

The Weekly Newsmagazine of Science

# SCIENCE NEWS

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## Bacterial Designs

Edmund Scientific makes science fun!

# SCIENCE FAIR TIME!!

SCIENCE FUN FOR EVERYONE!

**Free Standing Science Fair Project Boards.**  
NSTA Approved.

Enhance your science fair projects with our expandable science fair project boards. Extra sturdy, corrugated boards are faced with white bond paper for a beautiful finished appearance. Pre-folded sides can be folded forward (as illustrated) for a free standing presentation. Boards are 36" x 24" folded; 36" x 48" expanded.

**Science Project Display Boards**  
Package of 3 Boards  
Educational Pkg. of 10 Boards  
NDS2,383 \$12.95  
NDS2,384 \$33.95

**Perform Experiments With Equilateral Prisms Discovered By Sir Isaac Newton.**

Prism discovery optics have three equal 60° angles, ideal for classroom demonstrations. Turn sunshine into rainbows, bend light, even make a periscope. You can perform Newton's basic dispersion of white light into the spectrum experiments. All made of optical glass. Face is 25mm.

- 75mm, NDS1,787 \$5.75
- 100mm, NDS1,798 \$6.85
- 250mm, NDS3,124 \$4.45
- 500mm, NDS1,801 \$5.35
- 150mm, NDS1,799 \$9.25

**Watch This Amazing Dinosaur Grow Crystals In Just 30 Minutes!**

Grow blue and red "fur" on the back and tail of this Dino™. Measures 5 1/2" long x 2 1/4" high. Non toxic. Package of 4 Crystal Dinosaurs™ NDS2,602 \$5.95

**Static Electricity In A Test Tube™** **NEW!**

Investigate static and current electricity with this "hands-on" science kit. Construct circuits, build an electroscope and a telegraph, and other exciting experiments. Comes complete with light bulbs, sockets, wire, two 9V battery clips and an action packed 32 page activity book. Unique test tube shaped packaging also doubles as a convenient storage container. For ages 8 and up. NDS2,757 \$5.95

**Discover Science The Fun And Easy Way With The Slime Chemistry Kit.** **NEW!**

This science starter kit is a chemistry based learning lab that contains 8 activities about colloids, polymers and solvents. Comes complete with chemicals and hardware and an illustrated step-by-step instruction booklet. For ages 10 and up. Adult supervision is recommended. NDS2,842 \$29.95

**Make Perfumes And Conduct Experiments With The Science Of Scent.** **NEW!**

This kit combines the fun of mixing fragrances with fascinating scientific discoveries. Scientists are exploring the effects of scent on our emotions, memories and behavior. Included are five fragrance oils: jasmine, lily of the valley, heliotrope, apple and pepper mint. Kit contains mixing vials, droppers and instructions. NDS2,492 \$19.95

**Build A Working V-8 Engine That's Visible.** **NEW!**

What better way to learn how an internal combustion engine works than to be able to see all of the parts move! As you turn the crank at your own speed, each of the parts move - just like the real thing. You can actually watch the crank shaft rotate; valves open and close and the rods and pistons move up and down. This 1/4 scale realistic model is powered by a hand crank - no batteries required. V-8 engine rests on a black stand, which may be painted. Model skill level 3. Glue not included. NDS2,854 \$45.95

**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. NDS7,832 \$18.95

**Why Does This Amazing Space Pet or Celt Always Spin In A Counter Clockwise Direction?**

Originally called "Celts" because their curious properties were first discovered by archeologists 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. Hint: The round edge is an ellipsoid, 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 1/2" x 1 1/2" x 1 1/2". Package of 3 NDS3,912 \$5.95

**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 or 2 liter plastic soda bottles and ordinary tap water. Swirl water from the bottom bottle to the bottom one using tornado vortex action. Explanation of scientific principles included. Pkg. of 2 tubes NDS7,592 \$3.95

**Flash Rocks.**

Strike them together and see amazing flashes inside the rocks! The source of light is a miniature "lightning flash" that occurs in the quartz material within the rocks. It's nature's Piezo effect. Pack of 3 bags (6 rocks) NDS7,474 \$8.95

**Hand Propelled Flying Machine.**

Just rub the stick briskly between both hands and the propeller will soar into the air. Package of 3

**Exciting Books For Science Fair Projects "700 Science Experiments For Everyone"**

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 and diagrams. NDS301 \$13.95

**Motors By The Bag For The Hobbyist, 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 1/2" long shafts. 20, 1" Motors NDS1304 \$14.95

**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. Dual pack 2 Packages, NDS38,440 \$10.95

**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. NDS38,724 \$14.95

## HANDS-ON SCIENCE

**Illuminating 30X Magnifier-Microscope For Examining Stamps, Coins, etc.**

Our new design improves this popular model. Carry it with you everywhere, measures only 5 1/4" x 1 1/4" x 1/4". Ideal for critical inspections. Has a built-in light source and optics to let you examine objects 30 times actual size. Features a center focus wheel for precise one-hand operation. Ideal for industrial inspections and hobby applications. Uses 2 "AA" batteries (not included). NDS5,001 \$9.75

**COMPACT LASER POINTER**

Our Lowest Price Ever!

**The Powerful Edmund 400X Full Size Student Microscope - Ideal For Every Age Classroom.** **NEW!**

Open the hidden world to budding scientists to explore the fields of health, science and medicine with this professional instrument. It's the best quality and most economically priced microscope for the home/school budget. Features a large 1 1/2" tall heavy duty all metal frame built to International DIN Standards and weighs a hefty 7 lbs. 4 oz. Comes with three turret-mounted achromatic objectives, 40X - 100X - 400X and accepts all DIN objectives and eyepieces. Rack and pinion COARSE/FINE focusing allows for high power performance. Substage iris diaphragm provides precision light control for high contrast. Focus stop slide protection, adjustable inclination, spring clips and packed in a wooden storage case. This ES 400X student microscope, backed by a 5 year limited warranty, is highly recommended for your child's first microscope. NDS2,453 \$139.99

**NEW! PRICE BREAKTHROUGH \$49.95**

**Lightweight, Measures Less Than 5.5"**

**Ideal for lecturers, presentations, educators, instructors, annual meetings and slide shows.**

It projects a brilliant red laser dot to focus attention to slide presentations, charts, business and sales meetings at distances up to 150 feet. This compact pen style class IIIa laser pointer is crafted of the finest materials and built to the highest industrial standards. 8 hours continuous battery life, uses 2 "AAA" batteries (included), weighs less than 2 oz. Rated output: 3mW at 675nm. Caution: Laser light, avoid direct eye exposure. NDS2,442 PRICE BREAKTHROUGH! ONLY \$49.95

**Metric Triple Balance Ohaus Scale With Single Pan Balance.**

The classic weighing instrument provides accurate weights year after year. Rugged construction, weigh anything from your walk-in cooler to 610 grams. 610 gram capacity. Stainless 6" platform 18x6". NDS71,695 \$95.00

Accessories: Weight Set, expands scale to 2,610 capacity including 1-500 and 2-1000 gram wts. NDS41,768 \$26.00

**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. Balls are 3/4" in diameter and have the same density, mass, 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. NDS9,129 \$3.95/Pair 10 Pairs or more \$3.50

**Our Six Favorite Science Toys That Teach.**

Classic science demonstration toys have amazed and intrigued young minds for many generations. You'll have fun and learn scientific demonstrations with them.

- Amazing Flying Bird • Fickle Foam
- Whirling Gyroscope SPECIAL \$19.95
- Spin Powered Radiometer PRICE
- Rainbow Maker • Space Pet NDS2,380

**NEW! Russian Night Vision Scope... Ideal For Law Enforcement, Astronomy, Navigation And Camping.**

With the wide variety of Russian night vision scopes on the market, choosing the best can prove to be difficult. Having tested most of the scopes currently available, Edmund Scientific is pleased to offer the best scope overall in quality and price. This scope features affordable night vision with huge image gain and resolution. The unit only requires 0.002 lux natural or artificial illumination to function. An adjustable external illuminator is included to provide near-infrared light to scenes below the minimum level. Spectral response is wide, ranging from visible to near-infrared. Auto-gain circuitry prevents damage against accidental bright light exposure. Manual diaphragm allows alternative control over image brightness received by the scope. Eyepiece diopter adjustable; battery included, weight 2.8 lbs. NDS2,839 \$435.00

**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 principles 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. NDS6,082 \$6.95

**Deluxe Gyroscope Performs Gravity Defying Feats, Rotates 3 To 5 Minutes.**

Demonstrates "gyroscopic inertia" or rigidity in space as first recorded by Sir Isaac Newton in the 17th century. An object rotating about a fixed axis holds its position with respect to inertial space, no matter how the spinning object's support is moved about. Gyro-controlled guidance and navigation systems are used in ships, planes, missiles and space craft and used in mapping/survey work, oil drilling and motion-picture production. With laser gyros and advanced control mechanisms, gyroscopic principles promise to be an important part of tomorrow's technology. Space-age design gyroscope measures 3 1/4". NDS38,647 \$9.95

**Have You Ever Seen The Inside Of Your Eye?**

Eyescopes are 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 booklet included, describes the various features inside the normal eye, how the iris works, kinds of floaters and fixed objects, how to inspect contacts. NDS33,538 \$29.95

**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. NDS34,968 (Package of 20) @ \$3.95 Ea. (5 Packages or more) @ \$3.70 Ea. (10 Packages or more) @ \$3.20 Ea.

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