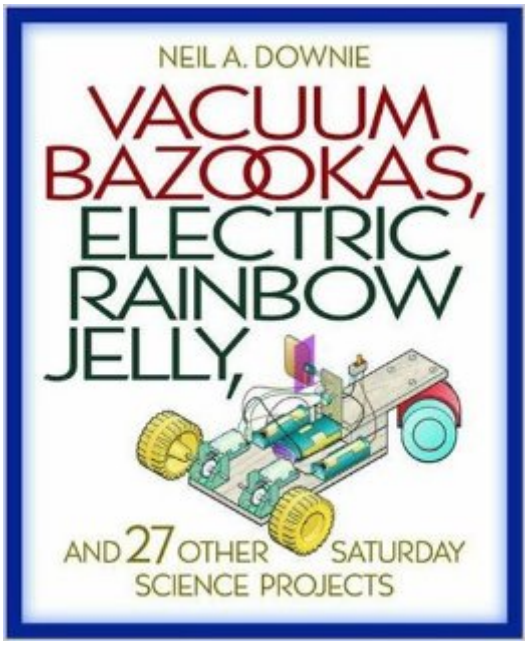
Vacuum Bazookas, Electric Rainbow Jelly, And 27 Other Saturday Science Projects.



Synopsis

How do you crack nuts with a piece of string? Reverse gravity? Cobble together a clock out of a coffee cup, a soda bottle, and some water? Use a vacuum cleaner and nineteenth-century railroad technology to fashion a makeshift bazooka that can launch paper projectiles? Create a rainbow in a block of Jello? This is a one-volume romp through a whole array of counterintuitive science experiments that require little more than common household items and a sense of curiosity. Prepare to have your surprise sensors on overload as Neil Downie stretches math, physics, and chemistry to do what they have never done before. This book describes twenty-nine unusual but practical experiments, detailing how they are done and the math and physics behind them. It will delight both casual and inveterate tinkerers. Of varying levels of complexity, the experiments are grouped in sections covering a wide field of physics and the borders of chemistry, ranging from dynamic mechanics (''Kinetic Curiosities'') to electricity (''Antediluvian Electronics'') and combustion (''Infernal Inventions''). The chapters are titillatingly titled, from ''Twisted Sinews'' and ''Mole Radio'' to ''A Symphony of Siphons'' and ''Tornado Transistor.'' More-detailed explanations, along with simple mathematical models using high-school level math, are given in boxes accompanying each experiment. Armchair scientists will welcome this edifying and entertaining alternative to idleness, not least for the buoyant prose, enriched by historical and literary anecdotes introducing each topic. With this book in hand, tinkerers, whether dabblers in science or devotees, students or teachers, need never again wonder how to impress friends, the judges at the science fair, and, not least, themselves.

Book Information

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Customer Reviews

I've only had this book for a few days, but have found the projects unusual and offbeat. For the most part, they are not a rehash of old science projects. They are well described and each one has a good description of the science and math behind them. The illustrations are not overly detailed, but they do the job quite well. I found it a little odd that the description of what the project is about is separated from the chapter on the project. The summaries of what is interesting about the projects and simply what they do is in the front of the book. If you open to a project within the book, you'll wonder what the real appeal of the project is until you go to the front of the book.The author is quite a tinkerer and at least one of the project toys is patented. I believe a few others are heading toward patents.Several projects require access to a small amount of Mecanno (or Erector) set parts. These companies almost do not exist it the U.S. any longer. However, Brio recently started distributing Erector sets again. I'm sure one could find substitutes for the Mecanno parts at a local hardware store or maybe even make them.

Neil Downie has developed another outstanding summary of science projects/challenges for all ages. At this time, when bcominig a scientist may not be the #1 career--- these projects get the attention of the student,parent and teacher alike. The opportunity to try, fail and try again--usually ends in success. We need this type of approach to encourgae our children to consider science as a career.

The technical language was easily understood and presented in a clear interesting manner.Mr Downie has inspired me to have a real go at these projects.As we say in New Zealand "Sweet As".

Lorikeets, Facts on habitat, breeding, lifespan, behavior, diet, cages, talking and suitability as pets Rainbow Fish Finger Puppet Book (Rainbow Fish (North-South Books)) The Adventures of Rainbow Fish: A Collection (The Rainbow Fish) ELVIS: Pure Gold (Arrangement for Mixed Chorus SATB with Piano, Electric Guitar, Electric Bass and Percussion) Electric Pressure Cooker Cookbook: 25 Best Electric Pressure Cooker Recipes for Busy People The Complete Electric Bass Player - Book 3: Electric Bass Improvisation Wheels!: Science Projects with Bicycles, Skateboards, and Skates (Score! Sports Science Projects) Minnie and Moo: The Case of the Missing Jelly Donut (I Can Read Book 3) Tomart's Price Guide to Character & Promotional Glasses: Including Pepsi, Coke, Fast-Food, Peanut Butter and Jelly Glasses; Plus Dairy Glasses & Mil Perfect Quilts for Precut Fabrics: 64 Patterns for Fat Quarters, Charm Squares, Jelly Rolls, and Layer Cakes Scrap-Basket Beauties: Quilting with Scraps, Strips, and Jelly Rolls How Jelly Roll Morton Invented Jazz