVICES

**COMPUTER PROGRAMMING.** Get started at home. Tekni-Comp provides easy instructions, helpful examples and runs your programs. Write Tekni-Comp, Box 85, Chapel Hill, North Carolina 27514.

## TRAVEL

**CHARTER FLIGHT HANDBOOK.** 1100 Organizations Named. Europe \$165. Also other destinations. Particulars Free. Travel Information Bureau, Box 105-SN, Kings Park, New York 11754.

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