Science And Its Times

BOYER TOWNSEND

Science and Its Times Oxford University Press
"This series discusses how the major fields of science developed during specific time periods. Each volume focuses on a range of years and includes developments in exploration, life sciences, mathematics, physical sciences, and technology. When the series is completed, the seven volumes will cover 2000 B.C. to the present."--"Outstanding Reference Sources," American Libraries, May 2001.
Science and Its Times Random House (NY)
Exploration and Discovery - Life Sciences - Mathematics - Medicine - Physical Sciences - Technology and Invention.
This Book Will Save Your Life Science and Its Times
Exploration and Discovery - Life Sciences - Mathematics - Medicine - Physical Sciences - Technology and Invention.
Science and Its Times
Knowledge is a big subject, says Stuart Firestein, but ignorance is a bigger one. And it is ignorance--not knowledge--that is the true engine of science. Most of us have a false impression of science as a surefire, deliberate, step-by-step method for finding things out and getting things done. In fact, says Firestein, more often than not, science is like looking for a black cat in a dark room, and there may not be a cat in the room. The process is more hit-or-miss than you might imagine, with much stumbling and groping after phantoms. But it is exactly this "not knowing," this puzzling over thorny questions or inexplicable data, that gets researchers into the lab early and keeps them there late, the thing that propels them, the very driving force of science. Firestein shows how scientists use ignorance to program their work, to identify what should be done, what the next steps are, and where they should concentrate their energies. And he includes a catalog of how scientists use ignorance, consciously or unconsciously--a remarkable range of approaches that includes looking for connections to other research, revisiting apparently settled questions, using small questions to get at big ones, and tackling a problem simply out of curiosity. The book concludes with four case histories--in cognitive psychology, theoretical physics, astronomy, and neuroscience--that provide a feel for the nuts and bolts of ignorance, the day-to-day battle that goes on in scientific laboratories and in scientific minds with questions that range from the quotidian to the profound. Turning the conventional idea about science on its head, Ignorance opens a new window on the true nature of research. It is a must-read for anyone curious about science.
The New York Times Book of Science Questions & Answers Random House Trade Paperbacks
Collects over 150 years of science articles from the New York Times, including stories on Einstein, the AIDS crisis, and the Curiosity rover.
Exact Thinking in Demented Times Bold Type Books
A dazzling, irresistible collection of the ten most groundbreaking and beautiful experiments in scientific history. With the attention to detail of a historian and the storytelling ability of a novelist, New York Times science writer George Johnson celebrates these groundbreaking experiments and re-creates a time when the world seemed filled with mysterious forces and scientists were in awe of light, electricity, and the human body. Here, we see Galileo staring down gravity, Newton breaking apart light, and Pavlov studying his now famous dogs. This is science in its most creative,

hands-on form, when ingenuity of the mind is the most useful tool in the lab and the rewards of a well-considered experiment are on exquisite display.

Styles of Knowing Science and Its Times

“The Knowledge Machine is the most stunningly illuminating book of the last several decades regarding the all-important scientific enterprise.” —Rebecca Newberger Goldstein, author of Plato at the Googleplex A paradigm-shifting work, The Knowledge Machine revolutionizes our understanding of the origins and structure of science. • Why is science so powerful? • Why did it take so long—two thousand years after the invention of philosophy and mathematics—for the human race to start using science to learn the secrets of the universe? In a groundbreaking work that blends science, philosophy, and history, leading philosopher of science Michael Strevens answers these challenging questions, showing how science came about only once thinkers stumbled upon the astonishing idea that scientific breakthroughs could be accomplished by breaking the rules of logical argument. Like such classic works as Karl Popper’s The Logic of Scientific Discovery and Thomas Kuhn’s The Structure of Scientific Revolutions, The Knowledge Machine grapples with the meaning and origins of science, using a plethora of vivid historical examples to demonstrate that scientists willfully ignore religion, theoretical beauty, and even philosophy to embrace a constricted code of argument whose very narrowness channels unprecedented energy into empirical observation and experimentation. Strevens calls this scientific code the iron rule of explanation, and reveals the way in which the rule, precisely because it is unreasonably close-minded, overcomes individual prejudices to lead humanity inexorably toward the secrets of nature. “With a mixture of philosophical and historical argument, and written in an engrossing style” (Alan Ryan), The Knowledge Machine provides captivating portraits of some of the greatest luminaries in science’s history, including Isaac Newton, the chief architect of modern science and its foundational theories of motion and gravitation; William Whewell, perhaps the greatest philosopher-scientist of the early nineteenth century; and Murray Gell-Mann, discoverer of the quark. Today, Strevens argues, in the face of threats from a changing climate and global pandemics, the idiosyncratic but highly effective scientific knowledge machine must be protected from politicians, commercial interests, and even scientists themselves who seek to open it up, to make it less narrow and more rational—and thus to undermine its devotedly empirical search for truth. Rich with illuminating and often delightfully quirky illustrations, The Knowledge Machine, written in a winningly accessible style that belies the import of its revisionist and groundbreaking concepts, radically reframes much of what we thought we knew about the origins of the modern world.

Science and Its Times Science and Its Times

Exploration and Discovery - Life Sciences - Mathematics - Medicine - Physical Sciences - Technology and Invention.

Science and Its Times: Cumulative index Basic Books

World-class science and technology developed in the Soviet Union during Stalin's dictatorial rule under conditions of political violence, lack of international contacts, and severe restrictions on the freedom of information. Stalin's Great Science: The Times and Adventures of Soviet Physicists is an invaluable book that investigates this paradoxical success by following the lives and work of Soviet scientists ? including Nobel Prize-winning physicists Kapitza, Landau, and others ? throughout the turmoil of wars, revolutions, and repression that characterized the first half of Russia's twentieth century.The book examines how scientists operated within the Soviet political order, communicated with Stalinist politicians, built a new system of research institutions, and conducted groundbreaking research under extraordinary circumstances. Some of their novel scientific ideas and theories reflected the influence of Soviet ideology and worldview and have since become accepted universally as fundamental concepts of contemporary science. In the process of making sense of the achievements of Soviet science, the book dismantles standard assumptions about the interaction between science, politics, and ideology, as well as many dominant stereotypes ? mostly inherited from the Cold War ? about Soviet history in general. Science and technology were not only granted unprecedented importance in Soviet society, but they also exerted a crucial formative influence on the Soviet political system itself. Unlike most previous studies, Stalin's Great Science recognizes the status of science as an essential element of the Soviet polity and explores the nature of a special relationship between experts (scientists and engineers) and communist politicians that enabled the initial rise of the Soviet state and its mature accomplishments, until the pact eroded in later years, undermining the communist regime from within.

History of the Inductive Sciences Open Road Media

Why is glass transparent? Why do cats purr? Why do men have nipples? These are but a handful of the thousands of questions that over the years have been asked and answered in The New York Times "Science Q&A" column. At last, the best and most interesting questions-and their replies-have been collected in a book for general readers. From wild animals to outdoor vegetation, from the human body to the heavens above, The New York Times Book of Science Questions and Answers takes readers on a thoroughly entertaining and informative journey through the world we live in. Like David Feldman's bestselling books Do Penguins Have Knees? and Why Do Clocks Run Clockwise?, this is science at its fun-filled best. Featuring answers from a wide variety of leaders across the country in scientific research and education, and illustrated by the delightful drawings of Victoria Roberts, The Times Q&A column is one of the best read features in the Science Times, which is one of the most popular sections of the newspaper. With a daily circulation of 1.2 million people, The New York Times is a leader in conveying scientific information to the general public. This fact-filled handbook for the scientifically curious should prove invaluable as a family reference book, as a classroom resource, as an entertaining subway diversion, and even as a supplement to public libraries' Frequently Asked Questions lists.

Times of Triumph, Times of Doubt Black Spot Books

Since her debut in 1989, A. M. Homes, author of the forthcoming novel The Unfolding, has been among the boldest and most original voices of her generation, acclaimed for the psychological accuracy and unnerving emotional intensity of her storytelling. Her ability to explore how extraordinary the ordinary can be is at the heart of her touching and funny new novel, her first in six years. This Book Will Save Your Life is a vivid, uplifting, and revealing story about compassion, transformation, and what can happen if you are willing to lose yourself and open up to the world around you.

Science and Its Times Science and Its Times

A masterful commentary on the history of science from the Greeks to modern times, by Nobel Prize-winning physicist Steven Weinberg—a thought-provoking and important book by one of the most distinguished scientists and intellectuals of our time. In this rich, irreverent, and compelling history, Nobel Prize-winning physicist Steven Weinberg takes us across centuries from ancient Miletus to medieval Baghdad and Oxford, from Plato’s Academy and the Museum of Alexandria to the cathedral school of Chartres and the Royal Society of London. He shows that the scientists of ancient and medieval times not only did not understand what we understand about the world—they did not understand what there is to understand, or how to understand it. Yet over the centuries, through the struggle to solve such mysteries as the curious backward movement of the planets and the rise and fall of the tides, the modern discipline of science eventually emerged. Along the way, Weinberg examines historic clashes and collaborations between science and the competing spheres of religion, technology, poetry, mathematics, and philosophy. An illuminating exploration of the way we consider and analyze the world around us, To Explain the World is a sweeping, ambitious account of how difficult it was to discover the goals and methods of modern science, and the impact of this discovery on human knowledge and development.

The Ten Most Beautiful Experiments Science and Its Times

Science and Its TimesScience and Its Times

Bad Science University of Pittsburgh Press

A dazzling group biography of the early twentieth-century thinkers who transformed the way the world thought about math and science Inspired by Albert Einstein's theory of relativity and Bertrand Russell and David Hilbert's pursuit of the fundamental rules of mathematics, some of the most brilliant minds of the generation came together in post-World War I Vienna to present the latest theories in mathematics, science, and philosophy and to build a strong foundation for scientific investigation. Composed of such luminaries as Kurt Gö and Rudolf Carnap, and stimulated by the works of Ludwig Wittgenstein and Karl Popper, the Vienna Circle left an indelible mark on science. Exact Thinking in Demented Times tells the often outrageous, sometimes tragic, and never boring stories of the men who transformed scientific thought. A revealing work of history, this landmark book pays tribute to those who dared to reinvent knowledge from the ground up.

Big Science Springer

Culled from the popular "New York Times" "Scientists at Work" column, this book brings to life 50 fascinating personalities of science in pieces written by such renowned journalists as Gina Kolata, John Noble Wilford, Natalie Angier, and Malcolm Browne. 50 photos. 20 diagrams.

Science and Its Times: 1800-1899 Penguin

New York Times Bestseller: This life story of the quirky physicist is “a thorough and masterful portrait of one of the great minds of the century” (The New York Review of Books). Raised in Depression-era Rockaway Beach, physicist Richard Feynman was irreverent, eccentric, and childishly enthusiastic—a new kind of scientist in a field that was in its infancy. His quick mastery of quantum mechanics earned him a place at Los Alamos working on the Manhattan Project under J. Robert Oppenheimer, where the giddy young man held his own among the nation’s greatest minds. There, Feynman turned theory into practice, culminating in the Trinity test, on July 16, 1945, when the Atomic Age was born. He was only twenty-seven. And he was just getting started. In this sweeping biography, James Gleick captures the forceful personality of a great man, integrating Feynman’s work and life in a way that is accessible to laymen and fascinating for the scientists who follow in his footsteps.

The Scientists Science and Its Times

A unique, highly readable approach to the environmental crisis, with alternating chapters outlining the effects on society if left unchecked, and the radical actions we can take to prevent it Now includes updated sections on COVID-19 and COP26 The environmental emergency is the greatest threat we face. Preventing it will require an unprecedented political and social response. And yet, there is still hope. Academic, physicist, environmental expert and award-winning science communicator Paul Behrens presents a radical analysis of a civilization on the brink of catastrophe. Setting out the pressing existential threats we face, he writes, in alternating chapters, of what the future could look like at its most pessimistic and hopeful. In lucid prose, Behrens argues that structural problems need structural solutions, and examines critical areas in which political will is required, including women's education, food and energy security, biodiversity and economics. The book was printed with two different jackets, to illustrate the unique duality of the author's approach.

Stalin's Great Science Simon & Schuster

From a star theoretical physicist, a journey into the world of particle physics and the cosmos—and a call for a more liberatory practice of science. Winner of the 2021 Los Angeles Times Book Prize in Science & Technology A Finalist for the 2022 PEN/E.O. Wilson Literary Science Writing Award A Smithsonian Magazine Best Science Book of 2021 A Symmetry Magazine Top 10 Physics Book of 2021 An Entropy Magazine Best Nonfiction Book of 2020-2021 A Publishers Weekly Best Nonfiction Book of the Year A Kirkus Reviews Best Nonfiction Book of 2021 A Booklist Top 10 Sci-Tech Book of the Year In The Disordered Cosmos, Dr. Chanda Prescod-Weinstein shares her love for physics, from the Standard Model of Particle Physics and what lies beyond it, to the physics of melanin in skin, to the latest theories of dark matter—along with a perspective informed by history, politics, and the wisdom of Star Trek. One of the leading physicists of her generation, Dr. Chanda Prescod-Weinstein is also one of fewer than one hundred Black American women to earn a PhD from a department of physics. Her vision of the cosmos is vibrant, buoyantly nontraditional, and grounded in Black and queer feminist lineages. Dr. Prescod-Weinstein urges us to recognize how science, like most fields, is rife with racism, misogyny, and other forms of oppression. She lays out a bold new approach to science and society, beginning with the belief that we all have a fundamental right to know and love the night sky. The Disordered Cosmos dreams into existence a world that allows everyone to experience and understand the wonders of the universe.

Science and Mathematics Union Square & Company

A wonderfully readable account of scientific development over the past five hundred years, focusing on the lives and achievements of individual scientists, by the bestselling author of In Search of Schrödinger’s Cat In this ambitious new book, John Gribbin tells the stories of the people who have made science, and of the times in which they lived and worked. He begins with Copernicus, during the Renaissance, when science replaced mysticism as a means of explaining the workings of the world, and he continues through the centuries, creating an unbroken genealogy of not only the greatest but also the more obscure names of Western science, a dot-to-dot line linking amateur to genius, and accidental discovery to brilliant deduction. By focusing on the scientists themselves, Gribbin has written an anecdotal narrative enlivened with stories of personal drama, success and failure. A bestselling science writer with an international reputation, Gribbin is among the few authors who could even attempt a work of this magnitude. Praised as “a sequence of witty, information-packed tales” and “a terrific read” by The Times upon its recent British publication, The Scientists breathes new life into such venerable icons as Galileo, Isaac Newton, Albert Einstein and Linus Pauling, as well as lesser lights whose stories have been undeservedly neglected. Filled with pioneers, visionaries, eccentrics and madmen, this is the

history of science as it has never been told before.
Science and Its Times Taylor & Francis
The epic story of how science went “big” and the forgotten genius who started it all—“entertaining, thoroughly researched…partly a biography, partly an account of the influence of Ernest Lawrence’s great idea, partly a short history of nuclear physics and the Bomb” (The Wall Street Journal). Since the 1930s, the scale of scientific endeavor has grown exponentially. The first particle accelerator could be held in its creator’s lap, while its successor grew to seventeen miles in circumference and cost ten billion dollars. We have invented the atomic bomb, put man on the moon, and probed the inner workings of nature at the scale of subatomic particles—all the result of Big Science, the model of industrial-scale research paid for by governments, departments of defense, and corporations that has driven the great scientific projects of our time. The birth of Big Science can be traced nearly nine decades ago in Berkeley, California, when a young scientist with a talent for physics declared, “I’m going to be famous!” His name was Ernest Orlando Lawrence. His invention, the cyclotron, would revolutionize nuclear physics, but that was only the beginning of its impact, which would be felt in academia, industry, and international politics. It was the beginning of Big Science. “An exciting book….A bright narrative that captures the wonder of nuclear physics without flying off into a physics Neverland….Big Science is an excellent summary of how physics became nuclear and changed the world” (The Plain Dealer, Cleveland). This is the “absorbing and expansive” (Los Angeles Times) story that is “important for understanding how science and politics entwine in the United States…with striking details and revealing quotations” (The New York Times Book Review).