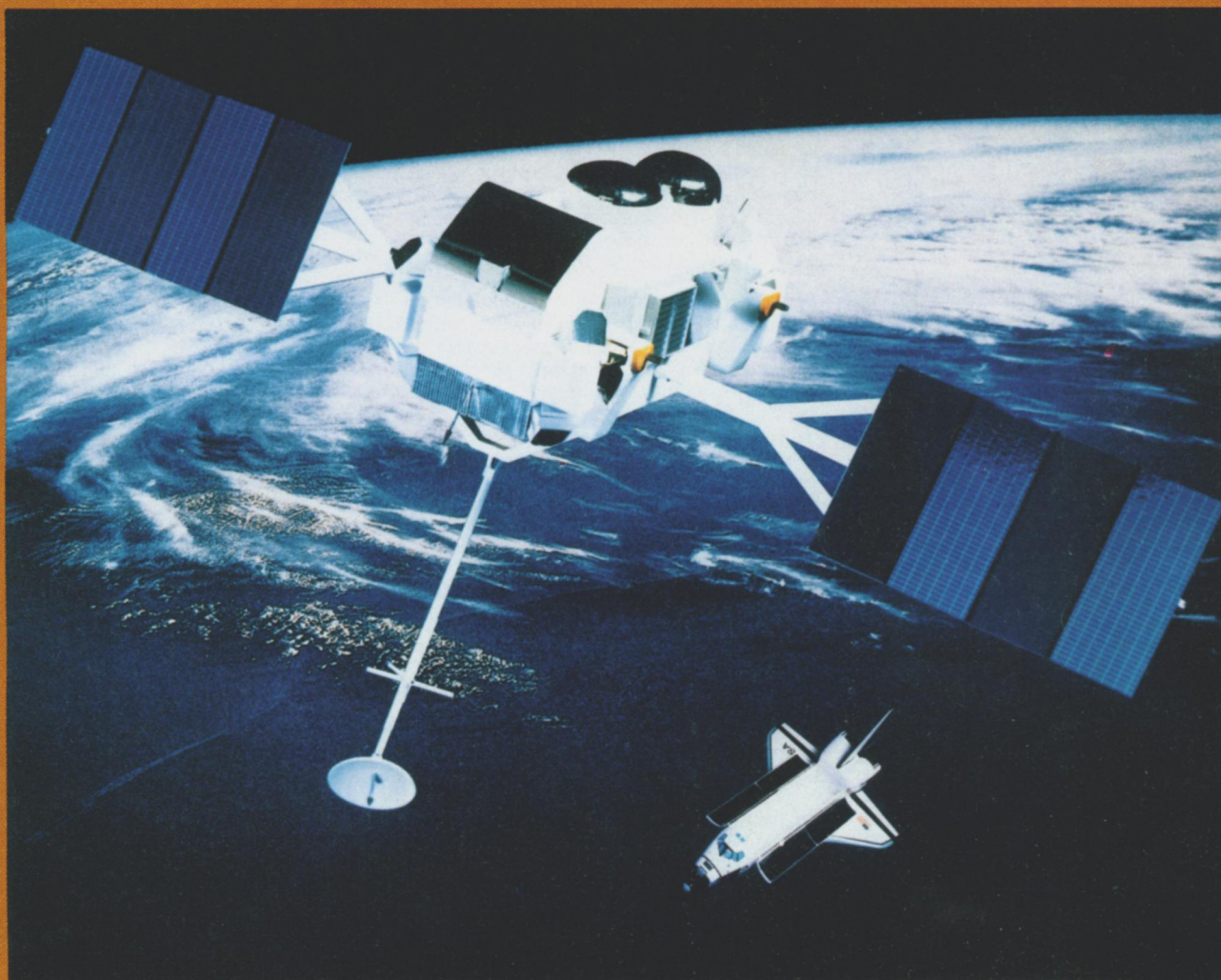


The Weekly Newsmagazine of Science

# SCIENCE NEWS

January 12, 1991  
Vol. 139, No. 2  
Pages 17-32



## Launching a New Year in Space



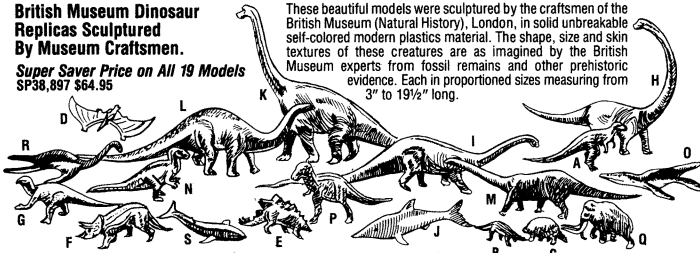
# Edmund Scientific is helping restore science

Science is too important to America for U.S. students to rank last. These poor results have managed to add science education to the nation's list of unmet crisis. Science with its drab lab coats and Bunsen burners suddenly seems more important. At Edmund Scientific we strive to develop unique products to help increase

## POPULAR PRODUCTS USED IN CREATIVE SCIENCE FAIR PROJECTS

### British Museum Dinosaur Replicas Sculptured By Museum Craftsmen.

Super Saver Price on All 19 Models  
SP38,897 \$64.95



These beautiful models were sculptured by the craftsmen of the British Museum (Natural History), London, in solid unbreakable self-colored modern plastics material. The shape, size and skin textures of these creatures are as imagined by the British Museum experts from fossil remains and other prehistoric evidence. Each in proportioned sizes measuring from 3" to 19 1/2" long.

- |                                  |   |                                      |
|----------------------------------|---|--------------------------------------|
| A) Megalosaurus SP36,741 \$3.49  | G) Pliosaur SP38,741 \$2.39             | N) Iguanodon SP36,744 \$3.89         |
| B) Scelidosaurus SP36,736 \$2.19 | H) Mamenchisaurus SP38,740 \$5.49       | O) Multaburorasaurus SP36,742 \$2.29 |
| C) Gytodon SP36,737 \$2.19       | I) Brontosaurus SP36,739 \$5.49         | P) Tyrannosaurus SP36,745 \$4.89     |
| D) Pteranodon SP36,738 \$2.19    | J) Ichthyosaurus & Stan SP36,711 \$4.00 | Q) Woolly Mammoth SP36,743 \$3.89    |
| E) Stegosaurus SP36,739 \$3.19   | K) Brachiosaurus SP36,749 \$16.79       | R) Plesiosaurus SP36,746 \$5.49      |
| F) Triceratops SP36,740 \$3.49   | L) Diplodocus SP36,748 \$7.59           | S) Blue Whale SP36,742 \$5.49        |
|                                  | M) Coelocaurus SP36,747 \$5.49          |                                      |

### Build A Working V-8 Demonstration Engine.

A great introduction into what's behind your gasoline-powered engine. The 1/4 scale realistic model contains over 100 moving parts. You can actually watch the crankshaft rotate, spark plugs light up, valves open and close, rods and pistons move. Easy to build, requires model glue for assembly, takes two "C" batteries (not incl.). Complete with stand. SP70,448 \$42.95

### Paper Human Skeleton.

*Bare Bones: Everybody's Inside Out.* by David Hawk. This is a new way for children to learn all about the makeup of the human skeleton. Bare Bones has only 20 pieces to cut and glue together. When completed, an adult female skeleton will be 1/2 life size or one meter tall. Fully poseable universal movement and extension/flexion. Complete step-by-step instructions with detailed diagrams. Only scissors and glue are necessary. SP37,500 \$14.95

### Motors By The Bag For Hobbyists, Modelmakers.

Our inexpensive motors can make wheels go round, propellers turn. Unlimited applications. Have fun by adding motion to your science fair projects, demonstrations and experiments with this special buy of 20, 1" motors with 3/8" long shafts and 2 wire leads. 20, 1" motors SP1304 \$14.50

### Life-Size Pumping-Heart Model Demonstrates Circulation Of Blood Through The Heart.

Squeeze the ball pump and watch the life-like continuous action of "blood" being pumped through the visible heart chambers—just like a real heart. Operating model used by doctors, educators and students. Ideal for science fair projects. Finished model is 11" high. Easy to assemble, complete with instructions and display frame and stand. SP35,825 \$14.95

### Realistic Visible Anatomy Kit Of Man & Woman.

Easy-to-assemble scale plastic model kits display the inner workings of various body cells, organs and muscles of the male and female species. Male model stands 16" tall, female stands 15 1/2" tall and also includes parts to demonstrate a 7-month pregnancy. Kit is ready to paint and assemble. Made of high-impact plastic and comes complete with stand and instructions. (Sorry, cements and paints not included.) Please specify model. Man SP70,228; Woman SP70,283 Each \$18.50

### Digital Thermometer Shows BOTH Indoor AND Outdoor Temperature, Memory For Day's High AND Low!

Now, you'll know at a glance, with large, easy-to-read LED readout numbers, both the outside and inside temperature. Thermometer also records high and low readings. F° or C° selectable—40°F to -122°F. 7x3 1/2x3 1/2". Easy to mount. Uses 2 "AA" batteries (not incl.). Complete with 10' probe sensor cord. SP38,038 \$42.95

### Ultra Mini Motors For Science Fair Projects.

For the hobbyist with imagination there are many uses, with mini toys, robot component, displays, demonstrations, etc. Micro size motors were originally designed to advance the film in disc cameras. Measures only 1/8" L x 1/8" W x 3/8" H with a 1/16" dia. x 3/16" long shaft. At 3 volts 200ma, they will do 7500 rps. Pkg. 25 SP36,341 \$20.75 Pkg. 100 SP36,342 \$67.50

### Why Does This Amazing Space Pet Always Spin In A Counter Clockwise Direction?

The Amazing Space Pet is a revolutionary wonder of mystifying properties of geometrics and physics. When tapped or rocked, it will begin to spin counter clockwise. When spun clockwise, it will reverse direction. A true wonder of nature. Made of injection molded acrylic polystyrene. Package of 3. SP36,912 \$5.95

### Build Your Own Clock Of Paper. It Really Keeps Accurate Time.

Cut up this heavy stock 40 page book, supply a little glue, three paper clips, nail, string and perseverence and you have a working clock which keeps accurate time and has a real "tick-tock" pendulum movement. You rewind and regulate it. SP9,687 \$10.95

### Multi-Image Fresnel Magnifier Repeats 25 Images At A Glance!

Dual purpose Fresnel contains two tools on one large 9 3/4x7" sheet of pliable, 5mm thick acrylic. A 2X magnifier that covers a 3x6 3/4" field lets you examine fine detail. Look through multi-image negative fresnel and you see 25 repeat images of one scene. Mini frame measures 1 1/4" sq. SP36,259 \$7.50

### Space-Trix Magnet Set.

Scientific and educational. Have fun with magnets. You can perform over 7 different mystifying action demonstrations, such as the "floating air magnet." You'll even invent your own tricks. Kit includes 3 ceramic disc magnets with center hole and complete directions. SP38,738 \$4.95

### Miniature Water Pump For Photo Darkrooms, Science Fairs, Water Displays.

This tiny pump can pump a pint per minute with a 1/2" high flow. Ideal for temperature control and circulation. SP50,345 \$7.50

### Build Your Own 2000° Solar Furnace With This Fresnel Lens And Harness The Sun's Rays!

You'll be able to use this precision lens as a solar cooker for heating food, as a kiln for pottery—and even to melt metal or for other solar experiments. Lens has a 8 1/2" x 11", 50 lines per inch, measures 10 1/2x10 1/2" x 1/2" thick. Unmounted lens comes with 16 page book, "Fun With Fresnel Lens." Instructions included on how to build the 360° stand and frame shown. SP70,533 \$26.50

For Phone Orders, Call 1 (609) 547-8880 for friendly special treatment

Use VISA, MasterCard, Diners Club, Am. Exp., Discover, Carte Blanche or Optima. Call anytime, 24 hours a day. MOST ORDERS SHIPPED WITHIN 48 HOURS

### Potato Power! Digital Clock Is Powered By Only Two Potatoes.

We call it the Two-Potato-Clock. It's powered by two potatoes (no batteries needed). Bi-metal probes actually convert the natural ingredients to low-voltage electrical output. Can also be powered by plants, soda pop, fruit and even beer. Clock has 1/2" L.C. digital display that shows hours, minutes, seconds and date. Fun and simple to assemble. Reg. \$19.95 SP5073 SALE \$12.95

### Watch These Colorful Magic Rocks Grow Up To 4 Inches Within An Hour!

Colorful assortment of magic rocks will start to grow within seconds of planting in our 'growing solution.' They'll create a beautiful underwater rock formation display of rainbow colors in the clear plastic hexagonal aquarium. Complete with rocks, aquarium, cover and growing solution. SP31,323 \$9.95

### Conduct 12 Basic Experiments With Magnet Demonstration Kit, Has 15 Different Magnets.

Our classroom demonstration kit contains all the materials you will need to show magnetic fields, the principles of magnetism and to conduct 12 basic experiments. Kit includes a special film for viewing magnetic fields, iron filings for demonstrating fields, 2 Alnico pencil magnets, 2 ceramic block magnets, a 2" Alnico horseshoe magnet, a magnetic wand, disc ceramic magnets and rectangular ceramics with center hole for "floating" magnet demo. Instructions included. SP38,737 \$14.95

### Bugs Under The Big Top!

Now you can observe the intriguing behavior of bugs in this unique "Critter Carnival." Under the clear acrylic dome are 7 bug amusements, obstacles, even a watering hole for drinking. You'll have hours of fun watching your bugs perform their activities through 5 magnifying lenses that are built into the dome for close-up viewing. Included is an excellent "How to..." guide, bug accessories, miniature net and scoop for capturing real bugs. SP38,892 \$12.95

### Witness The Hatching Of Live Tropical Fish In Two Hours!

Instant live tropical fish. Our new aquaculture kit provides everything you need to explore this exciting science: aquaculture mini tank, test tubes, eye dropper, instructions, fish eggs and brine shrimp eggs (hatch to feed fish) coupon. Ideal home or classroom project with great learning potential in aquaculture and biotechnology. SP38,848 \$17.95

### The Miracle Of Birth—Watch Eggs Hatch Into Chicks In Our Incubator.

Children will marvel as they watch eggs grow and hatch into chicks. Incubator measures 7" in diameter, operates on 110v. Has clear viewing dome, thermometer for checking temperature, light bulb to produce heat, aluminum heat reflector and wire rack. Holds 3 chicken, 2 turkey or 2 duck eggs (not included). Complete instructions included. SP38,724 \$13.95

### Duplicate Most Any Object In Detail With Multi-Use Latex Rubber Mold Compound.

Make replicas of most any object, duplicating the finest detail—coins, medallions, charms, figurines and more. Form flexible, durable molds. Use with plaster or expandable foams. Quart Size. SP42,446 \$18.50

### Build A Real Crystal Radio Kit.

Remember the golden age of radio? This crystal radio kit can bring back old memories...like listening to "The Eddie Cantor Show," "The Green Hornet," "The Lone Ranger" and more. You'll actually be able to listen to your local stations and even experiment with radio waves. Easy to build, no batteries or soldering needed. Complete with instructions and all parts. SP37,839 \$9.95

### GRAB BAG OF SCIENCE DISCOVERY BUY ALL 5 KITS AND SAVE \$35

### Build Real Working Models That Demonstrate The Principles Of Science.

Our new easy-to-assemble Science Kits offer unique learning opportunities at a reasonable price. Each kit contains an experiment which teaches an important principle of science or engineering.

A) Anemometer: A miniature wind direction and speed indicator. Teaches the principles used by professionals in weather forecasting. SP36,268 \$21.95

B) Generator: Build a hand-crank generator. Learn how electricity is created to light the mini-bulb. SP36,270 \$19.95

C) Pump: Build a working water pump. Learn the principles of suction and vacuum pressure by observing water movement. SP36,267 \$13.95

D) Signal: Build a traffic control signal light and learn the principles of electrical wiring and switching. SP36,274 \$15.95

E) Motor: Build a battery-operated mini-motor and learn how electromagnets drive the rotor. Requires a 1.5V "D" battery (not included). SP36,273 \$12.95

AN \$84.75 VALUE SP5,299 Pkg. of all 5 kits \$49.75

### Build And Erupt Your Own Volcano.

Simulate your own volcano erupting by just adding household baking soda and vinegar to contents of our kit. Great learning fun—this safe and educational kit was developed by an elementary school science teacher. Kit includes bag of instant papier mache mix, plastic vial, working tray, educational activity pamphlet and directions. SP38,775 \$9.95

### Build Your Own Electromagnet And Learn The Basics Of Electricity And Magnetism.

Students will enjoy building electromagnets and conducting experiments from a soft iron core that temporarily becomes a magnet as electric current flows through a coil of wire surrounding it. Kit includes complete instructions, conductive nails, copper wire, fahnestock clips and battery holder parts. Requires batteries, not incl. SP38,819 \$9.95

### Discover The Extent Of Pollution Caused By Acid Rain In Your Area With Our Test Kit.

Portable acid rain tester determines extent of pollution in rain or snowfall and the amount of limestone dosage needed to neutralize acidic content. Mixed indicator dye reagent produces distinct series of reproducible colors depending on the Ph. Kit includes necessary material for 50 tests and precision 16" field color chart. SP34,966 \$26.95

### Go Fishing With This Mighty Magnet.

Lift up to 200 lbs. Fun to use around docks and bridges. A "must" for a boat, it helps retrieve metal objects that fall overboard. You'll be amazed at what you pull up. Wt. 2 lbs., measures 4x3 1/2x3 1/4". Made with a Poly-Vinyl Chloride coating to resist corrosion and chipping. SP71,135 \$32.95

### 250 Assorted Stars That Glow In The Dark Turn Any Wall Or Ceiling Into The Night Sky.

Assortment of 250 luminous stars that glow in the dark on ceiling or wall. Your students will enjoy receiving these "star" gifts that will light up a room with the beauty of glowing stars and have fun with astronomy. Easy to apply decals glow after exposure to light. Comes with star chart and instructions to recreate the Big Dipper, Milky Way and the heavens. SP9521 Package of 250, only \$4.50

No Risk Guarantee! If you are not completely satisfied with your purchase, return the merchandise in its original package and we will cheerfully refund your money in full. We back up our products! Our 45-day unconditional guarantee means you take no risk on any product you buy from us.



**Edmund Scientific Co.**


Dept. 11D1, C922 Edscorp Bldg., Barrington, NJ 08007

# Science education to America's kids!

student interest in science. Many of our products, ideal for science fair projects, help spark the imagination and curiosity of budding scientists. We encourage would-be inventors to design experiments and invent things.

## 'BEST SELLERS' SELECTED FROM OUR CATALOG


**The Vortex™ More Than A Money Bank!**  
Performs spinning tricks and high maneuvers. Drop a coin onto the launching pad, spin the Vortex unit in a circular motion. This creates an immense amount of speed causing the coin to spin around and around until it finally drops to the bottom storage area. *"The longest continuous rolling so far is 33 hours, 16 minutes."* Challenge your skills, spin the coin back up the tunnel or spin it upside down, plus more. Made of tough polypropylene. Instructions included. **SP37,832 \$14.95**



**Build This Authentic, Deadly German U-Boat. It's Motorized To Actually Run And Dive!**  
Authentic 1/150th scale model of the German Type VIIC submarine is motorized to run and dive. Assembling this kit will teach the basic engineering principles of submarine operation and buoyancy. Parts are molded in realistic battle colors, only glue and common hobby craft tools are required. Powered by 3 "C" cells (not incl.). Finished model is approx. 18 inches long. **SP38,412 \$22.95**



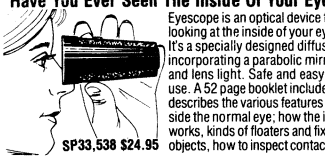
**Dr. Guk's Mutant Magic. Is It A Solid - Or A Liquid? Both! It Changes As You Play!**  
Hours of fun and amusement. Jab the GUK surface and it appears to be a solid. Grab a handful and form a ball in your hands and watch the GUK ooze through your fingers. Can be reused many times. Safe, clean up with water. **SP38,723 \$4.50**



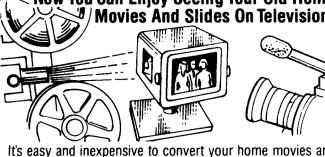
**Our Smallest Laser Pointer, Only 4" Long. Perfect For Lecturers And Educators.**  
The Applied Laser Systems' Laser Pointer is a revolution in pointer design and affordability. Weighs only 2 ounces with battery, this pointer sets the standard for the industry. Add to this the convenience of its use (it clips onto your shirt pocket like a pen) and you have a product perfect for lecturers and educators. A boon for slide presentations, business and sales meetings. Battery life is over one hour with continuous use. **SP38,914 \$19.99**



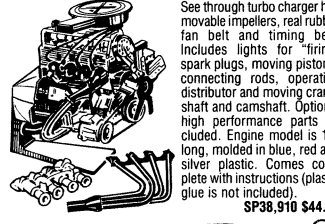
**Have You Ever Seen The Inside Of Your Eye?**  
Eyescopes is an optical device for looking at the inside of your eye. It's a specially designed diffuser incorporating a parabolic mirror and lens light. Safe and easy to use. A 52 page booklet included, describes the various features inside the normal eye; how the iris works, kinds of floaters and fixed objects, how to inspect contacts. **SP33,538 \$24.95**




**Now You Can Enjoy Seeing Your Old Home Movies And Slides On Television.**  
It's easy and inexpensive to convert your home movies and slides to videotape. Just place your movie camera or slide projector and focus the image onto the mini-screen of the Tele-Cine converter. Aim your video camera into the lens, focus and start recording. 6 1/2"x5 1/2"x5" Screen is 3"x3". **SP33,528 \$62.95**



**Build This 12 Inch Turbo Engine And Watch How All The Movable Parts Really Operate.**  
See through turbo charger has movable impellers, real rubber fan belt and timing belt. Includes lights for "firing" spark plugs, moving pistons, connecting rods, operating distributor and moving crankshaft and camshaft. Optional high performance parts included. Engine model is 12" long, molded in blue, red and silver plastic. Comes complete with instructions (plastic glue is not included). **SP38,910 \$44.95**

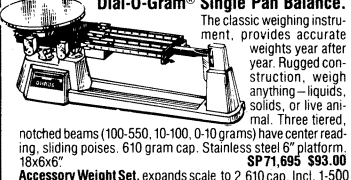


**Moon-Blob, It Crawls Out Of Containers And Looks Alive As It Creeps Uphill.**  
Moon-Blob has unbelievable properties and is fun to play with... it acts alive and looks like a living protoplasm as it defies gravity by crawling up and out of its container. It's dehydrated plastic - just add water to activate it. Completely harmless. 2 Packages, **SP38,440 \$7.00**



**Complete 25 piece outfit includes:**  
• Handsome storage carry case • 3 color cones, magnifier  
• One prepared specimen slide, 6 blank slides and 6 covers and labels • Butterfly specimen, fiber and leather  
• Canadian balsam, methylene blue • Dissecting kit with scissors, needle, spatula, knife and tweezers • Shrimp egg hatchery with eggs and sea salt


**Metric Triple Balance Ohaus Scale With Dial-O-Gram™ Single Pan Balance.**  
The classic weighing instrument, provides accurate weights year after year. Rugged construction, weigh anything - liquids, solids, or live animal. Three tiered, notched beams (100-550, 10-100, 0-10 grams) have center reading, sliding poises. 610 gram cap. Stainless steel 6" platform 16x6x8". **SP71,895 \$93.00**  
Accessory Weight Set, expands scale to 2,610 cap. Incl. 1-500 and 2-1,000 gr. wts. **SP41,766 \$24.95**



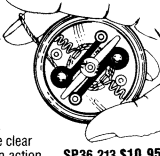
**Superconductivity - The Latest Technology.**  
**PRICE BREAKTHRU**  
**Superconducting ceramic disc for lab demonstration on the Meissner effect of magnetic levitation. This is the new material making headlines.** The disc is composed of yttrium oxide, barium oxide and copper oxide and will positively demonstrate the Meissner effect by magnetic levitation of a small samarium cobalt magnet at liquid nitrogen temperature (77°K). To conduct the demonstration you will need the disc, a small samarium cobalt magnet and liquid nitrogen (available from most hospital and lab supply firms). ES offers the disc and magnets. (Similar magnets may be found in lightweight headphones). **Superconductivity Disc** - includes ceramic 1" dia. x 1/8" thick disc and complete instructions. **Reg. \$25 SP37,446 \$17.50**  
**Demonstration Kit** - includes superconductivity disc 1" dia. x 1/8" thick, rare earth magnet 3/16" dia. x 1/4" thick and instructions. **Reg. \$45 SP38,169 \$36.00**




**The Handboiler, An Amazing Demonstration Of Physics**  
Watch the liquid contained within the glass chambers appear to "boil" from the warmth of your hand that increases the vapor pressure within the chambers. The warmer your hand, the better it works in this unusual demonstration of physics. **SP37,299 \$3.95**



**Our Intelligent Yo-Yo With A "Brain." It's The Longest Spinning Yo-Yo Around!**  
A simple flick of the wrist pre-positions this patented yo-yo, allowing it to spin freely at the end of the string. Suspended, you can do tricks, such as "Walk The Dog," "Rock The Baby," "Brain Twisters," and more. It operates on a centrifugal clutch principle that allows it to spin faster and longer than any other yo-yo before returning to the user's hand. Precision engineered, the clear plastic body shows the clutch in action. **SP36,213 \$10.95**



**Super Snooper™ Electronic Sounds From Over 40 Feet Away!**  
Kids will have fun with the Super Snooper electronic toy that gives super-human hearing, indoors and out. They'll be able to listen to birds and animals before they can be heard. Just point the disc and pull the trigger. Sounds are picked up from over 40 feet in the padded, adjustable headphones. Black and silver. Powered by a 9V battery (not incl.). **SP37,834 \$10.95**

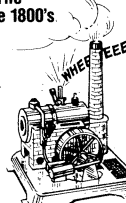


**Create Your Own Microscope Research Lab With This Powerful 300X 25 Pc. Microscope Outfit.**  
**SPECIAL SALE SAVE \$30**  
**SALE SP5066 Reg. \$109.95 \$79.95**

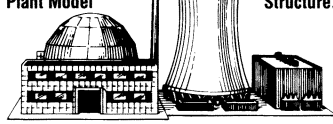


**School grade, all metal body construction (not a toy)**  
Open the hidden world to budding scientists to explore the fields of health, science and medicine. Precision microscope has black lacquer-finish all-metal body. One-piece, triple-revolving turret achromatic objectives (5X, 10X, 30X), 10X eyepiece, 50X, 100X and 300X magnifications, smooth rack and pinion focusing, revolving mirror. Fully coated optics for years of use. Smooth, rapid focusing adjustments

**Build A Working Replica Of The Steam Engine Popular In The 1800's**  
Steam engines, the workhorse of the 19th century, powered machinery, farm equipment, the Stanley Steamer and trains that crossed the country. The simplest was the single stroke piston engine - power occurring when the piston moved in one direction. Kit has everything needed to recreate a working replica - from crank shafts, cylinder, piston, boiler parts, nuts, bolts, gaskets, etc. including fully illus. instructions. **Kit, SP72,202 \$69.95**  
Fully assembled, **SP35,920 \$87.95**



**Build Your Own Nuclear Power Plant Model**  
Ideal HO Scale Background Structure.  
Based on Three Mile Island, this detailed 1/160 "N" scale kit has 79 parts molded in colors. Includes containment building, cooling tower and generator station on a 14 x 16" base. Stack is 4 3/4" high. For ages 12 and over. **SP36,718 \$13.95**




**Press The Space Fidget And Create Fantastic, Limitless Color Patterns.**  
Press "Fidget" gently with your finger for a few seconds - the pressure and heat sensitive material will create countless patterns and colors from the heat and pressure generated from your touch. Heat and cold will change its colors, pressure will make new designs. A personal 3 inch doodler. **SP37,189 \$7.50**




**Add Spectacular Color To Your Home With A Rainbow Light Display.**  
Our equilateral prism mounted in a specially designed wooden base catches the sun and projects the ever-changing rainbow patterns over your walls, ceiling and floor. It's almost like being inside a multi-faceted diamond. Glass equilateral prism is 2" (50mm) long with 1" (25mm) faces. Wooden mount is 2 1/2" x 1 3/8" x 1 3/8". **SP38,400 \$6.95**



**The Chandler Gyroscope - A Classic Favorite For 75 Years.**  
Demonstrates "gyroscopic inertia" or rigidity in space as first recorded by Isaac Newton. An object rotating about a fixed axis creates a condition in which the axis holds its position with respect to inertial space, no matter how the spinning object's support is moved about. Machined, painted and balance-fitted all by hand. Complete with instructions and pedestal. **SP37,265 \$5.95**



**"700 Science Experiments For Everyone" - An Exciting Book For Science Fair Projects.**  
A brand new, up-to-date edition of the best known science experiment book in the world. Compiled by science instructors under the auspices of UNESCO in Paris. 251 pages, featuring optical projection, electricity, chemistry, astronomy, magnetism, geology, physiology and more. Describes experiments with easy-to-follow instructions, diagrams **SP301 \$13.95**



**Great AM Radio Reception With Select-A-Tenna. Listen To Station WOR N.Y. When In Boston.**  
This new antenna will bring in those weak, distant, AM radio signals loud and clear. You'll now get excellent radio reception on all AM stations. Select-A-Tenna turns your AM radio into a powerful receiver. Used in Alaska to pull in stations from continental U.S. Employs mutually inductive coupling. Mini-jack and plug. 10 1/2" dia. **SP72,147 \$52.95**



Featured on this page are only a few of the many imaginative products that appear in our

**FREE 112 PAGE CATALOG**

Send for your copy today.

Thousands of exclusive, unique and exciting values. Something educational, fascinating and useful for every hobbyist, gadgeteer, student and educator.

# Newsweek magazine reported America's kids ranked last in science.

■ Singapore scored first in biology, followed by England, Hungary and Poland.  
■ On a chemistry achievement test high-school students in Hong Kong ranked first among 13 countries followed by England and Singapore. **Americans ranked 11th.**  
Source: The International Association For The Evaluation Of Educational Achievement

**Astropilot Acrylic Illuminated Cosmo Globe Locates Position Of Stars And Constellations.**  
Our Astropilot Cosmos model is a clear acrylic 5 inch diameter globe depicting 868 stars and all the major constellations of the universe. A horizon ring rests on the globe to determine the visible sky from your location. The globe rests on an attractive black base which contains the illuminator (powered by 4" AA batteries, not included). In the dark, the stars, all 868 of them, will glow. Comes with fully illustrated easy-to-use guide book. **SP38,909 \$34.95**




**Ultra-Sensitive Directional Sound Amplifier Picks Up Signals 200 Feet Away!**  
Used for police surveillance and excellent for nature study, microphone and head set amplified sounds up to 200 feet away. **Overhear private conversations - listen to the sounds of animals at distances that are out of hearing range.** It's light enough (only 3 1/2 ounces) so the microphone can be mounted on your binoculars. Compact, measures only 12". Powered by 1 "AAA" battery, includes response 200Hz to 800Hz, output level 49 db's maximum. Complete with padded microphone, amplifier and headphones. **SP38,042 \$49.95**



**Digital Thermometer Reads How Cold It Is Outside.**  
This new high-tech marvel reads temperature in your home and outside, too. Can be wall mounted - just extend the 5 ft. wire sensor out the window and close the window. Operates on one 9V battery (not incl.). Readings from -40°F to 199°F, measures 2x3x2 1/4". **SP34,005 \$28.95**



**Radiometer... A Space Age Sphere.**  
It's fascinating to watch the delicate vanes within this 5" precision-made sphere spin faster and faster illustrating the basic principle of solar heating. When light strikes the vanes it transfers heat, and the vanes begin to move. Works from direct sunlight or artificial light. An attractive "conversation piece". **SP5,063 \$6.95**



**Make Your Own Wild Tornado.**  
Our Tornado Tube assembly allows you to demonstrate the wild vortex phenomenon of a natural tornado. All you need are two 1 liter or 16 oz. plastic soda bottles and ordinary tap water. Instructions and explanation of scientific principles included. **Pkg. of 2 tubes SP37,592 \$3.95**

**Our Amazing Happy Bird Never Stops Drinking!**  
Fascinating to watch. Simply duck the bird's head into a glass of water to begin happy birds bobbing motion. Then the bird takes over, continuously dipping into the water for a drink. **SP 60,778 \$3.95**



**Edmund Scientific Co., Dept. 11D1**  
C922 Edscorp Bldg., Barrington, NJ 08007

Method of Payment:	STOCK NO.	QTY.	PRICE
<input type="checkbox"/> Check enclosed			
<input type="checkbox"/> MasterCard			
<input type="checkbox"/> American Express			
<input type="checkbox"/> VISA			
<input type="checkbox"/> Diners Club			
<input type="checkbox"/> Carte Blanche			
<input type="checkbox"/> Discover			
<input type="checkbox"/> Optima			

Exp. Date \_\_\_\_\_

Card Number \_\_\_\_\_

Bank Number (MasterCard only) \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

TOTAL PRICE \_\_\_\_\_

In NJ Add 7% Sales Tax \_\_\_\_\_

Add \$2.50 for postage and handling \_\_\_\_\_

SEND FREE 112 PAGE CATALOG \_\_\_\_\_

Total Enclosed \_\_\_\_\_