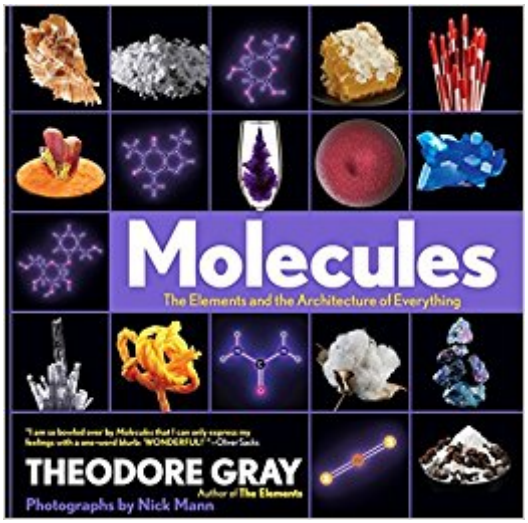
Molecules: The Elements And The Architecture Of Everything



Synopsis

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.

Book Information

Hardcover: 240 pages

Publisher: Black Dog & Leventhal (October 15, 2014)

Language: English

ISBN-10: 1579129714

ISBN-13: 978-1579129712

Product Dimensions: 10.4 x 0.9 x 10.4 inches

Shipping Weight: 3 pounds (View shipping rates and policies)

Average Customer Review: 4.9 out of 5 stars 213 customer reviews

Best Sellers Rank: #8,996 in Books (See Top 100 in Books) #4 inÃ Â Books > Children’s Books > Education & Reference > Science Studies > Chemistry #62 inÃ Â Books > Science & Math > Chemistry > General & Reference #164 inÃ Â Books > Children’s Books > Science, Nature & How It Works

Customer Reviews

"Molecules is like dipping your toe in a clear shallow poolÃ¢â ¬â •with transparent explanations, shimmering graphics, and luminous photographyÃ¢â ¬â •then suddenly realizing you are happily swimming in deep waters, relaxed and having fun! Ã Â The science here is presented so elegantly you'll feel like you are holding a jewelry catalog, and it's impossible to put down. A must have for anyone of any age or education." Ã Â Ã¢â ¬â • Jamie Hyneman, Host, MythBustersI am so bowled over by Molecules that I can only express my feelings with a one-word blurb: "WONDERFUL!" Ã¢â ¬â • Oliver Sacks

Theodore Gray is the author of The Elements: A Visual Exploration of Every Known Atom in the Universe; Theo Gray's Mad Science: Experiments You Can Do At Home, But Probably Shouldn't; Mad Science 2: Experiments You Can Do At Home, But Still Probably Shouldn't; and Popular Science magazine's "Gray Matter" column. With his company Touch Press, Gray is the developer of best-selling iPad and iPhone apps, including The Elements, Solar System, Disney Animated, The Orchestra, The Waste Land, and Skulls by Simon Winchester. He lives in Urbana, Illinois.Nick Mann is the photographer of The Elements: A Visual Exploration of Every Known Atom in the Universe. Aside from having photographed more elements and compounds than probably anyone in the world, he is an accomplished landscape, sports, and event photographer. He lives in Urbana, Illinois.

+So in my review of The Elements, I stupidly suggested that the book was a great example of why e-books weren't going to replace physical books any time soon. Well we know how that turned out (the fully interactive Elements app on iOS is breathtaking and undoubtedly many times more popular than the book). I'm sure Touch Press is about to release Molecules as an iOS e-book app too [Update: they did], but I'm still really glad I got the physical book."The Elements" and "Molecules" look very similar, but there are some subtle differences due to the difference in their subjects. The Elements was primarily a beautiful picture book and catalog of all the elements. But that made it somewhat more abstract since most of us rarely interact directly with more than a handful of elements, and their atomic nature is less a part of every day experience. The text was mostly interesting trivia for each element.Molecules on the other hand moves up a layer from atoms to molecular compounds, and as such it comes a step closer to our daily experience. The Elements was a book you mostly looked at, but Molecules is a book you'll want to READ since it's jam packed full of interesting and useful information about the chemistry of nature and human industry.It's still just as lavishly illustrated and beautifully produced as The Elements, but there's much more depth

here because the author is not compelled to cover "all" of anything as was the case in the earlier book (where honestly there are a lot of pretty boring or obscure elements).’s "Look Inside" feature lets you see what most of the book looks like if you want to see examples of the topics covered, but it does a good job of covering (in an interesting and visual way) both the chemistry of how atoms become molecules and then the properties of various molecular species, as well as numerous higher level applications and what sort of molecules we experience through our senses (color, scent, taste, etc.) as well as those with biological applications (painkillers for example).A great gift for a child or anyone about to begin their study of the sciences, especially chemistry.It’s a book with a very high signal to noise ratio, one that will leave you feeling smarter after you read it.G.

This is definitely a book you want to display on your coffee table. Doesn’t matter if you are a science buff or not. The pictures in this book are absolutely stunning to look at. Seeing such detail of the world around us is fascinating. You can read through this book again and again, without getting bored, see something new each time, and change the way you look at everything around you. Mr. Gray includes information about each molecule, and for anyone that is a trivia buff, this book will be a favorite.If you get this book, I highly recommend that you also purchase the author’s other book Elements: A Visual Exploration of Every Known Atom in the Universe. Both books are worthwhile purchases for any person.

This is a terrific book. I’ve never seen anything like it, except Gray’s earlier book, Elements, also terrific. Great for anyone who has even a passing interest in chemistry or learning about what stuff is made of.Visually stunning, coverage of wide array of topics, jammed packed with examples each with a beautiful photograph and most with chemical diagrams. Amazingly the chemical diagrams are beautiful too, clear and consistent with color coded atoms and presented with an artist’s touch. Just as good is Gray’s text which is always interesting and insightful. You can pick up a lot of chemistry from Gray’s text. This is a book you can open anywhere and start reading. A book that for a technical person is just plain fun.The only (minor) omission I noted was in describing glucose in the sugar section he didn’t mention that glucose is biologically the king of sugars. The sugar in your blood that ’feeds’ all the cells of the body is glucose.

I LOVE this book. It’s was difficult to put down once I started reading it. What I loved the most was that the book leaned toward organic chemistry, which is my favorite chemistry topic. The illustrations were very clear; I especially liked how the author rendered molecules with a faint glow

ÃƒÂ¢Ã â ¬Ã â • not only does it underscore the reality about what electrons truly are, it also aesthetically looks very pleasing against the black background of the book's pages. The photography was crisp and the subjects were varied and well thought out. Despite having just completed 1200 pages of general chemistry, I still learned an important thing or two that I didn't know before. The topic of this book, molecules, is such a broad umbrella that 1000 people could write such a book and you'd have 1000 very different approaches, some good and others not so good. With such an expansive set of things the author could have touched on, I think he did a good job in selecting what to mention and what to leave out, while still being both educational and entertaining. In short, I'd say you can't be disappointed in this book (unless you just really hate chemistry and/or the physical sciences).(That being said, my only complaint, and it's a minor one at that, is Theodore's rather opinionated views on things. If a second edition ever comes out, I would recommend to the author and the publisher to remove the few places where he thrusts his personal opinions on the reader. Not everyone holds the same beliefs, and opinions don't really belong in a book dealing with science anyway.)

My wiz kid (10 years old) Loves this book. Actually we ordered 3 books from this publisher and all are equally amazing! Great illustrations too.

Language, Second Course) Essential Elements Christmas Favorites - Flute: Solos and Band Arrangements Correlated with Essential Elements Band Method Essential Elements for Band - Book 2 with EEi: Flute (Essential Elements 2000 Comprehensive Band Method) Concert Favorites Vol. 1 - Trombone: Essential Elements 2000 Band Series (Essential Elements 2000 Band Method) Essential Elements for Strings - Book 1 (Original Series): Double Bass (Essential Elements for Strings, Bk 1) Essential Elements for Strings - Book 1 (Original Series): Viola (Essential Elements Comprehensive String Method) Essential Elements Movie Favorites for Strings: Viola (Essential Elements for Strings) Essential Elements: A Comprehensive Band Method, Book 2 - Bb Clarinet (Essential Elements Method)