With the ever-increasing pace of human development, a vast array of disciplines have emerged, each aiming to unravel the mysteries of our universe. Whether it's the intricate workings of the brain, the eternal debates in philosophy, or the complex concepts of physics, there's always something new to explore and understand. 

**Biology Ideas You Really Need to Know**
- Evolutionary theory
- DNA structure
- Genetic mutation
- Biomes and ecosystems
- The impact of human activity on biodiversity

**Chemistry Ideas You Really Need to Know**
- Atomic structure
- Chemical reactions
- Periodic table
- Organic compounds
- Environmental chemistry

**Physics Ideas You Really Need to Know**
- Newton's law of gravitation
- Quantum mechanics
- Special relativity
- Nuclear energy
- Particle physics

**Philosophy Ideas You Really Need to Know**
- Ethics
- Metaphysics
- Epistemology
- Political philosophy
- Aesthetics

**Mathematics Ideas You Really Need to Know**
- Algebra
- Calculus
- Geometry
- Number theory
- Probability

**Physics Ideas You Really Need to Know**

**Literature Ideas You Really Need to Know**
- Themes and motifs
- Character development
- Symbolism
- Narrative techniques
- Historical context

**Art Ideas You Really Need to Know**
- Art movements
- Artists and their works
- Art styles and techniques
- Art criticism and analysis
- Art historical context

**Science Ideas You Really Need to Know**
- Scientific method
- Hypothesis testing
- Data analysis
- Scientific theories
- Scientific revolutions

**Design Ideas You Really Need to Know**
- Principles of design
- Design processes
- Design aesthetics
- Design history
- Design applications

**Economics Ideas You Really Need to Know**
- Supply and demand
- Market forces
- Economic growth
- Fiscal policy
- Monetary policy

**Politics Ideas You Really Need to Know**
- Political systems
- Political parties
- Political ideology
- Policy making
- International relations

**History Ideas You Really Need to Know**
- Historical events
- Historical figures
- Historical context
- Historical analysis
- Historical perspectives

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50 Biology Ideas You Really Need to Know is your guide to the most significant and stimulating questions in the study of biology. From the origins of life to the death of stars, this book is the perfect introduction to the cutting-edge science that is shaping our understanding of our place in the Universe. But only in our own time has the true scale, the astonishing variety and the remarkable strangeness of the cosmos come clearly into focus. The pace and sophistication of recent scientific discovery has been breathtaking, but breakthroughs are often difficult to understand and their impact is hard to fully appreciate. In 50 Ideas You Really Need to Know, Ben Dupré provides a clear, concise account of key concepts that we ignore at our peril.

50 Chemistry Ideas You Really Need to Know is an engaging guide to the world of chemistry. From the molecules that kick-started life itself to nanotechnology, chemistry offers some fascinating insights into our origins, as well as the challenges we face today. The role of chemistry in our daily lives is evident in the medicine we take, the materials we wear and the fuels we burn. At a time when the environment is more topical than ever, chemistry’s contribution is crucial in determining how we meet the needs of the future and protect the planet.

50 Genetics Ideas is a timely introduction to this young and ground-breaking strand of science. In recent years knowledge of our genetic code has changed our understanding of life on Earth. New genetic technologies are transforming the way we live and promise treatments for otherwise incurable diseases. But these advances are also generating controversy, particularly surrounding issues such as cloning and designer babies. In 50 Genetics Ideas, Mark Henderson distils the central ideas of genetics in a series of clear and concise essays. Beginning with the theory of evolution and the characteristics of life, Mark goes on to explore the role of genes in shaping our behaviour and sexuality, but also the very latest, cutting-edge developments in gene therapy and artificial life. Accessible and informative, 50 Genetics Ideas is a clear guide to this fascinating and rapidly changing field.

50 Art Ideas You Really Need To Know Susie Hodge

In 50 Art Ideas You Really Need To Know, Susie Hodge leads you on an artistic pilgrimage to some of the world’s most inspirational places for aesthetes and creatives. From the ancient allure of the Colosseum in Rome to the sweeping grandeur of the Cataract of the Nile, and from the luminous glow of cathedrals in France to the teeming biodiversity of the Galápagos Islands, Susie will show you the places you need to see and the ways you need to see them. The book covers every major art tradition and movement, from the first figurative representation of the human body to the latest in contemporary art. Each entry is written in non-technical language that is easy to follow and packed with information, facts and figures. If you’re a reader or writer, this book is an essential companion to understanding the language of art; if you’re a listener or viewer, it’s the perfect way to gain a deeper enjoyment of reading and writing.
The need to understand religion and the role it plays in our world has never been more pressing. The beliefs and actions of the world’s 2 billion Christians, 1.2 billion Muslims, 800 million Hindus and 700 million followers of other religions form an integral part of the lives of many people across the globe. Religion has an impact on every aspect of war and peace, ethics, politics, reproduction, family and social structure across every continent.

Great works of art across the globe, from theanne to the Industrial Revolution to modernism, are often the result of complex social, political and economic forces. This concise and readable guide is a joy for students of art or anyone wanting to know more about the world of art.

The Great Art Guide introduces readers to 100 of the world's most important artists, from the 13th century to the present. Works by artists such as Caravaggio, Vermeer, Warhol and van Gogh are arranged chronologically and set in their historical context by Susie Hodge's authoritative narrative. Succinct and insightful artist profiles are accompanied by high-quality reproductions of the individual's most significant works of art.

The Great Art Guide demystifies the fundamental concepts of capital, creative destruction, the market and the invisible hand; dissects the rival impracticalities of socialism and capitalism; and explains why the cycles of boom and bust are a foregone conclusion. Indeed, is capitalism in a fatal crisis - and what, if any, are the alternatives? From capitalism's history, core theories and key institutions to its current-day political power and social impact, this book explains everything you need to understand the world's dominant economic system.
Art making is a wonderful way for young children to tap into their imagination, deepen their creativity, and bring out their child's creativity and imagination with more than 60 artful activities in this completely revised and updated edition. It will delight anyone who has ever been mystified by artistic jargon and wants to gain a deeper, more thorough understanding of the most important and influential concepts in art from the Ancient Greeks to the present. Taking in the defining artistic movements such as Romanticism, Cubism and Minimalism, Susie Hodge's concise and insightful text is accompanied by a glossary explaining key terms, as well as brief mini-essays and informative biographies on major artists of the period. For all those who don't know their Degas from Dali or their Monet from their Mondrian, this informative and insightful guide discusses 50 of the most important works of the Art Nouveau style. From Mackmurdo's jacket design of Christopher Wren's City Churches to Sykes' sculpture, The Spirit of Neptune's Horses. Each entry includes a full-page illustration and concise explanatory texts. An introductory essay on the history and legacy of Art Nouveau, along with brief biographies of the artists featured in the book, make this a beautifully illustrated book exploring fifty of the most important works of the Art Nouveau style.
People often complain that in history lessons at school they were taught just a few topics—the Romans, the Tudors, the
Nazis—and how they have no idea at all about what happened in between. To remedy this, World History: 50 Key
Milestones You Really Need to Know offers brief and stimulating outlines of key developments in the history of the world,
from the beginning of agriculture 10,000 years ago to the attack on the Twin Towers on 9/11. Each essay is accompanied
by a detailed time line of dates and events, and the flavour of the period concerned is brought to life by selected box
features throw light on a range of related topics, from Confucianism and the state to Alexander the Great's horse, from
Islamic science and the Barbary corsairs to the Enigma machine, from the Nazca Lines to Renaissance man, from
Galileo, Voltaire, Thomas Jefferson, Mary Wollstonecraft, Napoleon, Abraham Lincoln and Winston Churchill. In
addition, by exploring the subject through its 50 key insights—from the simple (the number one) and the subtle
addition, this book will teach you everything you need to know about quantum physics—and challenge the way you
understand the world. The ideas explored include: Theory of relativity; Schrödinger's cat; Nuclear forces: fission and
fusion; Antimatter; Superconductivity.

Quantum physics is the most cutting-edge, important and fascinating area of modern science. We have all heard of
quarks to quantum computing. With informative two-colour illustrations alongside key ideas in straightforward, bite-sized
present clear explanations of complex theories and their advanced applications—from string theory to black holes, and
universe? In 50 concise chapters, Joanne Baker covers the foundation concepts of quantum physics and moves on to
What exactly is a credit crunch? Why do footballers earn so much more than the rest of us? Which country is likely to be
the next to default? These are the questions at the heart of the world economy—questions which many people are asking
themselves today. The answer is finance. Financial events can change the course of the world. To understand the
current crisis and the challenges that lie ahead, we need to understand the world of finance. In 50 concise chapters,
Folkert Gras explains the basic principles of financial markets, their history and the way they have changed over time,
the way they work and the role they play in the modern economy. Within these pages, you will find a comprehensive
overview of the most significant financial events of the 20th century, from the Boer War to the housing bubble, and the
impact of financial turmoil on humanity and the economy. The book concludes with a look at current economic
challenges, and includes a glossary of financial terms and a suggested reading list, so that you can continue to
understand the world around you.
The perfect compact reference guide for all would-be art buffs. Art historian Susie Hodge takes you on a whistle-stop international tour of all the major artistic cultures, movements, phases, developments, artists and themes, from Prehistoric art to Hyperrealism. Contents also include Greek classicism, Gothic art, the Renaissance, Baroque, Romanticism, Realism, Impressionism, Cubism, surrealism, Pop art and Minimalism.

Following on from her bestselling book How to Survive Modern Art, Susie Hodge once again tackles a dauntingly complex subject: how can we evaluate, explore and respond to art? With the power to affect us all, art can be enjoyed in many different ways. Its impact can be both straightforward and unexpected. It can change our minds or our attitudes, provoke anger or shock, or make us laugh or cry. It can intimidate, disconcert, pose conundrums or puzzles, or instruct or enlighten. Ultimately, it offers a window on society's values and ideals, and every work of art expresses the perceptions and memories of the artist who created it. In her characteristically engaging style, Susie Hodge shows us how to interpret and respond to a broad variety of artwork and artists' philosophies. This enormously stimulating book enriches our experience of art, and in the process enhances our own creativity.

Design pervades every aspect of our lives from the clothes we wear to the simple items we use every day, like the spoon and toothbrush. This book takes a deeper look at the objects that enrich our lives through the examination of 80 classic designs that have stood the test of time.

Neuroscience is one of the most fascinating and complex areas of scientific research, with new advances being made every day. In 50 Human Brain Ideas You Really Need to Know, Mo Costandi condenses all we know about the brain and how it works into series of introductions to the most important concepts. Outlining both long-standing theories - such as the function of neurons and synaptic transmission - and cutting-edge ideas - including neuroethics and brain-computer interfacing - with straightforward narrative and clear two-colour illustrations, this book is a perfect beginner's guide to the most powerful and mysterious organ in the body. The ideas explored include: The nervous impulse; Differences between the male and female brain; The root of addiction; Neurobiological basis for personality; The relationship between sleep and memory.

Who invented zero? Why 60 seconds in a minute? How big is infinity? Where do parallel lines meet? And can a butterfly's wings really cause a storm on the far side of the world? In 50 Maths Ideas You Really Need to Know, Professor Tony Crilly explains in 50 clear and concise essays the mathematical concepts - ancient and modern, theoretical and practical, everyday and esoteric - that allow us to understand and shape the world around us. Packed with diagrams, examples and anecdotes, this book is the perfect overview of this often daunting but always essential subject. For once, mathematics couldn't be simpler. Contents include: Origins of mathematics, from Egyptian fractions to Roman numerals; Pi and primes, Fibonacci numbers and the golden ratio; What calculus, statistics and algebra can actually do; The very real uses of imaginary numbers; The Big Ideas of relativity, Chaos theory, Fractals, Genetics and hyperspace; The reasoning behind Sudoku and code cracking, Lotteries and gambling, Money management and compound interest; Solving of Fermat's last theorem and the million-dollar question of the Riemann hypothesis.