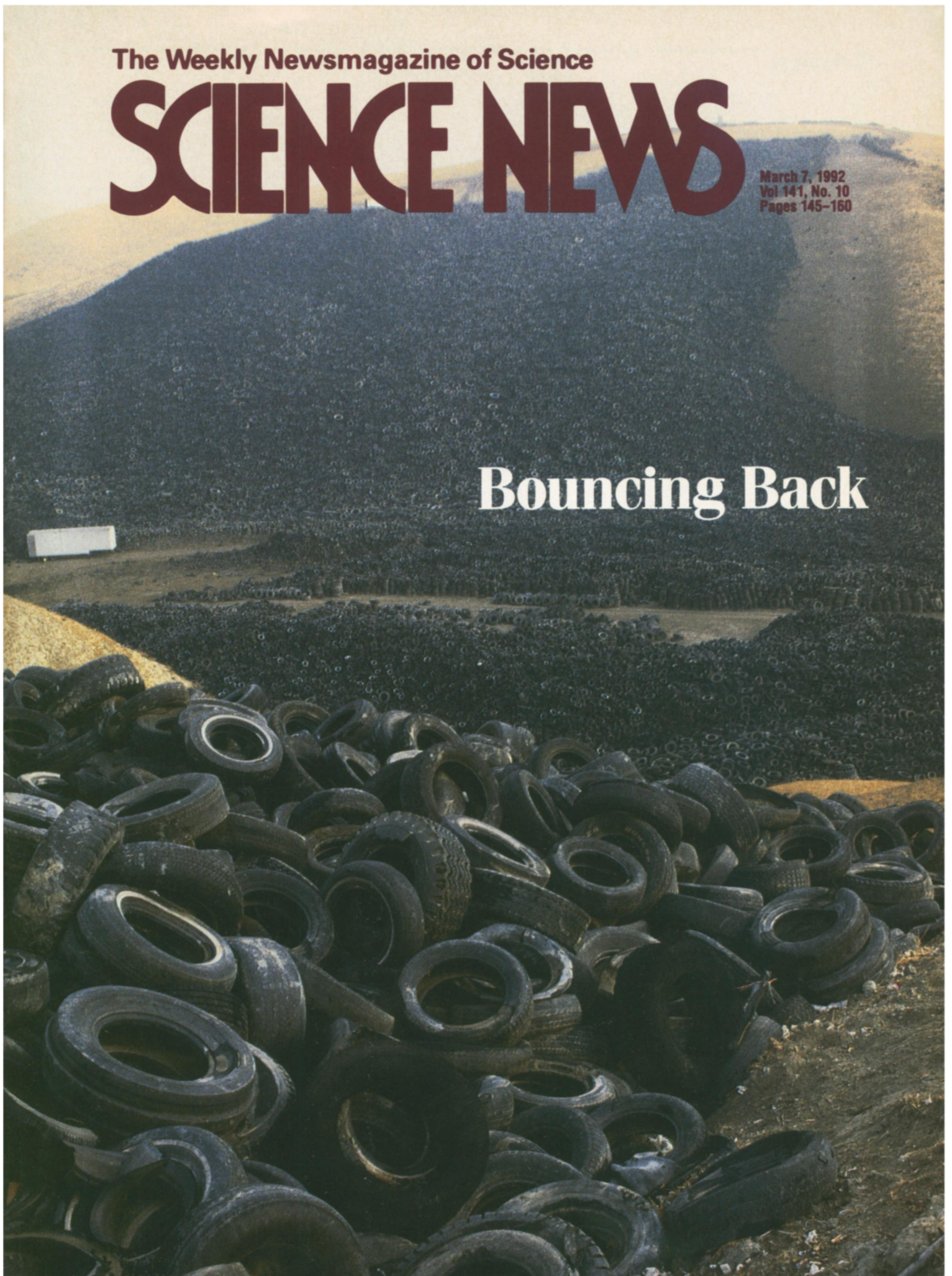


The Weekly Newsmagazine of Science

# SCIENCE NEWS

March 7, 1992  
Vol 141, No. 10  
Pages 145-160

## Bouncing Back



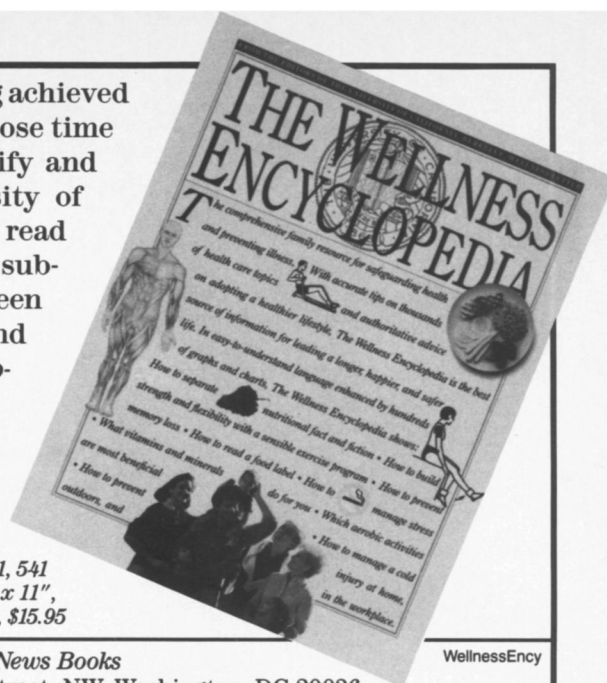


Wellness — the optimum state of health and well-being achieved through the active prevention of illness — is an idea whose time has come. And no publication has done more to clarify and inform Americans on these issues than the University of California, Berkeley, Wellness Letter, the most widely read newsletter in America, with more than one million subscribers. Now the editors of this newsletter (which has been ranked the number-one health publication by *Money* and the *Washington Post*) have compiled *The Wellness Encyclopedia*, the essential reference for every home.

Both authoritative and readable, *The Wellness Encyclopedia* sorts out misconceptions about diet and exercise; reports on the most effective ways of coping with stress; explains the link between lifestyle and staying well; and explores health-care alternatives in the same clear, engaging and nontechnical language for which the Wellness Letter is noted.

*The Wellness Encyclopedia* is divided into five major sections that correspond to the key areas of wellness: longevity, nutrition, exercise, self-care, and environment and safety. Within these sections is the kind of complete information each of us needs to make choices for a better, healthier life.

—from the publisher



Houghton Mifflin, 1991, 541 pages, 8½" x 11", paperback, \$15.95

Science News Books

1719 N Street, NW, Washington, DC 20036

WellnessEncy

Please send me \_\_\_\_\_ copy(ies) of *The Wellness Encyclopedia*. I include a check payable to Science News Books for \$15.95 plus \$2.00 postage and handling (total \$17.95) for each copy. Domestic orders only.

Name \_\_\_\_\_

Address \_\_\_\_\_

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

Daytime Phone (\_\_\_\_\_) \_\_\_\_\_  
(used only for problems with order)

RB1570

**IN THE COUNTRY OF HEARTS: Journeys in the Art of Medicine**, a collection of essays about the two hearts that beat within us — the literal and the metaphorical — is a product of John Stone's twenty-five years of immersion in medicine as a human, as well as a healing, encounter. He compassionately describes such common maladies

Dell, 1992, 211 pages, 5" x 8", paperback, \$10.00

Science News Books  
1719 N Street, NW  
Washington, DC 20036

CntryHearts

Please send \_\_\_\_\_ copy(ies) of *In the Country of Hearts: Journeys in the Art of Medicine*. I include a check payable to Science News Books for \$10.00 plus \$2.00 postage and handling (total \$12.00) for each copy. Domestic orders only.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

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

Daytime Phone \_\_\_\_\_  
(used only for problems with order)

RB1571

"A literary work, one that grabs your heart and holds it... *In the Country of Hearts*, the art of medicine is alive and well." — *The Atlanta Journal and Constitution*

**IN THE COUNTRY OF HEARTS**

Journeys in the Art of Medicine

JOHN STONE

Order by phone for faster service!  
1-800-544-4565  
(Visa or MasterCard Only)

as heart murmurs, chest pains, and heart diseases; as well as lesser known afflictions such as "Marfan's Syndrome" and lupus, and celebrates both ends of the life cycle: from the little "blue baby" with a heart murmur, whose pink lips are the most wonderful sight in the world to his mother; to those desperate patients who undergo an actual change of heart by way of transplant or an artificial pump.

Stone's book celebrates the human encounters in medicine, where, in John Stone's words, "often the hero or heroine is the patient, who also, so often and so well, teaches the doctor."

— from the publisher

"*IN THE COUNTRY OF HEARTS* is about . . . unlocking the heart's secrets, using both the latest technology and the oldest tools in the doctor's bag — big ears and warm hands. And a caring heart."

— Charlotte Observer

# HARD-TO-FIND, UNIQUE PRODUCTS for HOBBYISTS, GADGETEERS and STUDENTS

from America's Largest Mail-Order Market Place of Unusual Values in Telescopes, Binoculars, Magnifiers, Solar Microscopes, Science Kits, Lab Equipment, Toys, Military Surplus, Lasers, Photo and Weather Instruments.

GRAB BAG OF SCIENCE FUN



**British Museum Dinosaur Replicas Sculptured by Museum Craftsmen.**  
 Super Saver Price on All 19 Models  
 \$238,897 \$78.50

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.

Items can be purchased separately:  
 A) Megalosaurus \$238,741 \$3.79  
 B) Spinosaurus \$238,736 \$2.19  
 C) Glyptodon \$238,737 \$2.19  
 D) Pteranodon \$238,739 \$3.19  
 E) Stegosaurus \$238,739 \$3.19  
 F) Triceratops \$238,740 \$3.79  
 G) Plesiosaur \$238,741 \$2.59  
 H) Mamenchisaurus \$238,740 \$5.99  
 I) Brontosaurus \$238,739 \$7.59  
 J) Ichthyosaurus & Stand \$238,711 \$4.39  
 K) Brachiosaurus \$238,740 \$11.99  
 L) Diplodocus \$238,748 \$8.59  
 M) Cetiosaurus \$238,747 \$6.29  
 N) Iguanodon \$238,744 \$3.89  
 O) Muttaburrasaurus \$238,742 \$2.59  
 P) Tyrannosaurus \$238,745 \$4.89  
 Q) Woolly Mammoth \$238,743 \$4.29  
 R) Plesiosaurus \$238,746 \$5.49  
 S) Blue Whale \$238,742 \$3.99

**Edmund Scientific Offers Miniature Electric Components—Ideal for Creative Science Fair Projects and Classroom Demonstrations.**  
 Knife Switches: Sturdy plastic base knife switch with screw terminals for low voltage experiments. Single pole and throw \$238,805 \$2.10; Double pole and throw \$238,808 \$2.90  
 Battery Holders: Made of spring-tempered aluminum. Has pre-drilled mounting holes and polarity identification marks. For "D" size batteries: For 1 battery \$238,794 \$2.95; To hold 2 batteries \$238,795 \$3.45  
 Porcelain Miniature Bulb Receptacles: Clear type for miniature bulbs (flashlight size). Includes 2 mini screw bulbs. \$238,750 \$2.20  
 Open Gong Doorbell: 2-coil with 2 1/2" dia. open gong and clapper. Runs on 3-6V D.C. (battery) or 6-10V A.C. (transformer). \$238,809 \$9.50  
 Low Voltage Electric Buzzer: Clear tone, 2-coil with closed terminals and electronics. 3-6V D.C. or 6-10V A.C. \$238,810 \$8.75  
 Mini-Motors: Micro size, measures only 1/4" x 1/4" x 1/4" and a 1/4" shaft. At 3 volts 2000 RPM they do 7500 RPM's. Package of 5, \$235,128 \$5.75

**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. \$238,724 \$14.50

**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" \$260,082 \$6.95

**Can You Tell Which Ball Is A Happy Bouncer, And Which Ball Is Not?**  
 Two seemingly identical black spheres with marked differences in their physical properties. They have the same density, color and appearance; yet when dropped to the floor one jumps wildly, the other is motionless. Marvelous thought provoker for discrepant event science. Fact sheet on physical and chemical properties plus experiments for classroom use included. \$239,129 \$3.25/Pair; 2 or more pairs \$2.75/Pair

**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 constellations. \$295,251 Pkg. of 250, \$4.50

**Deal An Optical Illusion Next Time You Play Poker, Blackjack or Gin Rummy.**  
 Visual illusion cards are a great conversation piece for your card games. Contains 52 different visual illusions and instructions. Examples: illusions in color, color reversal, ambiguous figures, size and figure distortion. Two card deck styles available. Deck A Deck B Deck A: Can You Believe Your Eyes \$239,635 \$7.50 Deck B: More Illusions and Visual Oddities \$239,636 \$7.50

**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 4x2x3 1/2". Made with a Poly-Vinyl Chloride coating to resist corrosion and chipping. \$271,135 \$33.95

**Build Your Own Robot With A Two Way Sensor.**  
 Built-in electronic control sound sensor. Peppy the robot responds to sound and obstacles in its path. When the sound/touch sensor (in front) detects an obstacle or hears a loud noise, such as a hand clap, Peppy will automatically turn left 90° to 180° and continues on its merry way. Comes complete with electronic control sound sensor and assembled PC board. Powered by 2 1.5V "AA" batteries (not included). \$236,636 \$34.95

**Medical Tweezers For Fine Detail Work.**  
 Superior precision, surgical quality pair of tweezers are hand crafted out of 100% stainless steel. Ideal for removing splinters, ingrown hairs; will tweeze the finest hair. 4 1/4" x 1/4". Opens to 1/4". \$231,345 \$10.50



**Edmund Scientific's New Giant Moon Map**  
 OUR MOON  
 Our full color giant 24"x32" moon poster provides a detailed 14 1/2" diameter map of the lunar surface prepared by famed cartographer Antonin Rukl. All major features such as craters, mountains, seas, bays, valleys and named landing sites are identified on the map. The chart also contains additional informative photos by astronomers. Varnish Coated Poster Stock \$245,98 \$9.95; Kimdura Plastic Stock \$245,99 \$14.95

**Edmund's Famous Jumping Quarters Leap 3 Feet Into The Air!**  
 Full of fun and surprises. Simply click the jumping disc between your fingers, rub for a second, lay it on any smooth surface and POP! It leaps into the air, 3 feet high. Friends won't be able to resist tinkering with them. How does it work? The nickel and stainless steel discs work on the principle of thermodynamics. Heat (rubbing the discs) makes metal expand, a cool surface makes it contract. 12 Jumping Quarters \$242,099 \$4.25

**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 \$237,592 \$3.95

**The Hand Boiler, A 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. \$237,299 \$3.95

**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. \$233,538, \$29.95



**Save \$3.85 on our famous favorites**  
 Our Most Popular Science Fun Assortment  
 Classic science demonstration toys have amazed and intrigued young minds for many generations. You'll have fun and learn scientific demonstrations with these favorites:  
 • Perpetual drinking bird \$25.80 Value \$237.471  
 • Whirling gyroscope  
 • Sun-powered radiometer  
 • Amazing flying bird SPECIAL \$21.95 PRICE

**333 Science Tricks and Experiments** by Robert J. Brown. 206 pages. Targeted to elementary and high school students. Paperback. Demonstrate Hydrotopism, Dopplers effect, make a light engine or a reflection underwater. A treasure chest of scientific "examples" for elementary education use using inexpensive readily available materials. Each experiment fully explained. \$29703 \$9.95

**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. \$23931 \$13.95

**The Vortex™ More Than A Money Bank!**  
 Performs spinning tricks and high maneuvers. Drop a coin on 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. \$237,832 \$7.95

**Our Lowest Priced Laser Pointer, Only 7" Long. Perfect For Lecturers and Educators.**  
 New!  
 The Laserex 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 and you have a product perfect for lecturers and educators. A boon for slide presentations, business and sales meetings. Battery life is approx. 5 hours on one set of either 3 "AA" cells or 2 "AAA". \$238,733 \$125.00

**Fun And Intriguing! You'll Play For Hours With These Colorful Magnetic Magic Marbles.**  
 Build a mountain or odd geometric patterns with these fascinating, high impact plastic marbles. Each marble has both a negative and positive pole. A challenge to your imagination. Fun for youngsters, adults, too! 20 marbles per package. \$234,968 (Package of 20) @ \$3.95 Ea (5 Packages or more) @ \$3.70 Ea (10 Packages or more) @ \$3.20 Ea

**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 "AA" battery, includes Frequency response 200Hz to 8000Hz, output level 49 db's maximum. Complete with padded microphone, amplifier and headphones. \$238,042 \$49.95

**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. \$270,448 \$49.95

**Why Does This Amazing Space Pet or Cell Always Spin In A Counter Clockwise Direction?**  
 Originally called "Cetus" because their curious properties were first discovered by archaeologists studying prehistoric axes and adzes called Celts. These rocks had a preferred direction of rotation. Spin the space pet the other way and it will stop, rock up and down on the long axis, and then reverse its spin. Hit the round edge of an erasor, with its axis aligned at an angle of about 5° to 10° from the main axis of the stone. Angular momentum is conserved, but it doesn't look it. Made of injection molded acrylic. Size: 3 1/8" x 3 1/4" x 1 1/2". Pkg. of 3. \$238,912 \$5.95

**Every Detail Of Your Eye Enlarged.**  
 Check contact lenses and inspect your own eye with our unique close-up eye inspection mirror. Our precision radius mirror with front surface coating allows you to inspect your own eye by simply holding the mirror approximately 2 inches in front of your eye. Ideal for contact lens wearers or to inspect for irritant alien particles. Mirror is 2 inches in diameter with front surface aluminized coating. \$239,152 \$9.95

**Metric Triple Balance Ohaus Scale With 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 18x18x1/2". \$271,695 \$93.00  
 Accessory Weight Set, expands scale to 2,610 cap. Inc. 1-500 and 2-1,000 gr. wts. \$241,766 \$24.95

**Adult And Baby Sea Life Creature Replicas**  
 Large detailed replicas of the popular creatures that inhabit the world's oceans. 24 different models, both adult and baby. Each replica is hand painted and carefully molded for realism. Each in proportioned sizes. Adults up to 9 1/2" long; Babies up to 4" long. Items can be purchased separately.  
 A) Adult Walrus \$238,858 \$3.95 Baby \$238,859 \$1.25  
 B) Adult Manatee \$238,860 \$3.95 Baby \$238,861 \$1.25  
 C) Adult Blue Whale \$238,862 \$4.75 Baby \$238,863 \$1.25  
 D) Adult Tiger Shark \$238,864 \$4.75 Baby \$238,865 \$1.25  
 E) Adult Humpback Whale \$238,866 \$4.75 Baby \$238,867 \$1.25  
 F) Adult Sperm Whale \$238,868 \$4.75 Baby \$238,869 \$1.25  
 G) Plesiosaur \$238,741 \$2.59  
 H) Mamenchisaurus \$238,740 \$5.99  
 I) Brontosaurus \$238,739 \$7.59  
 J) Ichthyosaurus & Stand \$238,711 \$4.39  
 K) Brachiosaurus \$238,740 \$11.99  
 L) Diplodocus \$238,748 \$8.59  
 M) Cetiosaurus \$238,747 \$6.29  
 N) Iguanodon \$238,744 \$3.89  
 O) Muttaburrasaurus \$238,742 \$2.59  
 P) Tyrannosaurus \$238,745 \$4.89  
 Q) Woolly Mammoth \$238,743 \$4.29  
 R) Plesiosaurus \$238,746 \$5.49  
 S) Blue Whale \$238,742 \$3.99

**SPECIAL 14 Pc. Science A \$34.65 Value Fair Package \$238,721 \$29.95**  
 You get: Two light bulbs, one porcelain receptacle, one electric buzzer, one doorbell gong, one single and one double pole single throw knife switch, two battery holders and 5 mini motors.  
 Add Spectacular Color To Your Home With A Rainbow Light Display.  
 Our equilateral prism mounted in an attractive high tech positioning base catches the sunlight from your window and projects the ever-changing rainbow patterns over your walls, ceiling and floor. It's almost like being inside a multifaceted diamond. Glass equilateral prism is 2" (50mm) long with 1" (25mm) faces. Black plastic mount is 3" x 1 1/4" x 1 1/4". \$238,400 \$2.25

**Poison Dart Frogs From The Rainforest.**  
 Designed in cooperation with the National Aquarium in Baltimore. Each colorfully handpainted frog is 2 1/2" long. The toxic poison found in the skin of these frogs has been used for centuries by Indians who use it to coat the tips of their blowgun darts before hunting.  
 A) Azureus (Blue) \$239,682 \$4.75  
 B) Historionicus (Orange) \$239,683 \$4.75  
 C) Auratus (Green) \$239,684 \$4.75

**Space-Age Gyroscope. A Favorite Of All Ages.**  
 Space-age design updates the classic gyroscope featuring a high-impact plastic body with brass and metal fittings. Precision-crafted to spin 3 to 5 gravity-defying minutes. Demonstrates principles of centrifugal force and gravity as used in ships, airplanes and space craft for stabilization and navigation. Complete with base, cord, 3 1/4" diameter gyroscope and instructions. \$238,647 \$9.95

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.

**Edmund Scientific Co.**  
 Dept. 12D3, C922 Edscorp Bldg.  
 Barrington, NJ 08007

STOCK NO. QTY. PRICE

METHOD OF PAYMENT:  
 Check enclosed  
 VISA  
 MasterCard  
 Diners Club  
 American Express  
 Carte Blanche  
 Discover  
 Optima

Exp. Date \_\_\_\_\_  
 Card Number \_\_\_\_\_ Total Price \_\_\_\_\_  
 Bank Number (MasterCard only) \_\_\_\_\_ In NJ Add 7% Sales Tax  
 Signature \_\_\_\_\_ Add \$2.50 for postage and handling  
 RUSH FREE 112 PAGE FULL COLOR CATALOG TOTAL ENCLOSED

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Serving Science Hobbyists Since 1942

**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 our products! Our 45 day unconditional guarantee means you take no risk on any product you buy from us.

**Edmund Scientific Co.**  
 Dept. 12D3, C922 Edscorp Bldg., Barrington, NJ 08007

**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