



Welcome to Montgomery Academy's Science Department Recommended Reading List

The Science Department at Montgomery Academy values a well-rounded curriculum and literacy is a key part of that. This is why we have put together a selection of books that we highly recommend.

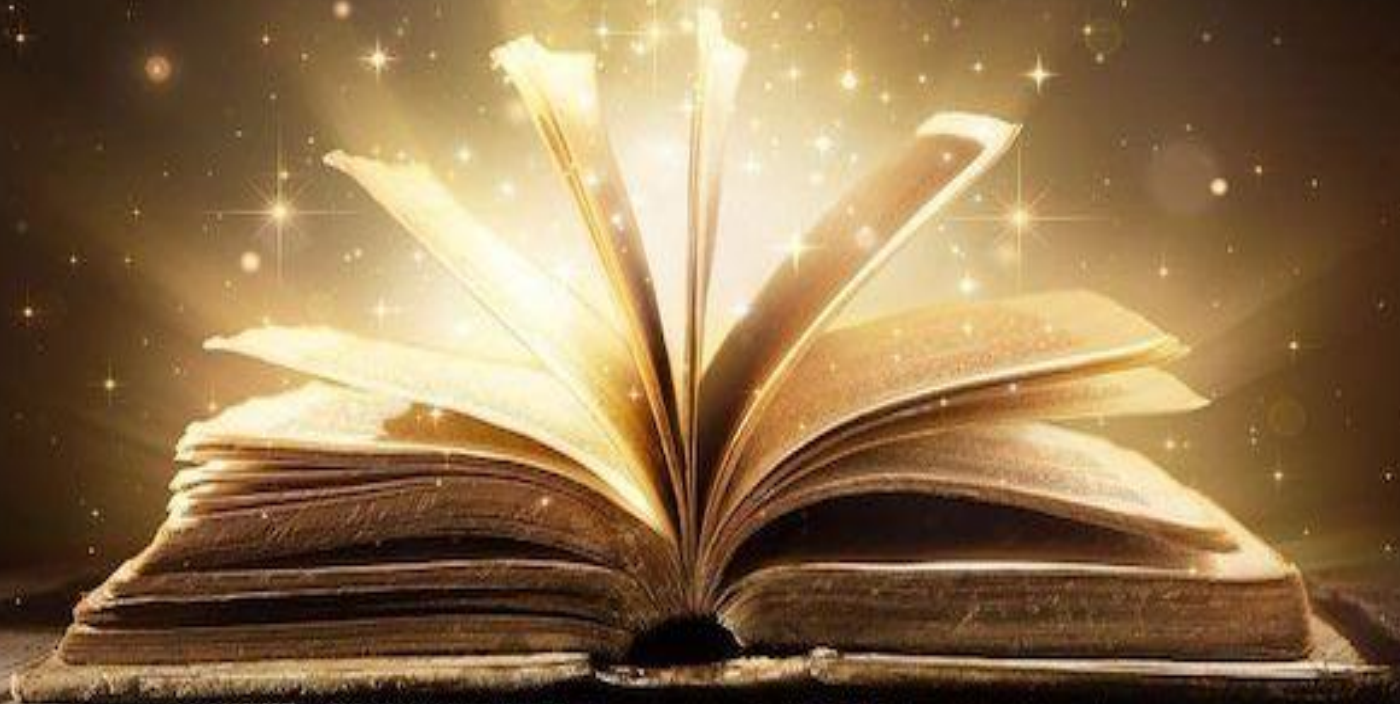


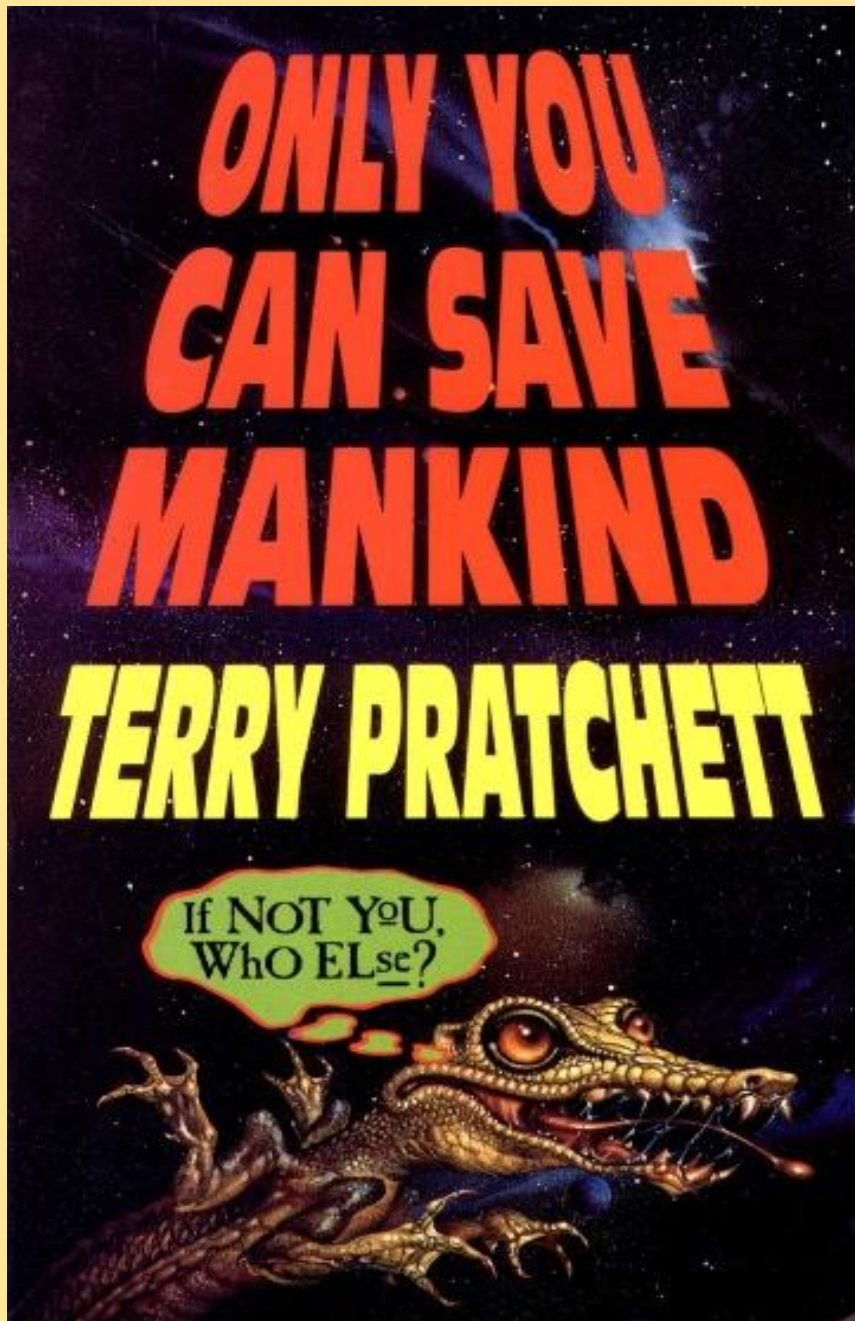
Here you will find a wide range of titles, both fact and fiction, that are sure to excite, intrigue, challenge and thrill. From timeless classics to contemporary novels, through to thought provoking non-fiction.

The books are in sections for KS3 (Years 7, 8 & 9) and KS4 (Years 10 & 11) and all titles plus more are **now available** from the **School Library**.



KS3 Recommended Reading Years 7, 8 and 9



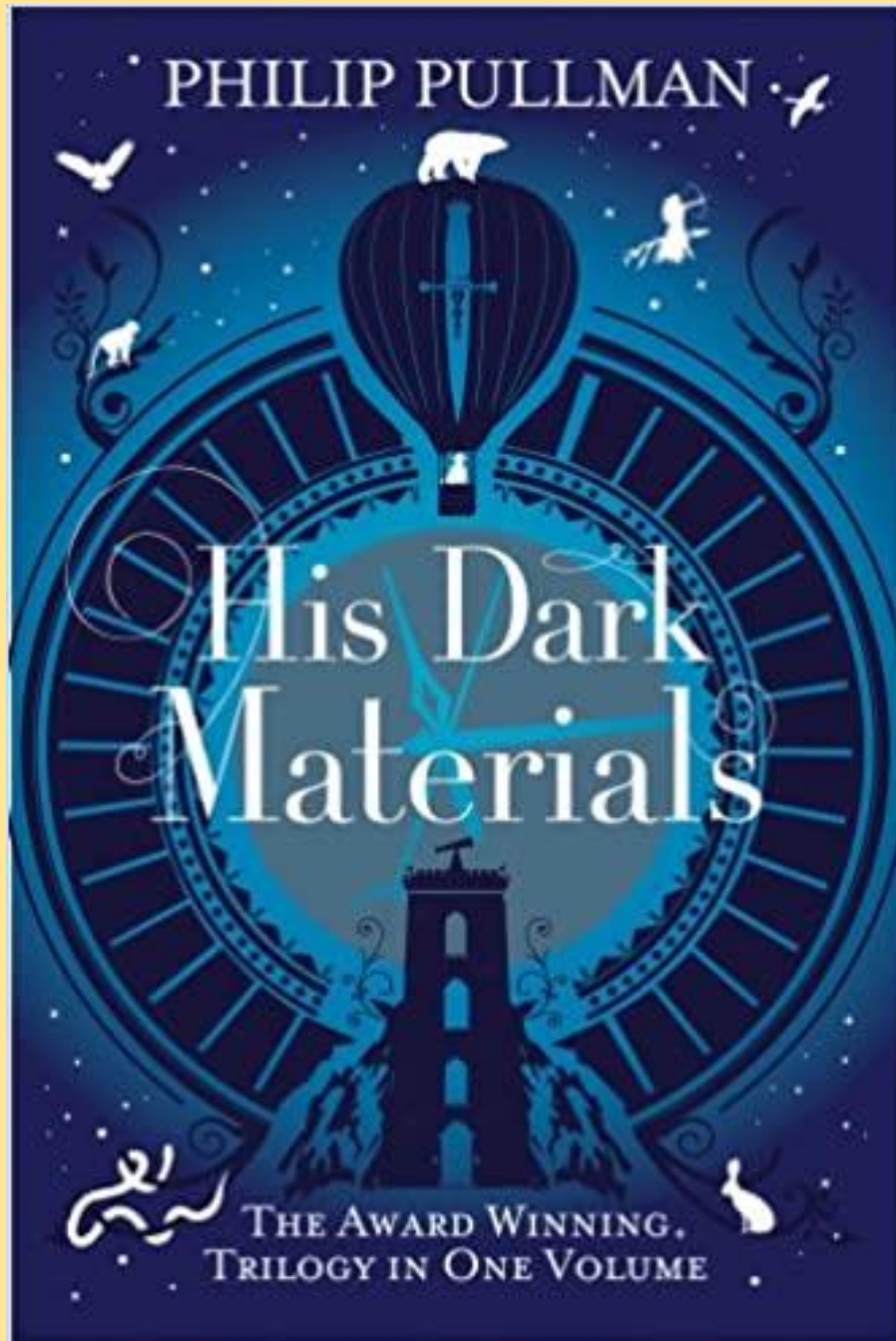


Only You Can Save Mankind by Terry Pratchett

The first book in the Johnny Maxwell trilogy.

As the mighty alien fleet from the latest computer game thunders across the screen, Johnny prepares to blow them into the usual million pieces. And they send him a message: *We surrender.*

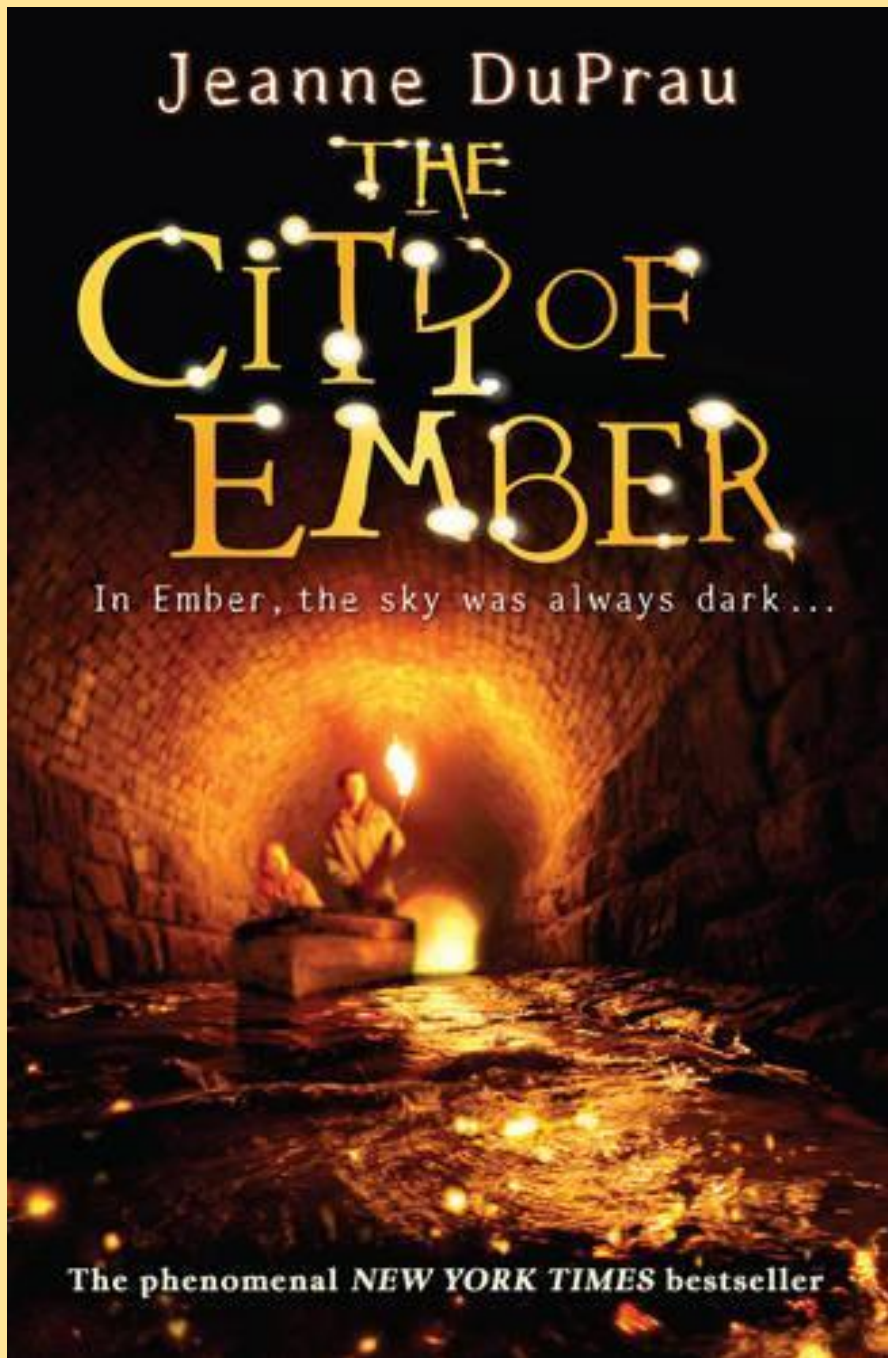
They're not supposed to do that!



His Dark Materials by Philip Pullman

Lyra lives amongst the scholars at Jordon College, Oxford, raised by the scholars and her uncle Lord Asriel. Whilst at the college Lyra overhears her uncle talking about a mysterious substance he is researching called 'Dust'.

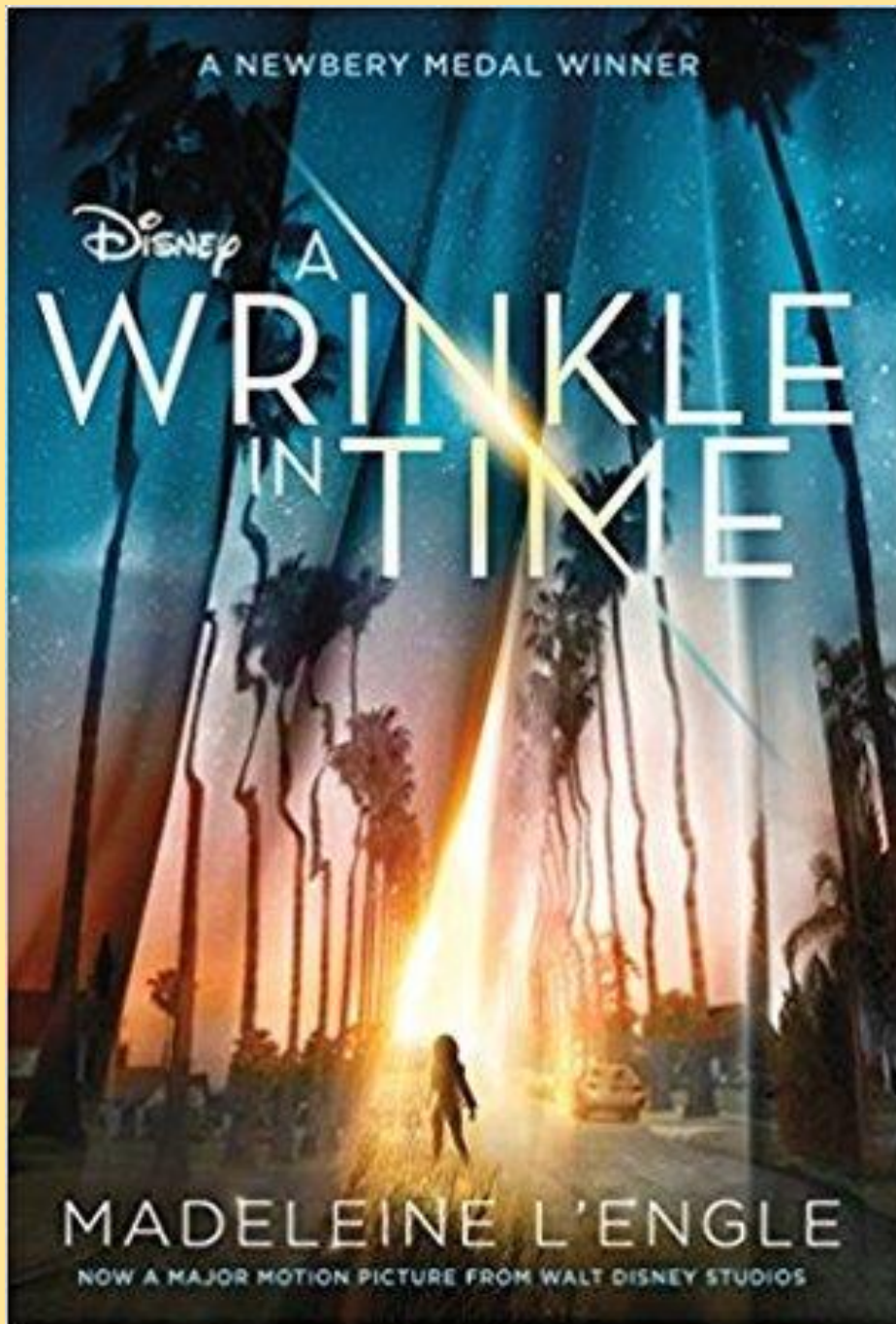
Lyra becomes increasingly curious about 'Dust' and must know more; doing so causes her to be catapulted into a world beyond anything she should have imagined.



The City of Ember by Jeanne DuPrau

Hundreds of years ago, the city of Ember was created by the Builders to contain everything needed for human survival. It worked - but now the storerooms are almost out of food, crops are blighted, corruption is spreading through the city and worst of all - the lights are failing.

Soon Ember could be engulfed by darkness. But when two children discover fragments of an ancient parchment, they begin to wonder if there could be a way out of Ember. Can they decipher the words from long ago and find a new future for everyone?



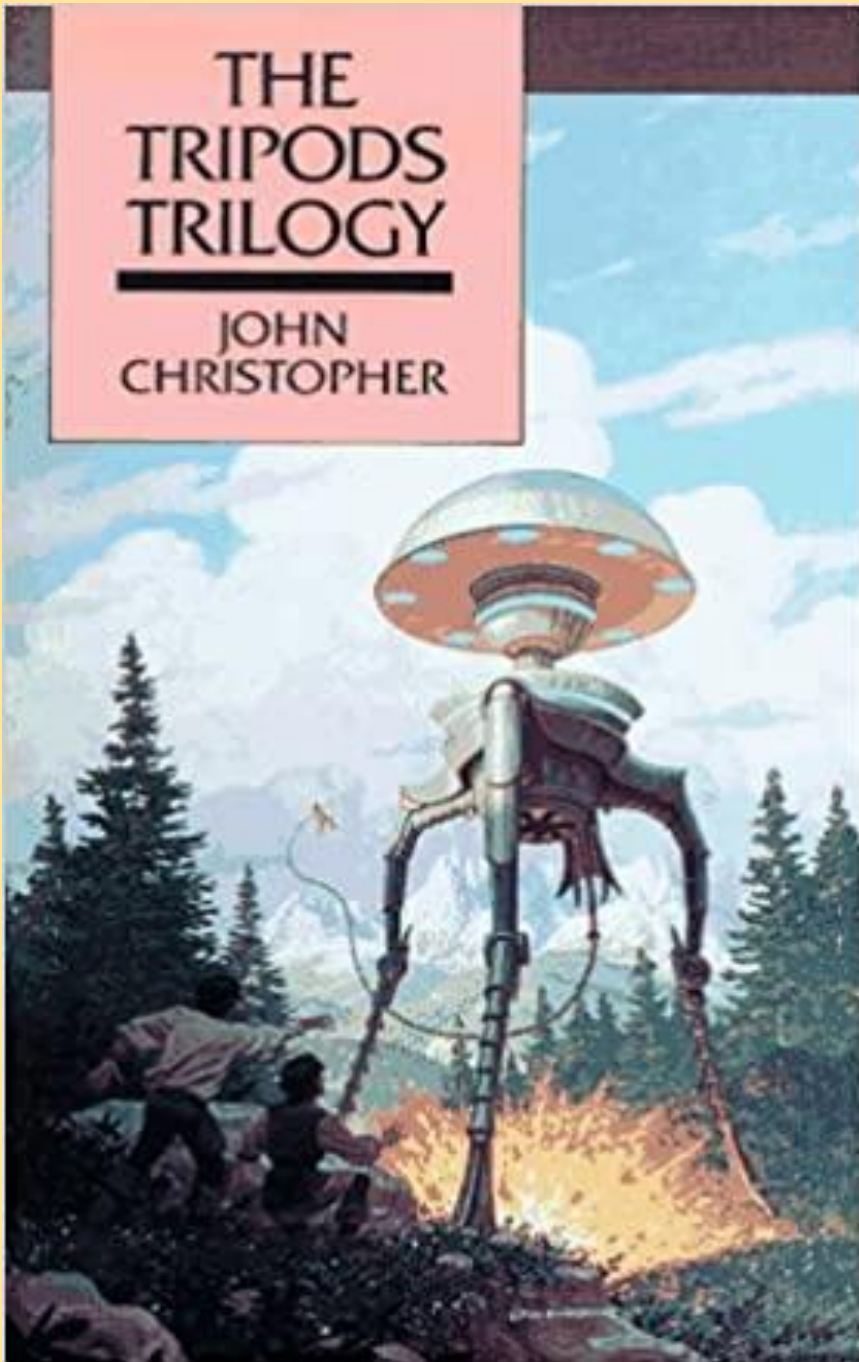
A Wrinkle In Time by Madeleine L'Engle

When Charles and Meg Murry go searching through a 'wrinkle in time' for their lost father, they find themselves on an evil planet where all life is enslaved by a huge pulsating brain known as 'It'.

Meg, Charles and their friend Calvin embark on a cosmic journey helped by the funny and mysterious trio of guardian angels, Mrs Whatsit, Mrs Who and Mrs Which. Together they must find the weapon that will defeat It.

THE TRIPODS TRILOGY

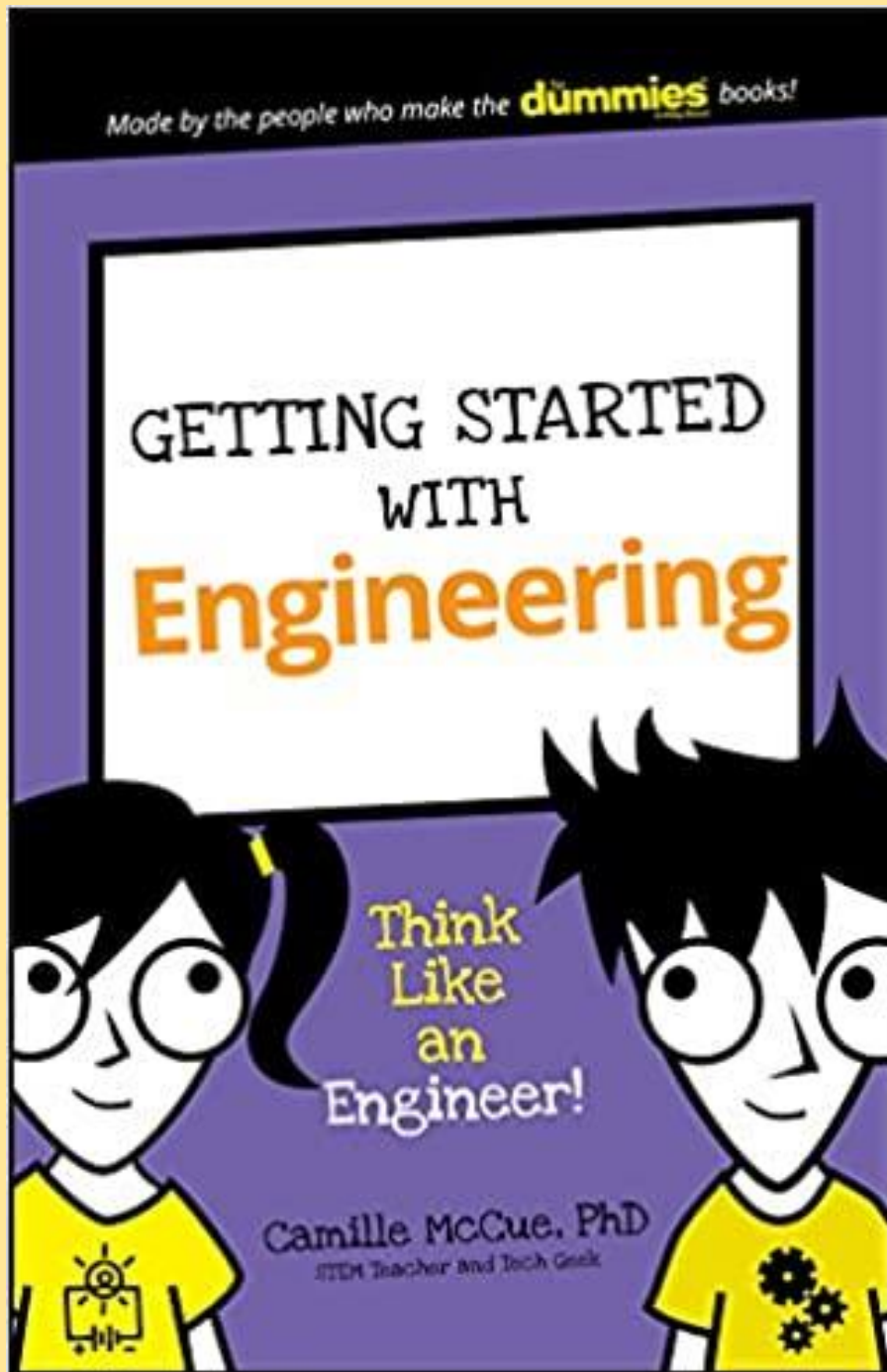
JOHN
CHRISTOPHER



The Tripods by John Christopher

Nobody knows how long it has been since the Tripods came. Nobody remembers life on Earth before they enslaved it. Humans live in scattered farms and villages, kept quiet and obedient by the mind-controlling Caps implanted when they reach their teens.

Will Parker's time is fast approaching - but a chance encounter with a madman convinces him that it may still be possible to resist the alien masters. So begins an epic tale of survival and defiance - and Will's journey to the White Mountains.



Getting Started With Engineering by Camille McCue

Engineers are experts on how things work. This book is your first step to developing the skills you need to design and build like an engineer. Tinker with fun projects that apply the Engineering Cycle to solve real-world problems.

Load the bridge — design a virtual bridge then build and test a fun pasta model

Alien invasion — design and craft a wearable toy using an electronic circuit and 3D printing

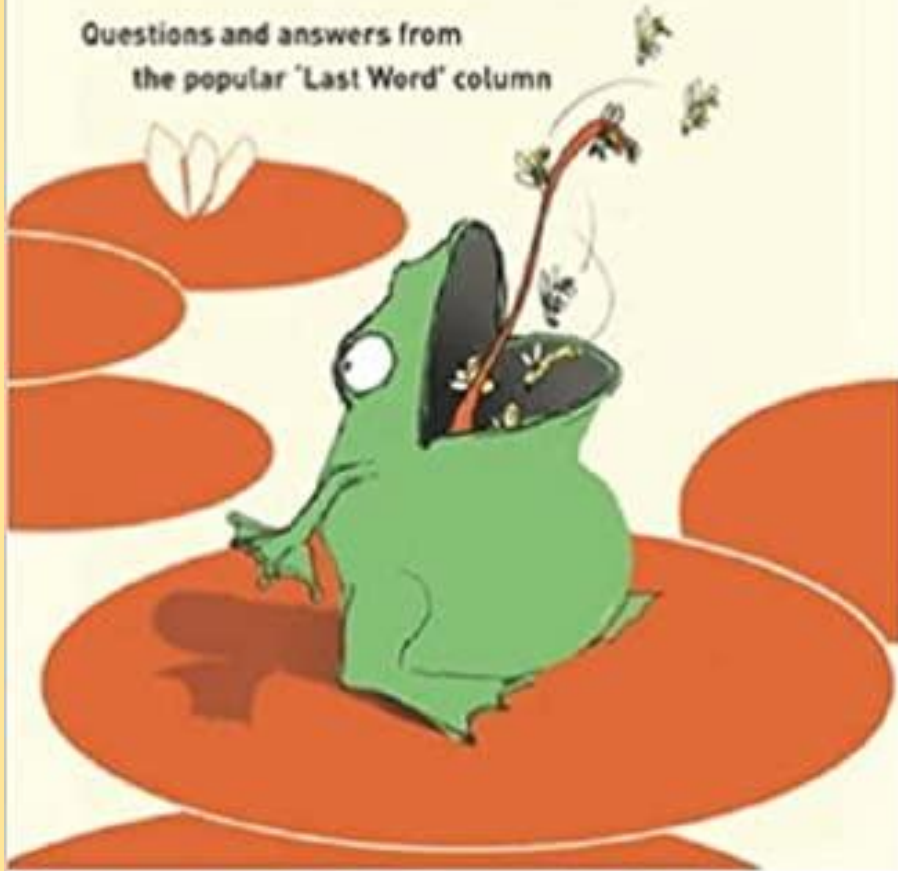
Ride the coaster — construct a tiny roller coaster with drops, twists, and loops

NewScientist

Does Anything Eat Wasps?

AND 101 OTHER QUESTIONS

Questions and answers from
the popular 'Last Word' column



Does Anything Eat Wasps? by The New Scientist

Every year, readers send in thousands of questions to *New Scientist*, the world's best-selling science weekly, in the hope that the answers to them will be given in the 'Last Word' column - regularly voted the most popular section of the magazine.

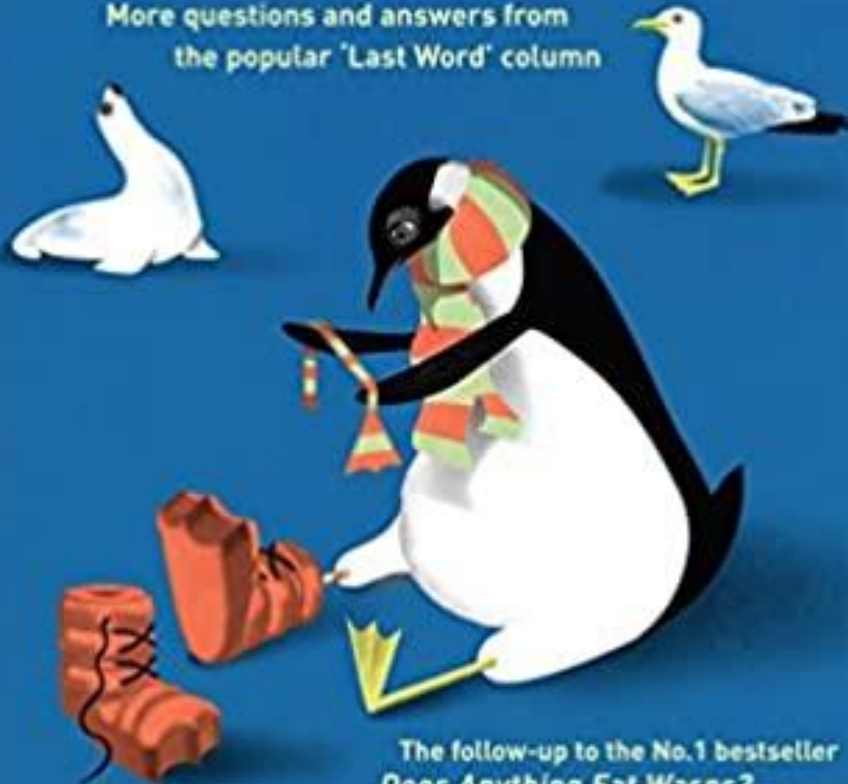
Does Anything Eat Wasps? is a collection of the best that have appeared, including: Why can't we eat green potatoes? Does a compass work in space? Why do all the local dogs howl at emergency sirens? *New Scientist's* 'Last Word' celebrates all questions - this selection of the best is popular science at its most entertaining and enlightening.

NewScientist

Why Don't Penguins' Feet Freeze?

AND 101 OTHER QUESTIONS

More questions and answers from
the popular 'Last Word' column



The follow-up to the No.1 bestseller
Does Anything Eat Wasps?

Why Don't Penguins' Feet Freeze? by The New Scientist

The latest compilation of readers' answers to the questions in the 'Last Word' column of New Scientist, the world's best-selling science weekly.

Following the phenomenal success of *Does Anything Eat Wasps?* - this new collection includes recent answers never before published in book form, and also old favourites from the column's early days.

NewScientist

Do Polar Bears Get Lonely?

and 101 other intriguing science questions

More questions
and answers
from the popular
'Last Word' column

The sequel to the No.1 bestseller,
Why Don't Penguins' Feet Freeze?

Do Polar Bears Get Lonely? by the New Scientist

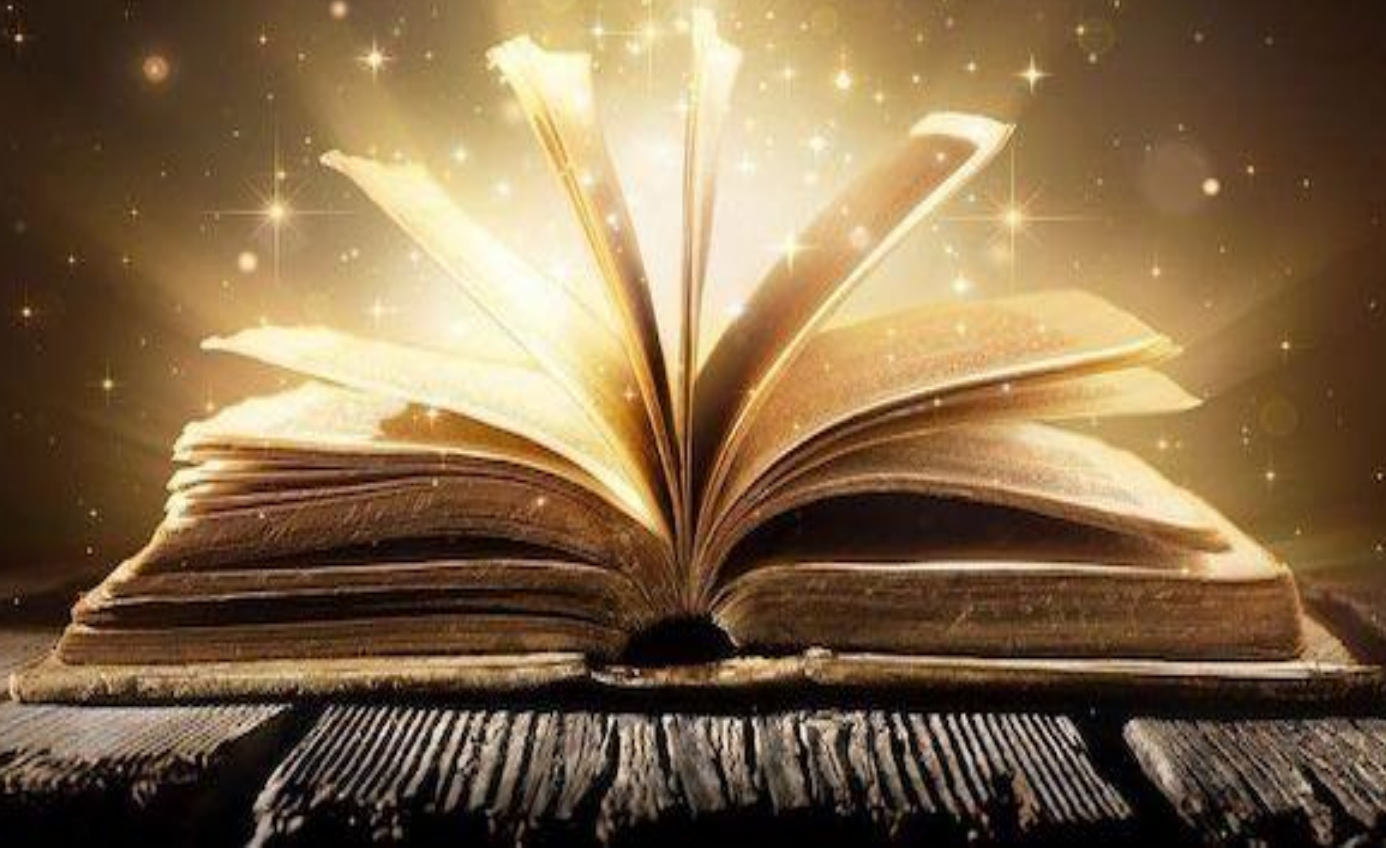
As usual, the simplest questions often have the most complex answers - while some that seem the knottiest have very simple explanations.

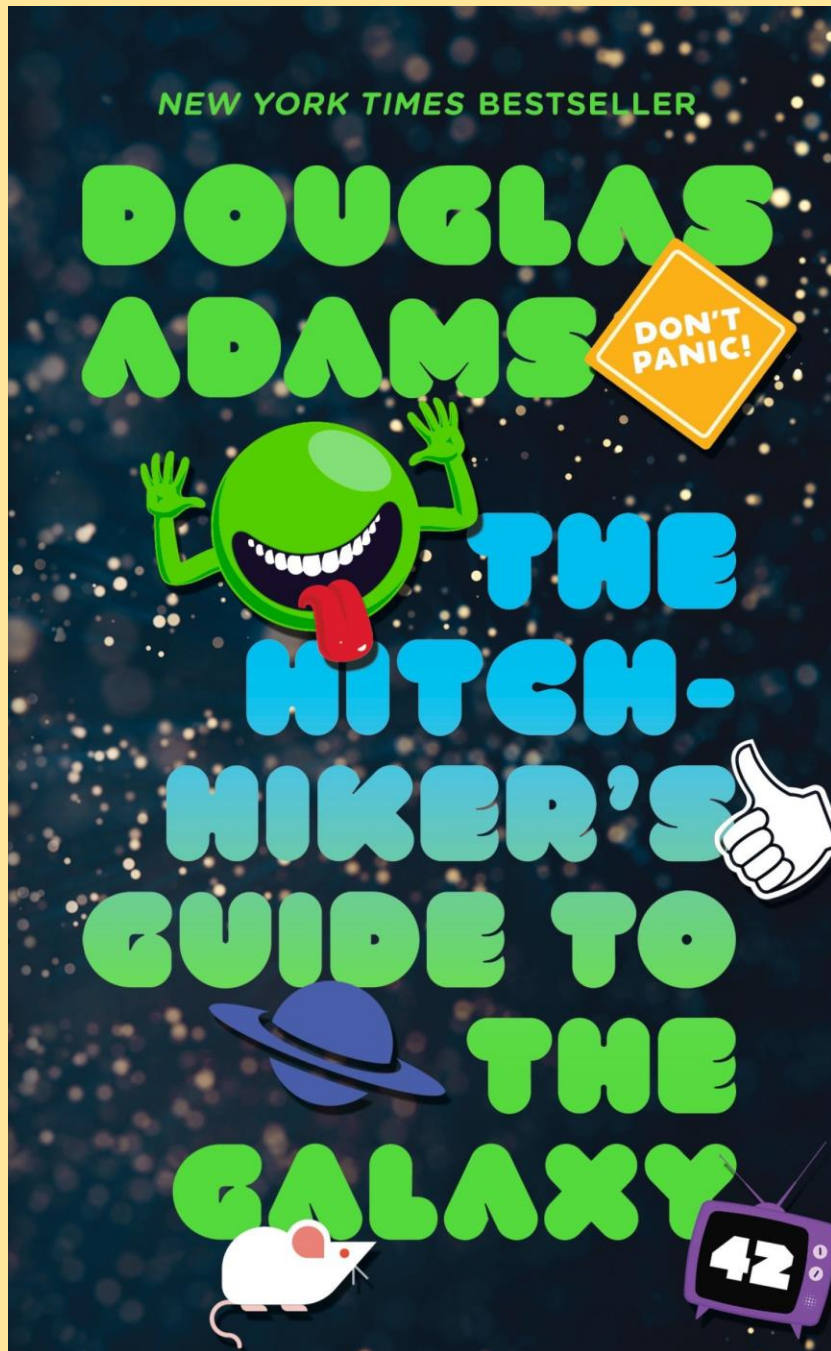
New Scientist's 'Last Word' is regularly voted the magazine's most popular section as it celebrates all questions - the trivial, idiosyncratic, baffling and strange. This all-new and eagerly awaited selection of the best again presents popular science at its most entertaining and enlightening.



KS4 Recommended Reading

Years 10 and 11



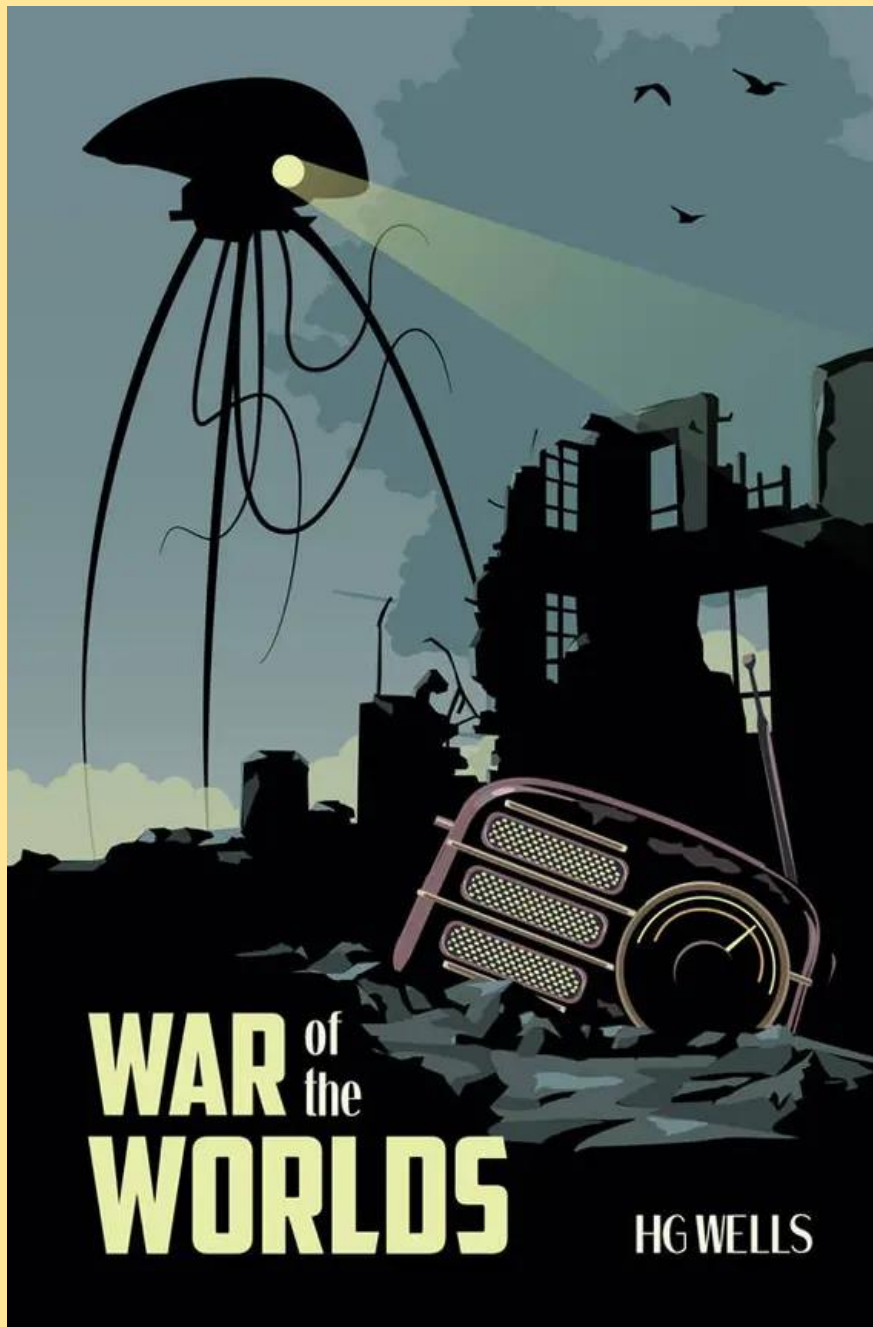


The Hitch-Hiker's Guide To The Galaxy by Douglas Adams

It's an ordinary Thursday lunchtime for Arthur Dent until his house gets demolished. The Earth follows shortly afterwards to make way for a new hyperspace express route, and his best friend has just announced that he's an alien.

At this moment, they're hurtling through space with nothing but their towels and an innocuous-looking book inscribed, in large friendly letters, with the words: DON'T PANIC.

The weekend has only just begun...



War Of The Worlds by HG Wells

An all-time classic work of fiction.

When an army of invading Martians lands in Victorian England, panic and terror seize the population.

As the aliens traverse the country in huge three-legged machines, incinerating all in their path with a heat ray and spreading noxious toxic gases, the people of the Earth must come to terms with the prospect of the end of human civilization and the beginning of Martian rule.

DIVERGENT AND INSURGENT
MAJOR MOTION PICTURES



DIVERGENT

No. 1 *New York Times* bestselling author
VERONICA ROTH



Divergent by Veronica Roth

The first book in the DIVERGENT series.

In the world of Divergent, society is divided into five factions – Candor, Abnegation, Dauntless, Amity and Erudite.

Every year, all sixteen-year-olds must select the faction to which they will devote the rest of their lives. For Beatrice Prior, the decision is between staying with her family and being who she really is. Her choice shocks everyone, including herself.

Bill Bryson

A Short History of Nearly Everything



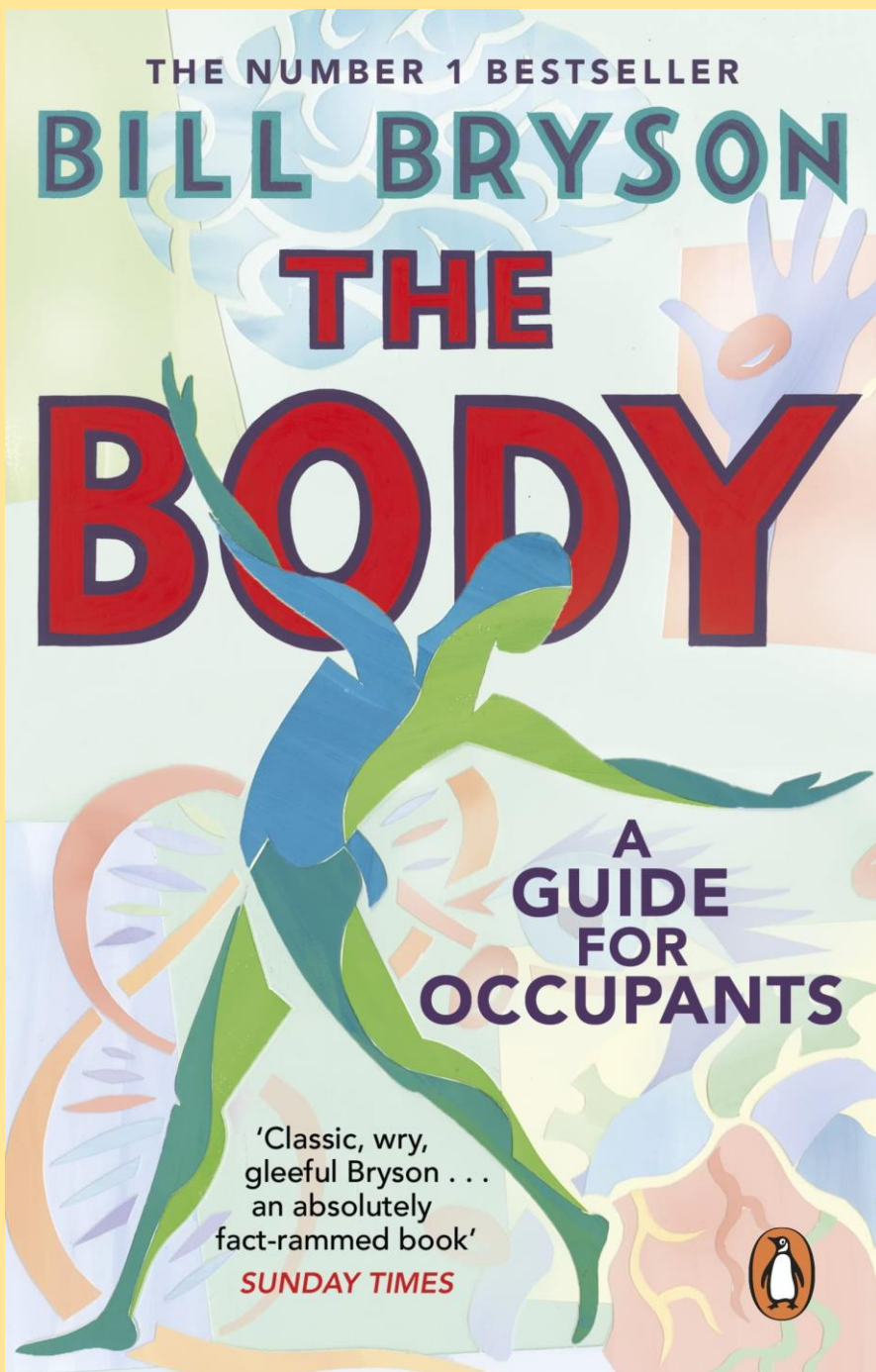
'Truly impressive... it's hard to imagine a better rough guide to science'

John Weller, *Guardian*

A Short History Of Nearly Everything by Bill Bryson

Bill Bryson's challenge is to take subjects that normally bore the pants off most of us, like geology, chemistry and particle physics, and see if there isn't some way to render them comprehensible to people who have never thought they could be interested in science.

The ultimate eye-opening journey through time and space, *A Short History of Nearly Everything* is the biggest-selling popular science book of the 21st century, and reveals the world in a way most of us have never seen it before.



The Body: A Guide For Occupants by Bill Bryson

Bill Bryson sets off to explore the human body, how it functions and its remarkable ability to heal itself. Full of extraordinary facts and astonishing stories The Body: A Guide for Occupants is a brilliant, often very funny attempt to understand the miracle of our physical and neurological make up.

A wonderful successor to A Short History of Nearly Everything, this book will have you marvelling at the form you occupy, and celebrating the genius of your existence, time and time again.

The *Sunday Times* top ten bestseller

Bad Science

Ben Goldacre

'A fine lesson in how to skewer the enemies of reason and the peddlers of cant and half-truths'
The Economist



'You'll laugh your head off, then throw all those expensive health foods in the bin'
Observer, Book of the Year

INCLUDES A BRILLIANT, SHOCKING AND
PREVIOUSLY UNPUBLISHABLE NEW CHAPTER

Bad Science by Ben Goldacre

Ben Goldacre's wise and witty bestseller lifts the lid on quack doctors, flaky statistics, scaremongering journalists and evil pharmaceutical corporations.

Since 2003 Dr Ben Goldacre has been exposing dodgy medical data in his popular Guardian column. In this eye-opening book he takes on the MMR hoax and misleading cosmetics ads, acupuncture and homeopathy, vitamins and mankind's vexed relationship with all manner of 'toxins'. Full spleen and satire, Ben Goldacre takes us on a hilarious, invigorating and ultimately alarming journey through the bad science we are fed daily by hacks and quacks.

THE UK AND US No.1 BESTSELLER

'NERD
ROYALTY'
BEN GOLDACRE

'BRILLIANT'
ROLLING STONE



SERIOUS SCIENTIFIC ANSWERS
to Absurd Hypothetical Questions

what if?

RANDALL MUNROE
creator of xkcd

ANNIVERSARY EDITION

What If? by Randall Munroe

From the creator of the wildly popular xkcd.com, hilarious and informative answers to important questions you probably never thought to ask.

How fast can you hit a speed bump, driving, and live? When will Facebook contain more profiles of dead people than living? How many humans would a T Rex rampaging through New York need to eat a day?

In pursuit of answers, Munroe runs computer simulations, pores over stacks of declassified military research memos, solves differential equations and consults nuclear reactor operators. His responses are masterpieces of clarity and hilarity and often predict the complete annihilation of humankind, or at least a really big explosion.

'The sort of science book one always hopes for ... Packed with detail, but clear.
Reading it will make you feel clever' William Leith, *Daily Telegraph*.

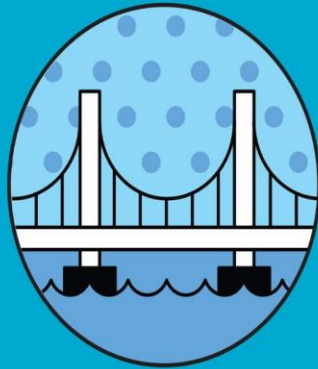
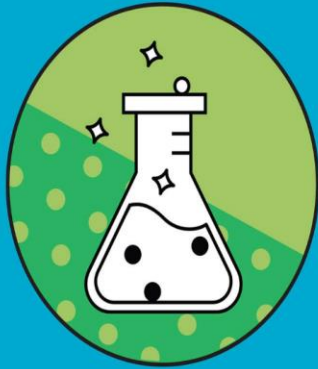


*The Most Intriguing
Scientific Mysteries
of Our Times*

13 Things That Don't Make Sense by Michael Brooks

Science starts to get interesting when things don't make sense. Even today, there are experimental results that the most brilliant scientists can neither explain nor dismiss. In the past, similar anomalies have revolutionised our world: in the 16th century, a set of celestial irregularities led Copernicus to realise that the Earth goes around the sun and not the reverse.

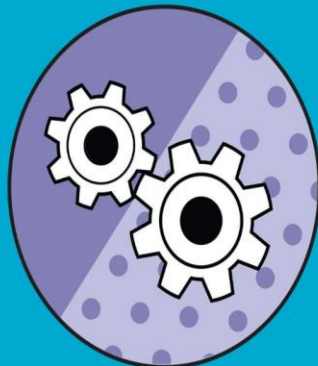
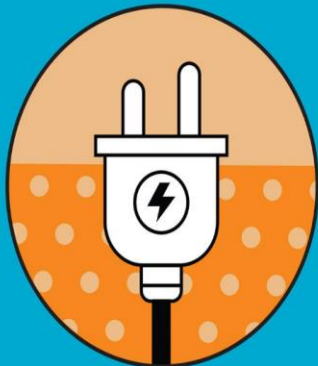
In *13 Things That Don't Make Sense*, Michael Brooks meets 13 modern-day anomalies that may become tomorrow's breakthroughs. Spanning fields from chemistry to cosmology, psychology to physics, Michael Brooks thrillingly captures the excitement and controversy of the scientific unknown.



ENGINEERING FOR TEENS

A Beginner's Book for Aspiring Engineers

DR. PAMELA McCAULEY



Engineering For Teens by Dr. Pamela McCauley

The job of an engineer is to solve all sorts of complex challenges facing the world while improving our lives through creative, innovative ideas. This engineering book for teens gives you a look into what engineers do and how they drive society forward through math and science.

From designing tablets and smartphones to reimagining the way we collect and store renewable energy, this engineering book for teens introduces you to the major engineering disciplines and their distinct specialties, famous engineers throughout history, and more.