

### **Weapons of Math Destruction**

by Cathy O'Neil

An in-depth and compelling analysis of how the poor application of maths and big data can increase inequality and even threaten democracy.

### **Things to Make and Do in the Fourth Dimension**

A fun exploration of weird and unusual maths concepts, including knots no one can untie and computers built from dominoes.

### **Cracking Mathematics**

by Colin Beveridge

Covers the history and development of mathematics, from the Ancient Egyptians to the 21st century.

### **An Introduction to Mathematical Reasoning**

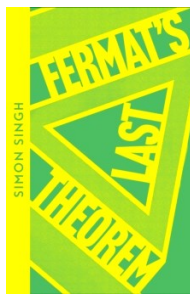
by Peter Eccles

Introduces the fundamentals of numbers, sets and functions for university-level study.

### **Moneyball**

by Michael Lewis

A classic book on business and sport, *Moneyball* examines how mathematics shapes the way baseball is played today, both on the pitch and in the boardroom.



### **Fermat's Last Theorem**

by Simon Singh

The story of the solving of a puzzle that has confounded mathematicians since the 17th century.

### **How Not to be Wrong**

by Jordan Ellenberg

Explains calculus in a single page, describes Goedel's theorem using only one-syllable words, and reveals how early you actually need to get to the airport.

### **Journey Through Genius**

by William Dunham

A tour of some of the greatest mathematicians in history, and their ideas.

### **50 Mathematical Ideas You Really Need to Know**

by Tony Crilly

Who invented zero? Why 60 seconds in a minute? How big is infinity? And can a butterfly's wings really cause a storm on the far side of the world?

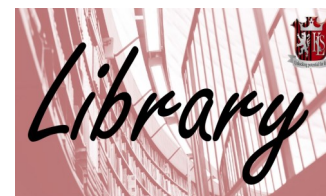
### **1089 and All That**

by David Acheson

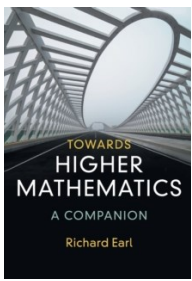
An accessible guidebook to mathematical ideas, with puzzles and cartoons.

# Maths

## WIDER READING

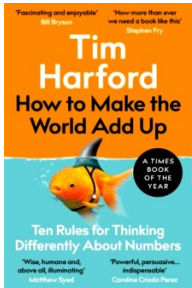


All these books are available from the school library



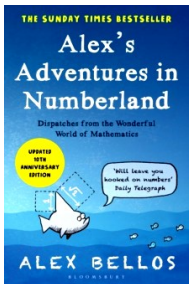
### Towards Higher Mathematics by Richard Earl

Stretches your mathematical abilities beyond the school syllabus, and bridges the gap to university-level mathematics.



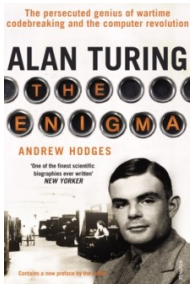
### How To Make The World Add Up by Tim Harford

What should we do when someone makes a claim that they say is based on hard data? This book discusses the factors we need to consider.



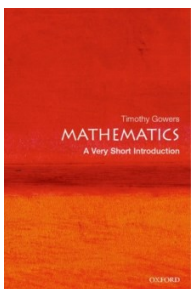
### Alex's Adventures in Numberland by Alex Bellos

Journey across the globe to meet the world's fastest mental calculators in Germany and a startlingly numerate chimpanzee in Japan.



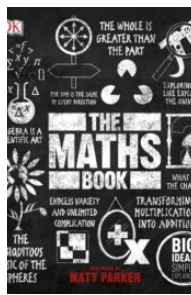
### Turing: the Enigma by A. Hodges

A biography of Alan Turing, the brilliant mathematician who masterminded the cracking of the German Enigma code and was the father of the modern computer.



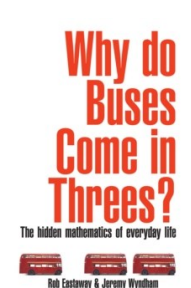
### Mathematics: A Very Short Introduction by Timothy Gowers

A clear, brief look at the differences between school-level and advanced mathematics.



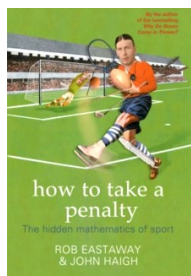
### The Maths Book by DK

An encyclopaedia of mathematics, covering 85 of the most important mathematical ideas, theorems, and proofs.



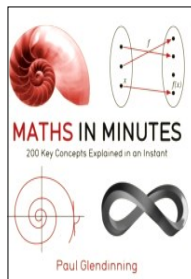
### Why do Buses Come in Threes? by Rob Eastaway

Why is it better to buy a lottery ticket on a Thursday? As explained here, dating, cooking, travelling, gambling and even life-saving are all linked with intriguing mathematical problems.



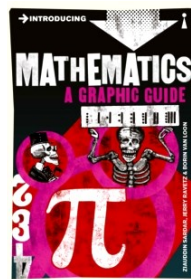
### How to Take a Penalty by Rob Eastaway and John Haigh

This book examines the connections between sport and mathematics. For example, does winning the toss actually matter?



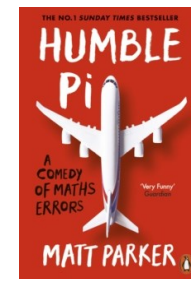
### Maths in Minutes by Paul Glendinning

A visually-led introduction to 200 key mathematical ideas, including vectors, number theory, and combinatorics.



### Mathematics: a Graphic Guide by Icon

A richly-illustrated journey through the history of mathematics.



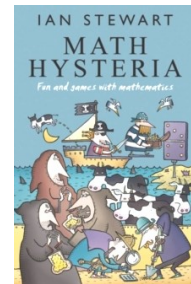
### Humble Pi by Matt Parker

What makes a bridge wobble when it's not meant to? Billions of dollars mysteriously vanish into thin air? The answer is maths. Or, what happens when maths goes wrong in the real world.



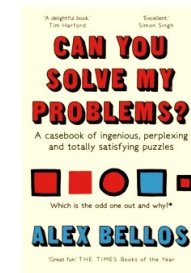
### Statistics Without Tears by Derek Rowntree

What do terms like 'dispersion', 'correlation', 'normal distribution' and 'significance' actually mean? A bestselling primer on stats, which assumes no expert knowledge.



### Math Hysteria by Ian Stewart

A collection of witty stories, told to illustrate maths puzzles.



### Can You Solve My Problems? by Alex Bellos

A casebook of 125 ingenious, perplexing and satisfying maths brainteasers, puzzles and riddles.



### A Curious History of Mathematics by Joel Levy

Shows how mathematical science advanced through the discoveries of the ancient Babylonians, the great scholars of medieval Islam and Europe, and the Renaissance and the birth of the Scientific Revolution.