The Elements A Visual Exploration Of Every Known Atom In The Universe

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The Stardust That Made Us - Colin Stuart 2022-03-22
"A visual exploration of chemistry, atoms, elements, and the universe."--
The Elements - Philip Ball 2021-09-27
The classical elements -- The antique metals -- Alchemical elements -- The new metals -- Chemistry golden age -- Electrical discoveries -- The radiant age -- The nuclear age.
Elements - Theodore Gray 2012-04-03
With more than 1 million copies sold worldwide, The Elements is the most entertaining, comprehensive, and visually arresting book on all 118 elements in the periodic table. Includes a poster of Theodore Gray's iconic photographic periodic table of the elements! Based on seven years of research and photography by Theodore Gray and Nick Mann, The Elements presents the most complete and visually arresting representation available to the naked eye of every atom in the universe. Organized sequentially by atomic number, every element is represented by a big beautiful photograph that most closely represents it in its purest form. Several additional photographs show each element in slightly altered forms or as used in various practical ways. Also included are fascinating stories of the elements, as well as data on the properties of each, including atomic number, atomic symbol, atomic weight, density, atomic radius, as well as scales for electron filling order, state of matter, and an atomic emission spectrum. This of solid science and stunning artistic photographs is the perfect gift book for every sentient creature in the universe.
Superheavy - Kit Chapman 2019-06-13
Shortlisted for the 2020 AAAS/Subaru SB&F Prize for Excellence in Science Books Creating an element is no easy feat. It's the equivalent of firing six trillion bullets a second at a needle in a haystack, hoping the bullet and needle somehow fuse together, then catching it in less than a thousandth of a second – after which it's gone forever. Welcome to the world of the superheavy elements: a realm where scientists use giant machines and spend years trying to make a single atom of mysterious artefacts that have never existed on Earth. From the first elements past uranium and their role in the atomic bomb to the latest discoveries stretching our chemical world, Superheavy will reveal the hidden stories lurking at the edges of the periodic table. Why did the US Air Force fly planes into mushroom clouds? Who won the transfermium wars? How did an earthquake help give Japan its first element? And what happened when Superman almost spilled nuclear secrets? In a globe-trotting adventure that stretches from the United States to Russia, Sweden to Australia, Superheavy is your guide to the amazing science filling in the missing pieces of the periodic table. By the end you'll not only marvel at how nuclear science has changed our lives – you'll wonder where it's going to take us in the future.
Theodore Gray's Elements Vault - Theodore Gray 2011-11
Presents facts, figures, and stories about the elements of the periodic table along with a variety of replicas of archival documents, vintage postcards, and advertisements in pockets.
How Things Work - Theodore Gray 2019-10-22
Million-copy bestselling author of The Elements, Molecules, and Reactions Theodore Gray applies his trademark mix of engaging stories, real-time experiments, and stunning photography to the inner workings of machines, big and small, revealing the extraordinary science, beauty, and rich history of everyday things. Theodore Gray has become a household name among fans, both young and old, of popular science and mechanics. He's an incorrigible tinkerer with a constant curiosity for how things work. Gray's readers love how he always brings the perfect combination of know-how, humor, and daring-do to every project or demonstration, be it scientific or mechanical. In How Things Work he explores the mechanical underpinnings of dozens of types of machines and mechanisms, from the cotton gin to the wristwatch to an industrial loom. Filled with stunning original photographs in Gray's inimitable style, How Things Work is a must-have exploration of stuff--large and small--for any builder, maker or lover of mechanical things.
The Language of the Universe - Colin Stuart 2020-10-20
Designed to present mathematics in a new, approachable way, this book explores the history and application of math in the natural world. With incredible artwork from Ximo Abadía, the reader can visualize atoms, explore the geometric complexity of beehives, and wonder at the movement of the planets. With engaging, easy-to-understand text by acclaimed science writer Colin Stuart, this title will truly captivate and inspire.
Mystery of the Periodic Table - Benjamin D Wiker 2003-04-18
Leads the reader on a delightful and absorbing journey through the ages, on the trail of the elements of the Periodic Table as we know them today. He introduces the young reader to people like Von Helmont, Boyle, Stahl, Priestly, Cavendish, Lavoisier, and many others, all incredibly diverse in personality and approach, who have laid the groundwork for a search that is still unfolding to this day. The first part of Wiker's witty and solidly instructive presentation is most suitable to middle school age, while the later chapters are designed for ages 12-13 and up, with a final chapter somewhat more advanced. Illustrated by Jeanne Bendick and Ted Schluenderfritz.
The Molecules - Theodore Gray 2016-02-19
In his highly anticipated sequel to "The Elements," Theodore Gray demonstrates how the elements of the periodic table combine to form the molecules that make up our world. Everything physical is made up of the elements and the infinite variety of molecules they form when they combine with each other. In "Molecules," Theodore Gray takes the next step in the grand story that began with the periodic table in his best-selling book, "The Elements: A Visual Exploration of Every Known Atom in the Universe." Here, he explores through fascinating stories and trademark stunning photography the most interesting, essential, useful, and beautiful of the millions of chemical structures that make up every material in the world. Gray begins with an explanation of how atoms bond to form molecules and compounds, as well as the difference between organic and inorganic chemistry. He then goes on to explore the vast array of materials molecules can create, including: soaps and solvents; goops and oils; rocks and ores; ropes and fibers; painkillers and dangerous drugs; sweeteners; perfumes and stink bombs; colors and pigments; and controversial compounds including asbestos, CFCs, and thimerosal. Big, gorgeous photographs, as well as diagrams of the compounds and their chemical bonds, rendered with never before seen beauty, fill the pages and capture molecules in their various states. As he did in "The Elements," Gray shows us molecules as we've never seen them before. It's the perfect book for his loyal fans who've been eager for more and for anyone fascinated with the mysteries of the material world.
The Kid's Book of the Elements - Theodore Gray 2020-10-20
A fun, fascinating, and amazingly photographic exploration of the periodic table, for curious kids who want to understand how atoms and elements make up everything in the universe. Created by Theodore Gray, bestselling author of The Elements, especially for kids ages 6 to 9. Includes 120 tear out element cards so kids can play with and arrange the periodic table all on their own! In this very special kids' edition of Theodore Gray's The Elements, budding scientists, ages 6 to 9, will learn all about every element in the periodic table from the first element, Hydrogen (1), to the very last element, Oganesson (118). Filled with great big colorful photographs and fun facts for every element, The Kid's Book of The Elements is the perfect introduction to the fascinating world of chemistry and visual/tactile-based STEM/STEAM learning. This edition

also includes 120 sturdy tear-out cards of each element for kids to play with and arrange on their own.

Theodore Gray's ABC Elements - Theodore Gray 2019-09-10

A delightful new Elements board book that teaches baby all about the ABCs and the elements of the periodic table at the same time. With baby-friendly text and big, bright colorful photographs! ABC ELEMENTS features 26 elements that represent each of the letters of the alphabet-A for Aluminum, B for Bismuth, C for Carbon etc. Each letter of the alphabet will be illustrated with a big, beautiful photograph of the element from Theodore Gray's famous photographic element collection.

The Elements - Theodore W. Gray 2009

Everything in the world that is tangible is made up of elements, and elements have two faces -- their pure states and the range of chemical compounds they form when they combine with other elements. This book provides the opportunity to see both up close and personally. Organized in order of appearance in the periodic table, the book showcases each element (wherever possible) with a photograph of the pure element. Also included are photographs that show examples of the way that element lives in the world -- the compounds and applications in which we experience the element in daily life. The text that accompanies each spread tells the story of the element. Along with the story of each element is essential scientific data including atomic weight, atomic radius, a crystal structure diagram, and graphs representing electron filling order, the atomic emission spectrum, and the temperatures at which the element is a solid, liquid, or gas.

Theodore Gray's Completely Mad Science - Theodore Gray 2016-09-13

The ultimate Theodore Gray collection, Theodore Gray's Completely Mad Science collects every one of Gray's dramatic, visually spectacular, and enlightening scientific experiments into one complete volume. Bestselling author Theodore Gray has spent more than a decade dreaming up, executing, photographing, and writing about extreme scientific experiments, which he then published between 2009 and 2014 in his monthly Popular Science column "Gray Matter." Previously published in book form by Black Dog in two separate volumes (Mad Science and Mad Science 2), these experiments, plus an additional 5, are available now in one complete book.Completely Mad Science is 432 pages of dazzling chemical demonstrations, illustrated in spectacular full-color photographs. Experiments include: Casting a model fish out of mercury (demonstrating how this element behaves very differently depending upon temperature); the famous Flaming Bacon Lance that can cut through steel (demonstrating the amount of energy contained in fatty foods like bacon); creating nylon thread out of pure liquid by combining molecules of hexamethylenediamine and sebacoyl chloride; making homemade ice cream using a fire extinguisher and a pillow case; powering your iPhone using 150 pennies and an apple, and many, many more. Theodore Gray is the author of The Elements: A Visual Exploration of Every Known Atom in the Universe; Molecules: The Elements and the Architecture of Everything; Theo Gray's Mad Science: Experiments You Can Do at Home, But Probably Shouldn't; and Mad Science 2: Experiments You Can Do at Home, but Still Probably Shouldn't. He lives in Urbana, Illinois.

Drive - Daniel H. Pink 2011-04-05

The New York Times bestseller that gives readers a paradigm-shattering new way to think about motivation from the author of When: The Scientific Secrets of Perfect Timing Most people believe that the best way to motivate is with rewards like money—the carrot-and-stick approach. That's a mistake, says Daniel H. Pink (author of To Sell Is Human: The Surprising Truth About Motivating Others). In this provocative and persuasive new book, he asserts that the secret to high performance and satisfaction-at work, at school, and at home—is the deeply human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. Drawing on four decades of scientific research on human motivation, Pink exposes the mismatch between what science knows and what business does—and how that affects every aspect of life. He examines the three elements of true motivation—autonomy, mastery, and purpose-and offers smart and surprising techniques for putting these into action in a unique book that will change how we think and transform how we live.

The Elements Notebooks - Theodore Gray 2019-04-09

The beautiful, vivid imagery of Theodore Gray's The Elements now graces this irresistible set of 3 paper-bound notebooks, perfect for students and science enthusiasts of all ages. Each of the 3 notebooks in this set features a different stunning image of an element of the periodic table on its cover, drawn from the iconic photographs found in The Elements. These three elements--Hydrogen, Oxygen, and Carbon--are the most essential and life-sustaining atoms in the universe. Their imagery is sure to inspire you to organize the daily chaos sustained in your own life. Approach everything from grocery lists and packing lists, to homework assignments, daydreams, doodles, and all those dreadful To-Do's with a renewed sense of order and awe for the world around you. This set includes: 3 saddle stitched 48-page notebooks. Ivory woodfree paper. Matte varnish covers. Packaged together with a belly band.

Periodic Tales - Hugh Aldersey-Williams 2012-05

The phenomenal Sunday Times bestseller Periodic Tales by Hugh Andersey-Williams, packed with fascinating stories and unexpected information about the building blocks of our universe. Everything in the universe is made of them, including you. Like you, the elements have personalities, attitudes, talents, shortcomings, stories rich with meaning. Here you'll meet iron that rains from the heavens and noble gases that light the way to vice. You'll learn how lead can tell your future while zinc may one day line your coffin. You'll discover what connects the bones in your body with the Whitehouse in Washington, the glow of a streetlamp with the salt on your dinner table. Unlocking their astonishing secrets and colourful pasts, Periodic Tales is a voyage of wonder and discovery, showing that their stories are our stories, and their lives are inextricable from our own. 'Science writing at its best. A fascinating and beautiful literary anthology, bringing them to life as personalities. If only chemistry had been like this at school. A rich compilation of delicious tales'Matt Ridley, Prospect 'A love letter to the chemical elements. Aldersey-Williams is full of good stories and he knows how to tell them well'Sunday Telegraph 'Great fun to read and an endless fund of unlikely and improbable anecdotes'Financial Times 'The history, science, art, literature and everyday applications of all the elements from aluminium to zinc' The Times Hugh Aldersey-Williams studied natural sciences at Cambridge. He is the author of several books exploring science, design and architecture and has curated exhibitions at the Victoria and Albert Museum and the Wellcome Collection. He lives in Norfolk with his wife and son.

The Periodic Table - Paul Parsons 2014-03-11

As one of the most recognizable images in science, the periodic table is ingrained in our culture. First drawn up in 1869 by Dmitri Mendeleev, its 118 elements make up not only everything on our planet but also everything in the entire universe. The Periodic Table looks at the fascinating story and surprising uses of each of those elements, whether solid, liquid or gas. From the little-known uses of gold in medicine to the development of the hydrogen bomb, each entry is accompanied by technical data (category, atomic number, weight, boiling point) presented in easy-to-read headers, and a colour coding system that helps the reader to navigate through the different groups of elements. A remarkable display of thought-provoking science and beautiful photography, this guide will allow the reader to discover the world afresh.

Reactions - Theodore Gray 2017-11-07

The third book in Theodore Gray's bestselling Elements Trilogy, Reactions continues the journey through the world of chemistry that began with his two previous bestselling books The Elements and Molecules. With The Elements, Gray gave us a never-before-seen, mesmerizing photographic view of the 118 elements in the periodic table. In Molecules, he showed us how the elements combine to form the content that makes up our universe. With Reactions Gray once again puts his one-of-a-kind photography and storytelling ability to work demonstrating how molecules interact in ways that are essential to our very existence. The book begins with a brief recap of elements and molecules and then goes on to explain important concepts the characterize a chemical reaction, including Energy, Entropy, and Time. It is then organized by type of reaction including chapters such as "Fantastic Reactions and Where to Find Them," "On the Origin of Light and Color," "The Boring Chapter," in which we learn about reactions such as paint drying, grass growing, and water boiling, and "The Need for Speed," including topics such as weather, ignition, and fire.

Teeth - Mary Otto 2017-03-14

An NPR Best Book of 2017 "[Teeth is] . . . more than an exploration of a two-tiered system—it is a call for sweeping, radical change." —New York Times Book Review "Show me your teeth," the great naturalist Georges Cuvier is credited with saying, "and I will tell you who you are." In this shattering new work, veteran health journalist Mary Otto looks inside America's mouth, revealing unsettling truths about our unequal society. Teeth takes readers on a disturbing journey into America's silent epidemic of oral disease, exposing the hidden connections between tooth

decay and stunted job prospects, low educational achievement, social mobility, and the troubling state of our public health. Otto's subjects include the pioneering dentist who made Shirley Temple and Judy Garland's teeth sparkle on the silver screen and helped create the all-American image of "pearly whites"; Deamonte Driver, the young Maryland boy whose tragic death from an abscessed tooth sparked congressional hearings; and a marketing guru who offers advice to dentists on how to push new and expensive treatments and how to keep Medicaid patients at bay. In one of its most disturbing findings, Teeth reveals that toothaches are not an occasional inconvenience, but rather a chronic reality for millions of people, including disproportionate numbers of the elderly and people of color. Many people, Otto reveals, resort to prayer to counteract the uniquely devastating effects of dental pain. Otto also goes back in time to understand the roots of our predicament in the history of dentistry, showing how it became separated from mainstream medicine, despite a century of growing evidence that oral health and general bodily health are closely related. Muckraking and paradigm-shifting, Teeth exposes for the first time the extent and meaning of our oral health crisis. It joins the small shelf of books that change the way we view society and ourselves—and will spark an urgent conversation about why our teeth matter.

Photographic Card Deck Of The Elements - Theodore Gray 2001-11

A companion to the bestselling book The Elements: A Visual Exploration of Every Known Atom in the Universe, this beautiful photographic card deck features all 118 elements in the periodic table. One element per card appears as a full-size image on the front and fascinating information about the element on the back. The Photographic Card Deck of The Elements is the most detailed, lush, and beautiful set of cards ever produced on the subject of the periodic table. With 126, 5"X5" cards in all, it includes one card for every one of the 118 elements, plus additional cards that explain the arrangement of the periodic table, present the elements sorted by various properties, and suggest activities and uses for the cards. The front side of each card shows a full-size, photographic image of the element, while the back gives scientific information including atomic weight, density, melting and boiling point, valence, and the percent of the element found in the universe, in the Earth's crust, in oceans, and in humans. Graphics show melting/boiling points, density, electron configuration, and atomic radius. A fascinating fact about the element, as well as the date of its discovery, is also included. The cards are perfect for students but also make an excellent gift for a scientist or anyone who enjoys the beauty and diversity of the natural world.

The Elements - Theodore W. Gray 2009

Presents photographic representations of the one hundred and eighteen elements in the period table, along with facts, figures and stories about each one.

The Secret Life of the Periodic Table - Ben Still 2016-10-01

The Secret Life of the Periodic Table uncovers the fascinating stories behind the formulation of the table. It describes how and who discovered the 118 elements, and the competition and cooperation behind scientific advances. The character of the elements is brought to life in a bright and engaging way, making The Secret Life of the Periodic Table ideal for students and general readers. Spared the monotony of a school text, they can gain a basic understanding of the fundamentals of atomic science. The book covers all 118 elements in 14 chapters. They are: A brief guide to atomic physics Igor Mendeleev, arguably the most important formulator of the table, and significant others Hydrogen Alkali metals Alkaline Earth metal Transition metals Post-transition metals Metalloids Other non-metals Halogens Noble gases Lanthanoids Actinoids Transuranium elements. Each element description includes a fact box showing atomic number, atomic weight, radius, melting point, boiling point, density, and the year of its discovery and by whom. There are many sidebars, boxes and extended captions covering topics of interest, like Ernest Lawrence's 1931 cyclotron, early precursor to the 10-km radius Large Hydron Collider that he could not possibly have imagined. There is also fascinating trivia about the elements. For example, phosphorus was first isolated by an alchemist's search for gold in urine and in the 1920s, there was a fad for lethal radium cocktails. The Secret Life of the Periodic Table is accurate and entertaining, making it a helpful adjunct to student studies. General readers will find it an enjoyable trip into the world of chemistry and atomic science. It is an ideal purchase for science, middle school and general collections.

Molecules - Theodore Gray 2016-10-04

In his highly anticipated sequel to The Elements, Theodore Gray demonstrates how the elements of the periodic table combine to form the molecules that make up our world. Everything physical is made up of the elements and the infinite variety of molecules they form when they combine with each other. In Molecules, Theodore Gray takes the next step in the grand story that began with the periodic table in his best-selling book, The Elements: A Visual Exploration of Every Known Atom in the Universe. Here, he explores through fascinating stories and trademark stunning photography the most interesting, essential, useful, and beautiful of the millions of chemical structures that make up every material in the world. Gray begins with an explanation of how atoms bond to form molecules and compounds, as well as the difference between organic and inorganic chemistry. He then goes on to explore the vast array of materials molecules can create, including: soaps and solvents; goops and oils; rocks and ores; ropes and fibers; painkillers and dangerous drugs; sweeteners; perfumes and stink bombs; colors and pigments; and controversial compounds including asbestos, CFCs, and thimerosal. Big, gorgeous photographs, as well as diagrams of the compounds and their chemical bonds, rendered with never before seen beauty, fill the pages and capture molecules in their various states. As he did in The Elements, Gray shows us molecules as we've never seen them before. It's the perfect book for his loyal fans who've been eager for more and for anyone fascinated with the mysteries of the material world.

Elements - Theodore Gray 2012-04-03

The Elements has become an international sensation, with over one million copies in-print worldwide. The highly-anticipated paperback edition of The Elements is finally available. An eye-opening, original collection of gorgeous, never-before-seen photographic representations of the 118 elements in the periodic table. The elements are what we, and everything around us, are made of. But how many elements has anyone actually seen in pure, uncombined form? The Elements provides this rare opportunity. Based on seven years of research and photography, the pictures in this book make up the most complete, and visually arresting, representation available to the naked eye of every atom in the universe. Organized in order of appearance on the periodic table, each element is represented by a spread that includes a stunning, full-page, full-color photograph that most closely represents it in its purest form. For example, at -183°C, oxygen turns from a colorless gas to a beautiful pale blue liquid. Also included are fascinating facts, figures, and stories of the elements as well as data on the properties of each, including atomic weight, density, melting and boiling point, valence, electronegativity, and the year and location in which it was discovered. Several additional photographs show each element in slightly altered forms or as used in various practical ways. The element's position on the periodic table is pinpointed on a mini rendering of the table and an illustrated scale of the element's boiling and/or melting points appears on each page along with a density scale that runs along the bottom. Packed with interesting information, this combination of solid science and stunning artistic photographs is the perfect gift book for every sentient creature in the universe. Includes a tear-out poster of Theodore Gray's iconic Photographic Periodic Table!

Solar System - Marcus Chown 2022-05-10

Now updated with the journeys of the 2012 Mars rover Curiosity and the 2020 Mars rover Perseverance, Solar System undertakes an astonishing visual journey through time and space through fascinating text, original graphics, and stunning photographs. Never before have the wonders of our solar system been so immediately accessible to readers of all ages. Award-winning writer and broadcaster Marcus Chown combines science and history to visually and narratively explore our neighboring planets, dwarf planets, moons, asteroids, comets and more, as well as the historical figures who aided in their discoveries. From the explosive surface of the sun to the new missions on Mars; from the gargantuan rings of Saturn to the volcanoes of Io; from the latest images of Pluto from NASA's New Horizons probe, to a simulation of what the Oort Cloud might look like, Solar System offers a window seat from which to view the beauty and magnificence of space.

Elemental - Tim James 2019-03-26

If you want to understand how our world works, the periodic table holds the answers. When the seventh row of the periodic table of elements was completed in June 2016 with the addition of four final elements—nihonium, moscovium, tennessine, and oganesson—we at last could identify all the ingredients necessary to construct our world.In Elemental, chemist and science educator Tim James provides an informative, entertaining, and quirkily illustrated guide to the table that shows clearly how this abstract and seemingly jumbled graphic is relevant to our day-to-day lives.James tells the story of the periodic table from its ancient Greek roots, when you could count the number of elements humans were aware of on one hand, to the modern alchemists

of the twentieth and twenty-first centuries who have used nuclear chemistry and physics to generate new elements and complete the periodic table. In addition to this, he answers questions such as: What is the chemical symbol for a human? What would happen if all of the elements were mixed together? Which liquid can teleport through walls? Why is the medieval dream of transmuting lead into gold now a reality?Whether you're studying the periodic table for the first time or are simply interested in the fundamental building blocks of the universe—from the core of the sun to the networks in your brain—Elemental is the perfect guide.

The Elements Magnet Set - Theodore Gray 2020-04-07

Display and play with the building blocks of life with The Elements Magnet Set! Based on the iconic images from Theodore Gray's bestselling book The Elements, this beautiful magnet set is the perfect way to add a little atomic flair at work and home. Spell out a fun message or just display and inspire some awe for all the elements that make up the world around you. This miniature kit includes: 121 element magnets, each highlighting an important piece of the periodic table. Magnet size is approximately 1" x 1" 48-page book exploring the world's most important elements, with full color-photographs throughout

Data Visualization - Kieran Healy 2018-12-18

An accessible primer on how to create effective graphics from data This book provides students and researchers a hands-on introduction to the principles and practice of data visualization. It explains what makes some graphs succeed while others fail, how to make high-quality figures from data using powerful and reproducible methods, and how to think about data visualization in an honest and effective way. Data Visualization builds the reader’s expertise in ggplot2, a versatile visualization library for the R programming language. Through a series of worked examples, this accessible primer then demonstrates how to create plots piece by piece, beginning with summaries of single variables and moving on to more complex graphics. Topics include plotting continuous and categorical variables; layering information on graphics; producing effective “small multiple” plots; grouping, summarizing, and transforming data for plotting; creating maps; working with the output of statistical models; and refining plots to make them more comprehensible. Effective graphics are essential to communicating ideas and a great way to better understand data. This book provides the practical skills students and practitioners need to visualize quantitative data and get the most out of their research findings. Provides hands-on instruction using R and ggplot2 Shows how the “tidyverse” of data analysis tools makes working with R easier and more consistent Includes a library of data sets, code, and functions

Ingredients - Dwight Eschliman 2015-09-29

In the bestselling tradition of The Elements and Salt Sugar Fat, an unprecedented visual exploration of what is really inside our food, setting the record straight on the controversial and fascinating science of chemical and synthetic additives in processed food—from Twinkies and McNuggets to organic protein bars and healthy shakes. What’s really in your food? We’ve all read the ingredients label on the back of a can, box, or bag from the grocery store. But what do all those mysterious-sounding chemicals and additives actually do? Focusing on 75 of the most common food additives and 25 ordinary food products that contain them, acclaimed photographer Dwight Eschliman and science writer Steve Ettlinger demystify the contents of processed food. Together they reveal what each additive looks like, where it comes from, and how and why it is used. Essential for everyone who is concerned about the wholesomeness of their diet or merely curious about “polysorbate 60” or “tertiary butylhydroquinone,” Ingredients is a visually and scientifically stunning journey from ketchup to Cool Whip. You’ll be surprised at what you find. * * * Ingredients focuses on processed food additives from acesulfame potassium to xanthan gum, including artificial and natural flavorings, sweeteners, colorings, preservatives, thickeners, emulsifiers, dessicants, and more. It also shows what is inside Amy's Burrito Especial, Campbell's Chunky Classic Chicken Noodle Soup, Doritos Cool Ranch Flavored Tortilla Chips, Dr. Pepper, General Mills Raisin Nut Bran, Hebrew National Beef Franks, Heinz Tomato Ketchup, Hidden Valley The Original Ranch Light Dressing, Hostess Twinkies, Klondike Reese's Ice Cream Bars, Kraft Cool Whip Original, Kraft Singles - American Skim Milk Fat Free, McDonald's Chicken McNuggets, MorningStar Farms Original Sausage Patties, Nabisco Wheat Thins, Naked Green Machine 100% Juice Smoothie, Nestle Coffee-Mate Fat Free The Original Coffee Creamer, Ocean Spray Cran-Grape Juice Drink, Oroweat Healthy Multi-Grain Bread, PowerBar Performance Energy Bar Oatmeal Raisin, Quaker Instant Oatmeal Strawberries and Cream, Red Bull Energy Drink, Snickers Bar, Trident Perfect Peppermint Sugar Free Gum, and Vlasic Ovals Hamburger Dill Chips.

Energy from Wind, Sun, and Tides - Frank Muschal 2007-08-01

Recent advances in harnessing energy from the wind, sun, and tides are explored. People are encouraged to seek resources beyond fossil fuels.

Armchair Chemistry - David Bradley 2018-02-13

Part of the Armchair series, Armchair Chemistry is a quick refresher course in how we survey of the science. It explains how we evolved from believing in alchemy to discovering modern chemical equations and goes into detail about the lives of the scientists that uncovered them. Fascinating and interactive, this is ideal for the student brushing up on a subject or for as a clear and accessible companion for beginner's and experts alike. It contains explanations of different chemical concepts, as well as profiles of key scientists and and their discoveries. It contains clear and concise explanations of different chemical concepts, as well as profiles of key scientists and their discoveries. A unique feature of the book is its simple, step-by-step exercises. Some of these have everyday applications, others are theoretical puzzles, but all are designed to challenge you and test your newly acquired knowledge. The perfect companion for beginners and experts alike, Armchair Chemistry does not assume prior knowledge of the subject. It conveys the basic elements of chemistry in a way that is clear and accessible, no matter your level of ability.

Theo Gray's Mad Science - Theodore Gray 2011-05

Details fifty-five experiments ranging from simply making ice that sinks to copper plating iPods and building spark plugs.

Reactions - Theodore Gray 2017-10-17

With Reactions bestselling author Theodore Gray continues the journey through our molecular and chemical world that begin with the tour de force The Elements and continued with Molecules. In The Elements Gray gave us a never-before-seen, mesmerizing photographic view of the 118 elements in the periodic table. In Molecules, with the same phenomenal photographic acumen, plus beautifully rendered computer generated graphics, he showed us how the elements combine to form the stuff that makes up our universe, from table salt to oxygen to the panoply of colors and smells that surround us. At last, we've reached Reactions, in which Gray once again puts his photographic and digital prowess and creativity monumental work demonstrating how molecules interact in ways that are essential to our very existence. The book begins with a brief recap of elements and molecules and then goes on to explain important concepts the characterize a chemical reaction, including Energy, Entropy, and Time. It is then organized by type of reaction including Combustion, Photosynthesis, Respiration, Oxidation, and Fermentation. A special section of chemical cycles including The Carbon Cycle, The Iron Cycle, and The Lime Cycle.

Illustrated Encyclopedia of the Elements - Lisa Congdon 2021-07-13

A gorgeous nonfiction book for kids from bestselling artist and author Lisa Congdon! The Illustrated Encyclopedia of the Elements leads young readers in an exploration of all 118 known elements. From their discoveries to their uses to their special properties, this vibrant book explores all things elements. • A visually stunning tour of the periodic table • Complete with profiles of notable scientists, amazing infographics, and more • Features an illustrated history of the periodic table's origins This artful survey of the elements combines science, history, trivia, humor, and endless fascination for science enthusiasts of every age. Middle grade readers will delight in this interesting take on the periodic table of elements. • Great for science lovers and Lisa Congdon fans alike • Resonates year-round as a go-to gift for birthdays and holidays for the science-loving kid • Perfect for children ages 10 and up • Equal parts educational and entertaining, this makes a great pick for parents and grandparents, as well as librarians, science teachers, and STEM educators. • You'll love this book if you love books like The Elements Book: A Visual Encyclopedia of the Periodic Table by DK, The Periodic Table by Sean Callery and Miranda Smith, and Elements: A Visual Exploration of Every Known Atom in the Universe by Theodore Gray.

My First Elements - Theodore Gray 2019-04-02

Introduce Baby to the wonderful, colorful elements that make up his or her world! This board book for babies, ages 6 months to 3 years, features big, bold, and bright photography from Theodore Gray's bestselling adult book The Elements, paired with delightful, baby-friendly text. My First Elements includes 10 elements, one per spread. Each spread features a big photograph of the element on one page, such as an iron horseshoe or nugget of gold. The opposite page shows photographs of the places in baby's world where the element is found from balloons for helium to a

swimming pool for chlorine to seaweed for iodine.

Molecules - Theodore Gray 2018-03-13

In this paperback edition of the beloved second book in Theodore Gray's bestselling (1.5 million copies) Elements trilogy, Gray demonstrates how the elements of the periodic table combine into the molecules that form the things that make up our world. Molecules is the second book in the million-copy bestselling Elements trilogy. In Molecules, Theodore Gray takes the next step in the story that began with the periodic table in his best-selling book, The Elements: A Visual Exploration of Every Known Atom in the Universe (2015) and culminated with the publication of Reactions: An Illustrated Exploration of Elements, Molecules, and Change in the Universe (2017). Here, he explores through fascinating stories and trademark stunning photography the most interesting, essential, useful, and beautiful of the millions of chemical structures that make up every material in the world. Gray begins with an explanation of how atoms bond to form molecules and compounds, as well as the difference between organic and inorganic chemistry. He then goes on to explore the vast array of materials molecules can create, including: soaps and solvents; goops and oils; rocks and ores; ropes and fibers; painkillers and dangerous drugs; sweeteners; perfumes and stink bombs; colors and pigments; and controversial compounds including asbestos, CFCs, and thimerosal. Big, gorgeous photographs, as well as diagrams of the compounds and their chemical bonds, rendered with never before seen beauty, fill the pages and capture molecules in their various states. It's the perfect book for his loyal fans who've been eager for more and for anyone fascinated with the mysteries of the material world.

The Kid's Book of the Elements - Theodore Gray 2020-10-20

A fun, fascinating, and amazingly photographic exploration of the periodic table, for curious kids who want to understand how atoms and elements make up everything in the universe. In this very special kids' edition of Theodore Gray's The Elements, budding scientists, ages 6 to 9, will learn all about every element in the periodic table from the first element, Hydrogen (1), to the very last element, Oganesson (118). Filled with great big colorful photographs and fun facts for every element, The Kid's Book of The Elements is the perfect introduction to the fascinating world of chemistry and visual/tactile-based STEM/STEAM learning. This edition also includes 120 sturdy tear-out cards of each element for kids to play with and arrange on their own.

A Doll´s House - Henrik Ibsen 2018-05-23

Reproduction of the original: A Doll´s House by Henrik Ibsen

Interior Space: a Visual Exploration of the International Space Station - Paolo Nespoli 2020

Unseen images of the International Space Station, untenanted and eerie: the legacy of humanity's fragile foothold in space On November 2 2020, NASA celebrates the 20th anniversary of continuous human habitation in space of the International Space Station. In Interior Space, American photographer Roland Miller and Italian astronaut and photographer Paolo Nespoli offer an in-depth portrait of the ISS, creating amazing unpeopled images of the interior of the ISS for the first time. As internationally acclaimed scholars of space archaeology Alice Gorman and Justin St. P. Walsh write in their essays, the ISS speaks not only of who we are and will be, but also of who we were. In 2024 the ISS will be abandoned; in 2028 it will be destroyed. This book provides us with an eerie account of what will remain in the space after our passing. Italian-born astronaut Paolo Nespoli(born 1957) spent 313 days in space. After a career in the military, he earned a M.Sc. in Aerospace Engineering, then joined the European Space Agency spending time in Europe, the US and Russia. In 2007 he flew on the Space Shuttle and then, in 2010 to 2011 and 2017, he flew again to the International Space Station with the Russian Soyuz. He retired in 2018 from the astronaut corps launching a career as an international public speaker. Chicago-born photographer Roland Miller(born 1958) taught photography at Brevard Community College in Cocoa, Florida, for 14 years, where he visited many nearby NASA launch sites. He is the author of the acclaimed book Abandoned in Place: Preserving America's Space History, documenting deactivated and repurposed space launch and test facilities around the US. In 2017 he started the project Interior Space. His work is held at the Museum of Contemporary Photography, Chicago and at the NASA Art Collection in Washington, DC.

Theodore Gray's My First Elements - Theodore Gray 2019-04-23

Introduce Baby to the wonderful, colorful elements that make up his or her world! This board book for babies, ages 6 months to 3 years, features big, bold, and bright photography from Theodore Gray's bestselling adult book The Elements, paired with delightful, baby-friendly text. My First Elements includes 10 elements, one per spread. Each spread features a big photograph of the element on one page, such as an iron horseshoe or nugget of gold. The opposite page shows photographs of the places in baby's world where the element is found from balloons for helium to a swimming pool for chlorine to seaweed for iodine.