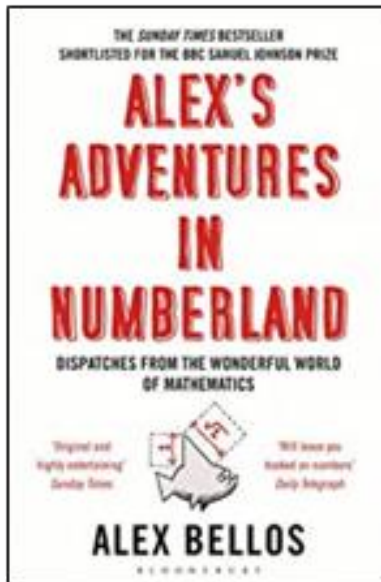




WIDER READING IN MATHS

We promote reading in Maths by finding opportunities within the curriculum that allow us to explore the history of mathematics as well as areas of everyday life where Maths plays a big part. This takes the form of guided reading activities where a short extract is followed up by comprehension and further discussion opportunities.

	Term 1	Term 2	Term 3
Year 7	Guided reading Who invented the zero	Guided reading A brief history of Algebra	Guided reading Football pitches
Year 8	Guided reading Alan Turing	Guided reading A brief history of pi.	Guided reading $E = mc^2$: Einstein's equation that gave birth to the atom bomb
Year 9	Guided reading Pythagoras	Guided reading A Brief History of time	Guided reading Tessellation
Year 10	Guided reading Katherine Johnson	Guided reading Sequences	Guided reading A brief history of constructions
Year 11	Complete work on the definitions of key mathematical words have other meaning in the wider world.	Complete work on the definitions of key mathematical words have other meaning in the wider world.	Complete work on the definitions of key mathematical words have other meaning in the wider world.

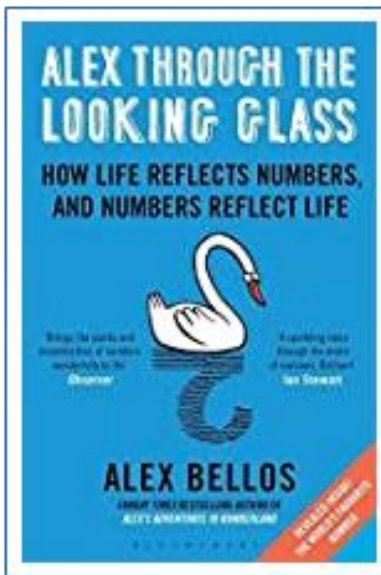


Alex's Adventures in Numberland

The world of maths can seem mind-boggling, irrelevant and, let's face it, boring. This groundbreaking book reclaims maths from the geeks. Mathematical ideas underpin just about everything in our lives: from the surprising geometry of the 50p piece to how probability can help you win in any casino.

In search of weird and wonderful mathematical phenomena, Alex Bellos travels across the globe and meets the world's fastest mental calculators in Germany and a startlingly numerate chimpanzee in Japan.

Packed with fascinating, eye-opening anecdotes, Alex's Adventures in Numberland is an exhilarating cocktail of history, reportage, and mathematical proofs that will leave you awestruck.

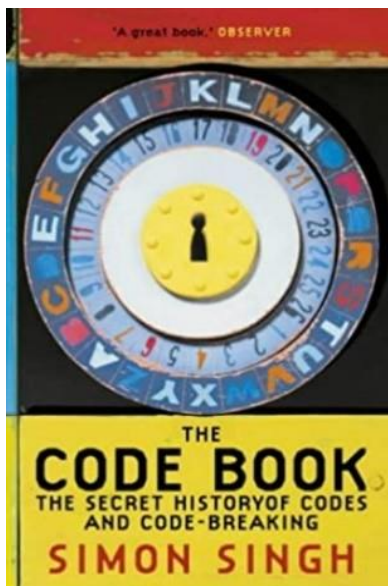


Alex Through the Looking Glass

From triangles, rotations and power laws, to fractals, cones and curves, bestselling author Alex Bellos takes you on a journey of mathematical discovery with his signature wit, engaging stories and limitless enthusiasm. As he narrates a series of eye-opening encounters with lively personalities all over the world, Alex demonstrates how numbers have come to be our friends, are fascinating and extremely accessible, and how they have changed our world.

He turns even the dreaded calculus into an easy-to-grasp mathematical exposition, and sifts through over 30,000 survey submissions to reveal the world's favourite number. In Germany, he meets the engineer who designed the first roller-coaster loop, whilst in India he joins the world's highly numerate community at the International Congress of Mathematicians. He explores the wonders behind the Game of Life program, and explains mathematical logic, growth and negative numbers. Stateside, he hangs out with a private detective in Oregon and meets the mathematician who looks for universes from his garage in Illinois.

Read this captivating book, and you won't realise that you're learning about complex concepts. Alex will get you hooked on maths as he delves deep into humankind's turbulent relationship with numbers, and proves just how much fun we can have with them.



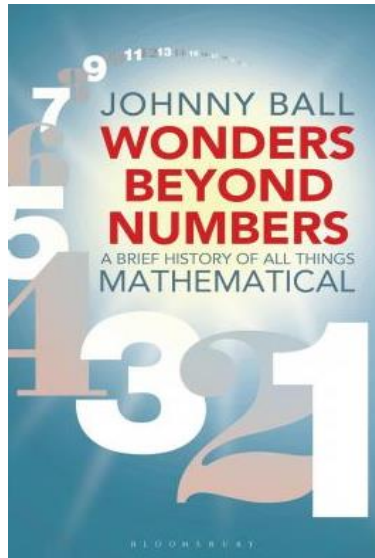
The Code Book

The Science of Secrecy from Ancient Egypt to Quantum Cryptography

From the best-selling author of Fermat's Last Theorem, The Code Book is a history of man's urge to uncover the secrets of codes, from Egyptian puzzles to modern day computer encryptions.

As in Fermat's Last Theorem, Simon Singh brings life to an astonishing story of puzzles, codes, languages and riddles that reveals man's continual pursuit to disguise and uncover, and to work out the secret languages of others.

Codes have influenced events throughout history, both in the stories of those who make them and those who break them. The betrayal of Mary Queen of Scots and the cracking of the enigma code that helped the Allies in World War II are major episodes in a continuing history of cryptography. In addition to stories of intrigue and warfare, Simon Singh also investigates other codes, the unravelling of genes and the rediscovery of ancient languages and most tantalisingly, the Beale ciphers, an unbroken code that could hold the key to a \$20 million treasure.

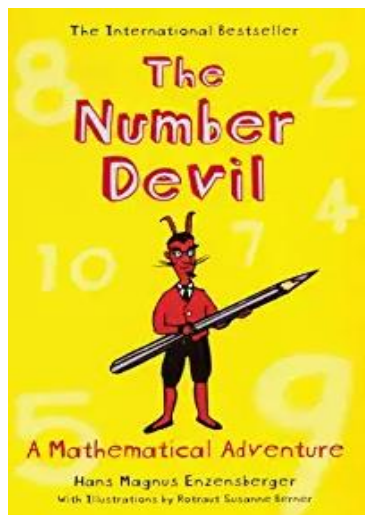


Wonders Beyond Numbers

By introducing us to the major characters and leading us through many historical twists and turns, Johnny slowly unravels the tale of how humanity built up a knowledge and understanding of shapes, numbers and patterns from ancient times, a story that leads directly to the technological wonderland we live in today. As Galileo said, 'Everything in the universe is written in the language of mathematics', and Wonders Beyond Numbers is your guide to this language.

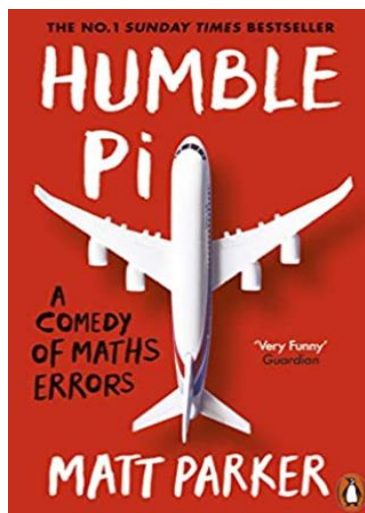
Mathematics is only one part of this rich and varied tale; we meet many fascinating personalities along the way, such as a mathematician who everyone has heard of but who may not have existed; a Greek philosopher who made so many mistakes that many wanted his books destroyed; a mathematical artist who built the largest masonry dome on earth, which builders had previously declared impossible; a world-renowned painter who discovered mathematics and decided he could no longer stand the sight of a brush; and a philosopher who lost his head, but only after he had died.

Enriched with tales of colourful personalities and remarkable discoveries, there is also plenty of mathematics for keen readers to get stuck into. Written in Johnny Ball's characteristically light-hearted and engaging style, this book is packed with historical insight and mathematical marvels; join Johnny and uncover the wonders found beyond the numbers.



The Number Devil

Twelve-year-old Robert hates his maths teacher: he sets his class boring problems and won't let them use their calculators. Then in his dreams Robert meets the Number Devil, who brings the subject magically to life, illustrating with wit and charm a world in which numbers can amaze and fascinate, where maths is nothing like the dreary, difficult process that so many of us dread. The Number Devil knows how to make maths devilishly simple.



Humble Pi

What makes a bridge wobble when it's not meant to? Billions of dollars mysteriously vanish into thin air? A building rock when its resonant frequency matches a gym class leaping to Snap's 1990 hit I've Got The Power? The answer is maths. Or, to be precise, what happens when maths goes wrong in the real world.

As Matt Parker shows us, our modern lives are built on maths: computer programmes, finance, engineering. And most of the time this maths works quietly behind the scenes, until ... it doesn't. Exploring and explaining a litany of glitches, near-misses and mishaps involving the internet, big data, elections, street signs, lotteries, the Roman empire and a hapless Olympic shooting team, Matt Parker shows us the bizarre ways maths trips us up, and what this reveals about its essential place in our world.

Mathematics doesn't have good 'people skills', but we would all be better off, he argues, if we saw it as a practical ally. This book shows how, by making maths our friend, we can learn from its pitfalls. It also contains puzzles, challenges, geometric socks, jokes about binary code and three deliberate mistakes. Getting it wrong has never been more fun.