Introducing Stephen Hawking A Graphic Guide Introducing

Logic is the backbone of Western civilization, holding together its systems of philosophy, science and law. Yet despite logic's widely acknowledged importance, it remains an unbroken seal for many, due to its heavy use of jargon and mathematical symbolism.This book follows the historical development of logic, explains the symbols and methods involved and explores the philosophical issues surrounding the topic in an easy-to-follow and friendly manner. It will take you through the influence of logic on scientific method and the various sciences from physics to psychology, and will show you why computers and digital technology are just another case of logic in action.

An introduction to Hawking's work, ranging from Einstein's Theory of Relativity to Black Holes and the Big Bang. Also explains Hawking's research into Quantum Gravity.

From the medicine we take, the treatments we receive, the aptitude and psychometric tests given by employers, the cars we drive, the clothes we wear to even the beer we drink, statistics have given shape to the world we inhabit. For the media, statistics are routinely 'damning', 'horrifying', or, occasionally, 'encouraging'. Yet, for all their ubiquity, most of us really don't know what to make of statistics. Exploring the history, mathematics, philosophy and practical use of statistics, Eileen Magnello - accompanied by Bill Mayblin's intelligent graphic illustration - traces the rise of statistics from the ancient Babylonians, Egyptians and Chinese, to the censuses of Romans and the Greeks, and the modern emergence of the term itself in Europe. She explores the 'vital statistics' of, in particular, William Farr, and the mathematical statistics of Karl Pearson and R.A. Fisher.She even tells how knowledge of statistics can prolong one's life, as it did for evolutionary biologist Stephen Jay Gould, given eight months to live after a cancer diagnoses in 1982 - and he lived until 2002. This title offers an enjoyable, surprise-filled tour through a subject that is both fascinating and crucial to understanding our world.

What is time? The 5th-century philosopher St Augustine famously said that he knew what time was, so long as no one asked him. Is time a fourth dimension similar to space or does it flow in some sense? And if it flows, does it make sense to say how fast? Does the future exist? Is time travel possible? Why does time seem to pass in only one direction?These questions and others are among the deepest and most subtle that one can ask, but "Introducing Time" presents them - many for the first time - in an easily accessible, lucid and engaging manner, wittily illustrated by Ralph Edney.

It is now more than a century since Einstein's theories of Special and General Relativity began to revolutionise our view of the universe. Beginning near the speed of light and proceeding to explorations of space-time and curved spaces, "Introducing Relativity" plots a visually accessible course through the thought experiments that have given shape to contemporary physics. Scientists from Newton to Hawking add their unique contributions to this story, as we encounter Einstein's astounding vision of gravity as the curvature of space-time and arrive at the breathtakingly beautiful field equations. Einstein's legacy is reviewed in the most advanced frontiers of physics today - black holes, gravitational waves, the accelerating universe and string theory. This is a superlative, fascinating graphic account of Einstein's strange world and how his legacy has been built upon since.

Stephen Hawking is the world-famous physicist with a cameo in "The Simpsons on his CV", but outside his academic field his work is little understood. To the public he is a tragic figure - a brilliant scientist and author of the 9 million-copy-selling "A Brief History of Time", and yet confined to a wheelchair and almost completely paralysed. Hawking's major contribution to science has been to integrate the two great theories of 20th-century physics - Einstein's General Theory of Relativity and Quantum Mechanics. J.P. McEvoy and Oscar Zarate's brilliant graphic guide explores Hawking's life, the evolution of his work from his days as a student, and his breathtaking discoveries about where these fundamental laws break down or overlap, such as on the edge of a Black Hole or at the origin of the Universe itself.

Philosophers have always enjoyed asking awkward and provocative questions, such as: What is the nature of reality? What are human beings really like? What is special about the human mind and consciousness? Are we free to choose who we are and what we do? Can we prove that God exists? Can we be certain about anything at all? What is truth? Does language provide us with a true picture of the world? How should we behave towards each other? Do computers think? "Introducing Philosophy" is a comprehensive graphic guide to the thinking of all the significant philosophers of the Western world from Heraclitus to Derrida. It examines and explains their key arguments and ideas without being obscure or solemn. Lively and accessible, it is the perfect introduction to philosophers and philosophical ideas for anyone coming to the subject for the first time.

This volume introduces the basic concepts of Exponential Random Graph Modeling (ERGM), gives examples of why it is used, and shows the reader how to conduct basic ERGM analyses in their own research. ERGM is a statistical approach to modeling social network structure that goes beyond the descriptive methods conventionally used in social network analysis. Although it was developed to handle the inherent non-independence of network data, the results of ERGM are interpreted in similar ways to logistic regression, making this a very useful method for examining social systems. Recent advances in statistical software have helped make ERGM accessible to social scientists, but a concise guide to using ERGM has been lacking. An Introduction to Exponential Random Graph Modeling, by Jenine K. Harris, fills that gap, by using examples from public health, and walking the reader through the process of ERGM model-building using R statistical software and the statnet package.

Why must we believe that God is dead? Can we accept that traditional morality is just a 'useful mistake'? Did the principle of 'the will to power' lead to the Holocaust? What are the limitations of scientific knowledge? Is human evolution complete or only beginning? It is difficult to overestimate the importance of Friedrich Nietzsche for our present epoch. His extraordinary insights into human psychology, morality, religion and power seem quite clairvoyant today: existentialism, psychoanalysis, semiotics and postmodernism are plainly anticipated in his writings - which are famously enigmatic and often contradictory."Introducing Nietzsche" is the perfect guide to this exhilarating and oft-misunderstood philosopher.

What connects Marliyn Monroe, Disneyworld, "The Satanic Verses" and cyber space? Answer: Postmodernism. But what exactly is postmodernism? This graphic guide explains clearly the maddeningly enigmatic concept that has been used to define the world's cultural condition over the last three decades. "Introducing Postmodernism" tracks the idea back to its roots by taking a tour of some of the most extreme and exhilarating events, people and thought of the last 100 years: in art - constructivism, conceptual art, Marcel Duchamp, Jackson Pollock and Andy Warhol; in politics and history - McCarthy's witch-hunts, feminism, Francis Fukuyama and the Holocaust; in philosophy - the work of Derrida, Baudrillard, Foucault and Heidegger. The book also explores postmodernism's take on today, and the anxious grip of globalisation, unpredictable terrorism and unforeseen war that greeted the dawn of the 21st century. Regularly controversial, rarely straightforward and seldom easy, postmodernism is nonetheless a thrilling intellectual adventure. "Introducing Postmodernism" is the ideal guide.

Covering thinkers from Aristotle to Saussure and Chomsky, "Introducing Linguistics" reveals the rules and beauty that underlie language, our most human skill.

The ideal guide to the most important idea ever to appear in the history of science.

How do emotions affect your basic decision making? Why do certain smells prompt long-forgotten memories, and what makes us suddenly self-conscious? How does the biological organ, the brain, give rise to all of the thoughts in your head – enable you to think, to feel, to be conscious and aware – to have ‘a mind’? Introducing Mind and Brain explains what the sciences have to say about planning and action, language, memory, attention, emotions and vision. It traces the historical development of ideas about the brain and its function from antiquity to the age of neuro-imaging. Clearly explained by Professor of

Psychology Angus Gellatly and award-winning artist Oscar Zarate, they invite you to take a fresh look at the nature of mind, consciousness and personal identity.

Beyond reaching the pinnacle of success in his field, the preeminent physicist Stephen Hawking also has made a name for himself as a best-selling author. His books bring the wonders of the universe to the masses. Hawking himself is revealed to the public in this book, which follows his rise from apathetic schoolboy to respected scientist and writer. Along the way readers discover how Hawking has dealt with having ALS, and what critics have said about his commercial writings.

Ons verlangen om te willen weten is oneindig: wat is de oorsprong van het heelal, wat is tijd, wat zijn zwarte gaten, hoe zit de kosmos in elkaar? Deze vragen vormen het uitgangspunt van Carlo Rovelli's Zeven korte beschouwingen over natuurkunde. In dit overzichtelijke boek behandelt hij de belangrijkste ontwikkelingen in de twintigste-eeuwse natuurkunde. Zo bespreekt hij Einsteins relativiteitstheorie, de kwantummechanica en zwarte gaten, de architectuur van het heelal en andere brandende kwesties met betrekking tot de fysische wereld. Carlo Rovelli (1956) is een gerenommeerd Italiaans natuurkundige en schrijver. Hij is een autoriteit op het gebied van de kwantumgravitatie _ een belangrijk onderwerp in de natuurkunde van dit moment. Rovelli is verbonden aan het Centrum voor theoretische natuurkunde van de Universiteit van Aix-Marseille. Van Zeven korte beschouwingen over natuurkunde zijn in Italië al meer dan 200.000 exemplaren verkocht. 'Door Carlo Rovelli's Zeven korte beschouwingen over natuurkunde zijn de relativiteitstheorie en de kwantumfysica veranderd in bestsellermateriaal.' La Repubblica 'Natuurkunde wordt altijd al gepopulariseerd, maar professor Rovelli's boek doet meer: zijn stijl onderscheidt zich doordat die zowel authentiek als aantrekkelijk is, en hij behandelt vraagstukken die zijn lezers werkelijk interesseren.' Corriere della Sera 'Net zo ongecompliceerd als de titel impliceert.' The Guardian

In 2016 hield professor Stephen Hawking de BBC Reith Lectures over een onderwerp dat hem al tientallen jaren fascineert: zwarte gaten. In Zwarte gaten stelt de legendarische natuurkundige dat we, als we zwarte gaten kunnen begrijpen, en als we weten hoe ze de aard van ruimte en tijd tarten, de geheimen van het universum kunnen ontsluieren. Stephen Hawking (1942), natuurkundige, kosmoloog en wiskundige, schreef eerder onder meer de internationale bestsellers Het heelal en Een korte geschiedenis van de tijd en zijn ontroerende autobiografie Mijn kleine geschiedenis. Hij wordt beschouwd als een van de briljantste theoretische natuurwetenschappers sinds Albert Einstein.

If a butterfly flaps its wings in Brazil, does it cause a tornado in Texas? Chaos theory attempts to answer such baffling questions. The discovery of randomness in apparently predictable physical systems has evolved into a science that declares the universe to be far more unpredictable than we have ever imagined. Introducing Chaos explains how chaos makes its presence felt in events from the fluctuation of animal populations to the ups and downs of the stock market. It also examines the roots of chaos in modern maths and physics, and explores the relationship between chaos and complexity, the unifying theory which suggests that all complex systems evolve from a few simple rules. This is an accessible introduction to an astonishing and controversial theory.

Anthropology originated as the study of 'primitive' cultures. But the notion of 'primitive' exposes presumptions of 'civilized' superiority and the right of the West to speak for 'less evolved' others. With the fall of Empire, anthropology became suspect and was torn by dissension from within. Did anthropology serve as a 'handmaiden to colonialism'? Is it a 'science' created by racism to prove racism? Can it aid communication between cultures, or does it reinforce our differences? "Introducing Anthropology" is a fascinating account of an uncertain human science seeking to transcend its unsavoury history. It traces the evolution of anthropology from its genesis in Ancient Greece to its varied forms in contemporary times. Anthropology's key concepts and methods are explained, and we are presented with such big-name anthropologists as Franz Boas, Bronislaw Malinowski, E.E. Evans-Pritchard, Margaret Mead and Claude Levi-Strauss. The new varieties of self-critical and postmodern anthropologies are examined, and the leading question - of the impact of anthropology on non-Western cultures - is given centre-stage. "Introducing Anthropology" is lucid in its arguments, its good humour supported by apt and witty illustrations. This book offers a highly accessible invitation into anthropology.

Presents an account, in graphic novel form, of Heidegger's life and his philosophies.

"Introducing Genetics" takes readers on a journey through this new science to the discovery of DNA and the heart of the human gene map. In everyday life, many of us increasingly have to make moral decisions where genetics plays a part. This book gives us the information to do so.

What really happens at the most fundamental levels of nature? Introducing Particle Physics explores the very frontiers of our knowledge, even showing how particle physicists are now using theory and experiment to probe our very concept of what is real. From the earliest history of the atomic theory through to supersymmetry, micro-black holes, dark matter, the Higgs boson, and the possibly mythical graviton, practising physicist and CERN contributor Tom Whyntie gives us a mind-expanding tour of cutting-edge science. Featuring brilliant illustrations from Oliver Pugh, Introducing Particle Physics is a unique tour through the most astonishing and challenging science being undertaken today.

Stephen Hawking is widely believed to be one of the world's greatest minds: a brilliant theoretical physicist whose work helped to reconfigure models of the universe and to redefine what's in it. Imagine sitting in a room listening to Hawking discuss these achievements and place them in historical context. It would be like hearing Christopher Columbus on the New World. Hawking presents a series of seven lec-tures—covering everything from big bang to black holes to string theory—that capture not only the brilliance of Hawking's mind but his characteristic wit as well. Of his research on black holes, which absorbed him for more than a decade, he says, "It might seem a bit like looking for a black cat in a coal cellar." Hawking begins with a history of ideas about the universe, from Aristotle's determination that the Earth is round to Hubble's discovery, over 2000 years later, that the universe is expanding. Using that as a launching pad, he explores the reaches of modern physics, including theories on the origin of the universe (e.g., the big bang), the nature of black holes, and space-time.

What makes philosophy on the continent of Europe so different and exciting? And why does it have such a reputation for being 'difficult'? Continental philosophy was initiated amid the revolutionary ferment of the 18th century, philosophers such as Kant and Hegel confronting the extremism of the time with theories that challenged the very formation of

individual and social consciousness. Covering the great philosophers of the modern and postmodern eras – from Nietzsche, Heidegger, Derrida and Deleuze right to up Agamben and Žižek – and philosophical movements from German idealism to deconstruction and feminism – Christopher Kul-Want and Piero brilliantly elucidate some of the most thrilling and powerful ideas ever to have been discussed.

Meditation, Karma, Zen, Tantric and Nirvana are some of the many Buddhist ideas Westerners hear of frequently, even if their meaning has been lost in translation. This vast and complex non-theistic religion is woven into the fabric of Asian civilisations. from India to the Himalayan regions, China, Vietnam, Korea, Japan and elsewhere. What is Buddhism really all about? Introducing Buddha describes the life and teachings of the Buddha, but it also shows that enlightenment is a matter of experiencing the truth individually, and by inspiration which is passed from teacher to student. Superbly illustrated by Borin Van Loon, the book illuminates this process through a rich legacy of stories, explains the practices of meditation, Taoism and Zen, and goes on to describe the role of Buddhism in modern Asia and its growing influence on Western thought.

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The term 'feminism' came into English usage around the 1890s, but women's conscious struggle to resist discrimination and sexist oppression goes much further back. This completely new and updated edition of "Introducing Feminism" surveys the major developments that have affected women's lives from the 17th century to the present day. "Introducing Feminism" is an invaluable reference book for anyone seeking the story of how feminism reconfigured the world for women and men alike.

A graphic introduction to the best-known physicist alive today.

First published in the USA by Totem Books in 1995. Previously published in the UK in 1995 under the title Stephen Hawking for beginners.

Was there a beginning of time? Could time run backwards? Is the universe infinite or does it have boundaries? These are just some of the questions considered in an internationally acclaimed masterpiece by one of the world's greatest thinkers. It begins by reviewing the great theories of the cosmos from Newton to Einstein, before delving into the secrets which still lie at the heart of space and time, from the Big Bang to black holes, via spiral galaxies and strong theory. To this day A Brief History of Time remains a staple of the scientific canon, and its succinct and clear language continues to introduce millions to the universe and its wonders.

"Introducing Descartes" explains why he is usually called the father of modern philosophy. It is a clear and accessible guide to all the puzzling questions that Descartes asked about human beings and their place in the world. It gives a lucid account of Descartes' contributions to modern science, mathematics, and the Philosophy of Mind, and also reveals why Descartes liked to do all of his serious thinking in bed.

Freud revolutionized the way we think about ourselves. His psychoanalytic terms such as Id, Ego, libido, neurosis and Oedipus Complex have become a part of our everyday vocabulary. But do we know what they really mean? "Introducing Freud" successfully demystifies the facts of Freud's discovery of psychoanalysis. Irreverent and witty but never trivial, the book tells the story of Freud's life and ideas from his upbringing in 19th-century Vienna, his early medical career and his encounter with cocaine, to the gradual evolution of his theories on the unconscious, dreams and sexuality. With its combination of brilliantly clever artwork and incisive text, this book has achieved international success as one of the most entertaining and informative introductions to the father of psychoanalysis.

Wanneer een 9-jarige jongen in New York op zoek gaat naar informatie over zijn vader, die bij de aanslag op 11 september 2001 is omgekomen, vindt hij iets anders dan hij verwachtte.

Quantum theory confronts us with bizarre paradoxes which contradict the logic of classical physics. At the subatomic level, one particle seems to know what the others are doing, and according to Heisenberg's "uncertainty principle", there is a limit on how accurately nature can be observed. And yet the theory is amazingly accurate and widely applied, explaining all of chemistry and most of physics. "Introducing Quantum Theory" takes us on a step-by-step tour with the key figures, including Planck, Einstein, Bohr, Heisenberg and Schrodinger. Each contributed at least one crucial concept to the theory. The puzzle of the wave-particle duality is here, along with descriptions of the two questions raised against Bohr's "Copenhagen Interpretation" - the famous "dead and alive cat" and the EPR paradox. Both remain unresolved.

What is the place of individual choice and consequence in a post-Holocaust world of continuing genocidal ethnic cleansing? Is "identity" now a last-ditch cultural defence of ethnic nationalisms and competing fundamentalisms? In a climate of instant information, free markets and possible ecological disaster, how do we define "rights", self-interest and civic duties? What are the acceptable limits of scientific investigation and genetic engineering, the rights and wrongs of animal rights, euthanasia and civil disobedience?"Introducing Ethics" confronts these dilemmas, tracing the arguments of the great moral thinkers, including Socrates, Plato, Aristotle, Hobbes and Kant, and brings us up to date with postmodern critics.

What might a 'theory of everything' look like? Is science an ideology? Who were Adorno, Horkheimer or the Frankfurt School? The decades since the 1960s have seen an explosion in the production of critical theories. Deconstructionists, poststructuralists, postmodernists, second-wave feminists, new historicists, cultural materialists, postcolonialists, black critics and queer theorists, among a host of others, all vie for our attention. Stuart Sim and Borin Van Loon's incisive graphic guide provides a route through the tangled jungle of competing ideas and provides an essential historical context, situating these theories within tradition of critical analysis going back to the rise of Marxism. They present the essential methods and objectives of each theoretical school in an incisive and accessible manner, and pay special attention to recurrent themes and concerns that have preoccupied a century of critical theoretical activity.

Was there a beginning of time? Could time run backwards? Is the universe infinite or does it have boundaries? These are just some of the questions considered in an internationally acclaimed masterpiece which begins by reviewing the great theories of the cosmos from Newton to Einstein, before delving into the secrets which still lie at the heart of space and time.

Evolution is the cause of everything in the universe, or so we are taught. But is this based in scientific truth? Could much of what we have learned at school, and what the media and evolutionists suggest about the origins of life and the universe, be contrary to the real scientific facts? After 15 years of research, and written in everyday language, Evolution Unraveled is the only place on earth where Evolutionary Theory is explained from the very beginning of the universe to the present day, where every major evolutionary step is dissected and compared with the facts that science already knows. In this book, you will discover that the science of evolution is not what you thought it was: • Does science confirm the big bang? • Why can’t scientists create life from inanimate matter? • What did Charles Darwin really say about evolution? • What does the fossil record say about the origins of humankind? • Why is Evolutionary Theory still a theory

and not a fact? • Can any creature change itself into something else, and has this ever actually happened? This comprehensive analysis of evolutionary theory presents the scientific facts that are not generally known to the public. It is a journey of wonder, reflection and revelation that will challenge many of the fundamental beliefs on which our lives are based. With over 500 pages of astounding scientific facts, you will discover that science really does have all the answers – and now you can too. ebook and webinar series at www.evolutionunraveled.com

Capitalism now dominates the globe, both in economics and ideology, shapes every aspect of our world and influences everything from laws, wars and government to interpersonal relationships. "Introducing Capitalism" tells the story of its remarkable and often ruthless rise, evolving through strife and struggle as much as innovation and enterprise. Tracing capitalism from its beginning to the present day, Dan Cryan and Sharron Shatil, alongside Piero's brilliant graphics, look at its practical and theoretical impact. They cover the major economic, social and political developments that shaped the world we live in, such as the rise of banking, the founding of America and the Opium Wars.This book explores the leading views for and against, including thinkers like Adam Smith, Karl Marx, Theodor Adorno and Milton Friedman, together with the connections between them and their historical context. Capitalism has influenced everything in the 21st-century world. For anyone who wants to gain a broad understanding of this fascinating subject, this book cuts across narrow academic lines to analyse an all-encompassing feature of modern life.

What is psychology? When did it begin? Where did it come from? How does psychology compare with related subjects such as psychiatry and psychotherapy? To what extent is it scientific? "Introducing Psychology" answers all these questions and more, explaining what the subject has been in the past and what it is now. The main "schools" of thought and the sections within psychology are described, including Introspection, Biopsychology, Psychoanalysis, Behaviourism, Comparative (Animal) Psychology, Cognitive Approaches (including the Gestalt movement), Social Psychology, Developmental Psychology and Humanism. The key figures covered include: Freud, Pavlov, Skinner, Bandura, Piaget, Bowlby, Maslow and Rogers, as well as many lesser-known but important psychologists.

Zwarte gaten zijn donker, de naam zegt het al. Als ze botsen, is daar niets van te zien. Toch komt bij een botsing van zwarte gaten een onvoorstelbaar grote hoeveelheid kracht vrij. Einstein voorspelde, precies een eeuw geleden, dat je zou moeten kunnen zien dat ruimte en tijd een beetje veranderen wanneer zo'n botsing plaatsvindt. Een 'zwaartekrachtgolf', die veroorzaakt dat tijd en ruimte niet meer constant zijn. Maar hoe observeer je zoiets? Wetenschappers zijn er tientallen jaren mee bezig geweest, en Janna Levin volgde hen op de voet: van de eerste tekeningen tot aan meetapparatuur van 40 kilometer groot, midden in de woestijn. De apparatuur werd aangezet. En vanaf dat moment was het afwachten. Zou er iets gebeuren? Had Einstein gelijk? Iedereen dacht dat het jaren zou duren voordat de eerste resultaten binnenkwamen. Maar nog geen twee weken later was er iets vreemds te zien...