

A Mind For Numbers How To Excel At Math And Science Even If You Flunked Algebra

"As a mother of three, this book's practical road map for helping our kids learn independently is invaluable. This should be a must-read for all parents." --Jenna Bush Hager

Drawing on extensive experience as classroom teachers and the directors of their highly regarded tutoring business, Abby and Brian address a range of common frustrations caused by homework. They answer the most pressing questions on every parent's mind: How much should I get involved, what does constructive help look like, and how can I help my child work independently? Taking the Stress out of Homework breaks down for parents exactly when and how to offer homework support. Whether your child's stress point is executive functioning--the ability to plan or organize--or a subject-specific struggle in math, reading, writing, or standardized test-preparation, Abby and Brian use real-life stories to provide individualized, actionable advice. At the center of Abby and Brian's philosophy is encouraging students to break free of the "let's get to the answer already so that we can be done with the assignment" mindset; they focus instead on a process-oriented approach that fosters engagement and self-sufficiency both in and out of school. Filled with expert tips about how to build executive functioning and content skills, Abby and Brian share stress-reducing best practices so homework not only supports what kids are learning, but also helps build confidence and skills that last a lifetime.

An engineering professor who started out doing poorly in mathematical and technical subjects in school offers tools, tips and techniques to learning the creative and analytical thought processes that will lead to achievement in math and science. Original.

Life is not what you get out of it . . . it's what you put back in. Yet our current means for summarizing life's work, from resumes to salaries, are devoid of what matters most. This is why the work we do is often bad for our wellbeing, when it should be making us happier and healthier. What are the most meaningful contributions we can make? This is Life's Great Question. Life is about what you do that improves the world around you. It is about investing in the development of other people. And it is about efforts that will continue to grow when you are gone. Life's Great Question will show you how to make your work and life more meaningful, and greatly boost your wellbeing. In this remarkably quick read, author Tom Rath describes how finding your greatest contribution is far more effective than following talent or passion alone. More than a book, each copy includes a code for an online program that identifies the most significant contributions you can make. This deeply practical book will alter how you look at your work and change the way you live each day.

The old saying goes, "To the man with a hammer, everything looks like a nail." But anyone who has done any kind of project knows a hammer often isn't enough. The more tools you have at your disposal, the more likely you'll use the right tool for the job - and get it done right. The same is true when it comes to your thinking. The quality of your outcomes depends on the mental models in your head. And most people are going through life with little more than a hammer. Until now. The Great Mental Models: General Thinking Concepts is the first book in The Great Mental Models series designed to upgrade your thinking with the best, most useful and powerful tools so you always have the right one on hand. This volume details nine of the most versatile, all-purpose mental models you can use right away to improve your decision making, productivity, and how clearly you see the world. You will discover what forces govern the universe and how to focus your efforts so you can harness them to your advantage, rather than fight with them or worse yet- ignore them. Upgrade your mental toolbox and get the first volume today. AUTHOR BIOGRAPHY Farnam Street (FS) is one of the world's fastest growing websites, dedicated to helping our readers master the best of what other people have already figured out. We curate, examine and explore the timeless ideas and mental models that history's brightest minds have used to live lives of purpose. Our readers include students, teachers, CEOs, coaches, athletes, artists, leaders, followers, politicians and more. They're not defined by gender, age, income, or politics but rather by a shared passion for avoiding problems, making better decisions, and lifelong learning. AUTHOR HOME Ottawa, Ontario, Canada A surprisingly simple way for students to master any subject--based on one of the world's most popular online courses and the bestselling book A Mind for Numbers A Mind for Numbers and its wildly popular online companion course "Learning How to Learn" have empowered more than two million learners of all ages from around the world to master subjects that they once struggled with. Fans often wish they'd discovered these learning strategies earlier and ask how they can help their kids master these skills as well. Now in this new book for kids and teens, the authors reveal how to make the most of time spent studying. We all have the tools to learn what might not seem to come naturally to us at first--the secret is to understand how the brain works so we can unlock its power. This book explains:

- Why sometimes letting your mind wander is an important part of the learning process
- How to avoid "rut think" in order to think outside the box
- Why having a poor memory can be a good thing
- The value of metaphors in developing understanding
- A simple, yet powerful, way to stop procrastinating

Filled with illustrations, application questions, and exercises, this book makes learning easy and fun.

Mindshift reveals how we can overcome stereotypes and preconceived ideas about what is possible for us to learn and become. At a time when we are constantly being asked to retrain and reinvent ourselves to adapt to new technologies and changing industries, this book shows us how we can uncover and develop talents we didn't realize we had--no matter what our age or background. We're often told to "follow our passions." But in Mindshift, Dr. Barbara Oakley shows us how we can broaden our passions. Drawing on the latest neuroscientific insights, Dr. Oakley shepherds us past simplistic ideas of "aptitude" and "ability," which provide only a snapshot of who we are now--with little consideration about how we can change. Even seemingly "bad" traits, such as a poor memory, come with hidden advantages--like increased creativity. Profiling people from around the world who have overcome learning limitations of all kinds, Dr. Oakley shows us how we can turn perceived weaknesses, such as impostor syndrome and advancing age, into strengths.

People may feel like they're at a disadvantage if they pursue a new field later in life; yet those who change careers can be fertile cross-pollinators: They bring valuable insights from one discipline to another. Dr. Oakley teaches us strategies for learning that are backed by neuroscience so that we can realize the joy and benefits of a learning lifestyle. Mindshift takes us deep inside the world of how people change and grow. Our biggest stumbling blocks can be our own preconceptions, but with the right mental insights, we can tap into hidden potential and create new opportunities.

This volume is a textbook for a year-long graduate level course in All research universities have applied mathematics for scientists and engineers. such a course, which could be taught in different departments, such as mathematics, physics, or engineering. I volunteered to teach this course when I realized that my own research students did not learn much in this course at my university. Then I learned that the available textbooks were too introductory. While teaching this course without an assigned text, I wrote up my lecture notes and gave them to the students. This textbook is a result of that endeavor. When I took this course many, many, years ago, the primary references were the two volumes of P. M. Morse and H. Feshbach, *Methods of Theoretical Physics* (McGraw-Hill, 1953). The present text returns the contents to a similar level, although the syllabus is quite different than given in this venerable pair of books.

How do we really think about the world? We may use words to tell stories about it or draw pictures to represent it, but one thing we do far more than either of those is make calculations of the things that are in it—and to do that we use numbers. Numbers give shape and texture to almost everything we feel, say, dream, and do, a fact that Steven Connor explores in this qualitative assessment of the quantifiable. Looking at how numbers play a part in nearly every aspect of our lives, he offers a fascinating portrait of the world as a world of numbers. Connor explores a host of thought-provoking aspects of our numerical existence. He looks at the unexpected oddities that shape the loneliest number—the number one. He looks at counting as a human phenomenon and the ways we negotiate crowds, swarms, and multitudes. He demonstrates the work of calculation as it lies at the heart of poetry, jokes, painting, and music. He shows how we use numbers to adjust to uncertainty and chance and how they help us visualize the world in diagrammatic ways, and he unveils how numbers even help us think about death. Altogether, Connor brings into relief an aspect of our lives so ubiquitous that we often can't see it, unveiling a rich new way of thinking about our existence.

If you want to be muscular, lean, and strong as quickly as possible without steroids, good genetics, or wasting ridiculous amounts of time in the gym and money on supplements...then you want to read this book. Here's the deal: Getting into awesome shape isn't nearly as complicated as the fitness industry wants you to believe. You don't need to spend hundreds of dollars per month on the worthless supplements that steroid freaks shill in advertisements. You don't need to constantly change up your exercise routines to "confuse" your muscles. I'm pretty sure muscles lack cognitive abilities, but this approach is a good way to just confuse you instead. You don't need to burn through buckets of protein powder every month, stuffing down enough protein each day to feed a third world village. You don't need to toil away in the gym for a couple of hours per day, doing tons of sets, supersets, drop sets, giant sets, etc. (As a matter of fact, this is a great way to stunt gains and get nowhere.) You don't need to grind out hours and hours of boring cardio to shed ugly belly fat and love handles and get a shredded six-pack. (How many flabby treadmillers have you come across over the years?) You don't need to completely abstain from "cheat" foods while getting down to single-digit body fat percentages. If you plan cheat meals correctly, you can actually speed your metabolism up and accelerate fat loss. In this book you're going to learn something most guys will never know: The exact formula of exercise and eating that makes putting on 10 to 15 pounds of quality lean mass a breeze...and it only takes 8-12 weeks. This book reveals secrets like... The 6 biggest myths and mistakes of building muscle that stunt 99% of guys' muscle gains. (These BS lies are pushed by all the big magazines and even by many trainers.) How to get a lean, cut physique that you love (and that girls drool over) by spending no more than 5 percent of your time each day. The 4 laws of muscle growth that, when applied, turn your body into an anabolic, muscle-building machine. You'll be shocked at how easy it really is to get big once you know what you're doing... How to develop a lightning-fast metabolism that burns up fat quickly and leaves you feeling full of energy all day long. The carefully-selected exercises that deliver MAXIMUM results for your efforts, helping you build a big, full chest, a wide, tapered back, and bulging biceps. A no-BS guide to supplements that will save you hundreds if not THOUSANDS of dollars each year that you would've wasted on products that are nothing more than bunk science and marketing hype. How to get shredded while still indulging in the "cheat" foods that you love every week like pasta, pizza, and ice cream. And a whole lot more! The bottom line is you CAN achieve that "Hollywood hunk" body without having your life revolve around it--no long hours in the gym, no starving yourself, no grueling cardio that turns your stomach. Imagine, just 12 weeks from now, being constantly complimented on how you look and asked what the heck you're doing to make such startling gains. Imagine enjoying the added benefits of high energy levels, no aches and pains, better spirits, and knowing that you're getting healthier every day. SPECIAL BONUS FOR READERS! With this book you'll also get a free 75-page bonus report from the author called "The Year One Challenge." In this bonus report, you'll learn exactly how to train, eat, and supplement to make maximum gains in your first year of training. By applying what you learn in the book and in this report, you can make more progress in one year than most guys make in three, four, or even five (seriously!). Scroll up, click the "Buy" button now, and begin your journey to a bigger, leaner, and stronger you!

Banish math anxiety and give students of all ages a clear roadmap to success *Mathematical Mindsets* provides practical strategies and activities to help teachers and parents show all children, even those who are convinced that they are bad at math, that they can enjoy and succeed in math. Jo Boaler—Stanford researcher, professor of math education, and expert on math learning—has studied why students don't like math and often fail in math classes. She's followed thousands of students through middle and high schools to study how they learn and to find the most effective ways to unleash the math potential in all students. There is a clear gap between what research has shown to work in teaching math and what happens in schools and at home. This book bridges that gap by turning research findings into practical activities and advice. Boaler translates Carol Dweck's concept of 'mindset' into math teaching and parenting strategies, showing how students can go from self-doubt to strong self-confidence, which is so important to math learning. Boaler reveals the steps that must be taken by schools and parents to improve math education for all. *Mathematical Mindsets*: Explains how the brain processes mathematics learning Reveals how to turn mistakes and struggles into valuable learning experiences Provides examples of rich mathematical activities to replace rote learning Explains ways to give students a positive math mindset Gives examples of how assessment and grading policies need to change to support real understanding Scores of students hate and fear math, so they end up leaving school without an understanding of basic mathematical concepts. Their evasion and departure hinders math-related pathways and STEM career opportunities. Research has shown very clear methods to change this phenomena, but the information has been confined to research journals—until now. *Mathematical Mindsets* provides a proven, practical roadmap to mathematics success for any student at any age.

"Our understanding of how the human brain performs mathematical calculations is far from complete. In *The Number Sense*, Stanislas Dehaene offers readers an enlightening exploration of the mathematical mind. Using research showing that human infants have a rudimentary number sense, Dehaene suggests that this sense is as basic as our perception of color, and that it is wired into the brain. But how then did we leap from this basic number ability to trigonometry, calculus, and beyond? Dehaene shows that it was the invention of symbolic systems of numerals that started us on the climb to higher mathematics. Tracing the history of numbers, we learn that in early times, people indicated numbers by pointing to part of their bodies, and how Roman numerals were replaced by modern numbers. On the way, we also discover many fascinating facts: for example, because Chinese names for numbers are short, Chinese people can remember up to nine or ten digits at a time, while English-speaking people can only remember seven. A fascinating look at the crossroads where numbers and neurons intersect, *The Number Sense* offers an intriguing tour of how the structure of the brain shapes our mathematical abilities, and how math can open up a window on the human mind"--Provided by publisher.

The Little Book of Mathematical Principles provides simple, clear explanations for over 120 principles, equations, paradoxes, laws, and theorems that form the basis of modern mathematics. Making serious math simple, it explains Fibonacci numbers, Euclid's *Elements*, and Zeno's paradoxes, as well as other fundamental principles such as chaos theory, game theory, and the game of life. This book simplifies the ancient discipline of mathematics and provides fascinating answers to intriguing questions, such as: What is the greatest pyramid? and Is there a theory for stacking oranges? Written by the author of *CCEA GCSE Mathematics Higher 2* and *Advanced Level Mathematics: Mechanics*, this book is excellent either for dipping into or for reading from cover to cover for a more thorough and engaging understanding of mathematics.

A psychologist offers a detailed study of the genetic underpinnings of human thought, looking at the small number of genes that contain the instructions for building the vastly complex human brain to determine how these genes work, common misconceptions about genes, and their implications for the future of genetic engineering. 30,000 first printing.

Looking to jumpstart your GPA? Most college students believe that straight A's can be achieved only through cramming and painful all-nighters at the library. But Cal Newport knows that real straight-A students don't study harder—they study smarter. A breakthrough approach to acing academic assignments, from quizzes and exams to essays and papers, *How to Become a Straight-A Student* reveals for the first time the proven study secrets of real straight-A students across the country and weaves them into a simple, practical system that anyone can master. You will learn how to: • Streamline and maximize your study time • Conquer procrastination • Absorb the material quickly and effectively • Know which reading assignments are critical—and which are not • Target the paper topics that wow professors • Provide A+ answers on exams • Write stellar prose without the agony A strategic blueprint for success that promises more free time, more fun, and top-tier results, *How to Become a Straight-A Student* is the only study guide written by students for students—with the insider knowledge and real-world methods to help you master the college system and rise to the top of the class.

A fresh, personal, and entertaining exploration of a topic that concerns all of us: how to be more productive at work and in every facet of our lives. Chris Bailey turned down lucrative job offers to pursue a lifelong dream—to spend a year performing a deep dive experiment into the pursuit of productivity, a subject he had been enamored with since he was a teenager. After obtaining his business degree, he created a blog to chronicle a year-long series of productivity experiments he conducted on himself, where he also continued his research and interviews with some of the world's foremost experts, from Charles Duhigg to David Allen. Among the experiments that he tackled: Bailey went several weeks with getting by on little to no sleep; he cut out caffeine and sugar; he lived in total isolation for 10 days; he used his smartphone for just an hour a day for three months; he gained ten pounds of muscle mass; he stretched his work week to 90 hours; a late riser, he got up at 5:30 every morning for three months—all the while monitoring the impact of his experiments on the quality and quantity of his work. *The Productivity Project*—and the lessons Chris learned—are the result of that year-long journey. Among the counterintuitive insights Chris Bailey will teach you: • slowing down to work more deliberately; • shrinking or eliminating the unimportant; • the rule of three; • striving for imperfection; • scheduling less time for important tasks; • the 20 second rule to distract yourself from the inevitable distractions; • and the concept of productive procrastination. In an eye-opening and thoroughly engaging read, Bailey offers a treasure trove of insights and over 25 best practices that will help you accomplish more.

How math helps us solve the universe's deepest mysteries One of the great insights of science is that the universe has an underlying order. The supreme goal of physicists is to understand this order through laws that describe the behavior of the most basic particles and the forces between them. For centuries, we have searched for these laws by studying the results of experiments. Since the 1970s, however, experiments at the world's most powerful atom-smashers have offered few new clues. So some of the world's leading physicists have looked to a different source of insight: modern mathematics. These physicists are sometimes accused of doing 'fairy-tale physics', unrelated to the real world. But in *The Universe Speaks in Numbers*, award-winning science writer and biographer Farnelo argues that the physics they are doing is based squarely on the well-established principles of quantum theory and relativity, and part of a tradition dating back to Isaac Newton. With unprecedented access to some of the world's greatest scientific minds, Farnelo offers a vivid, behind-the-scenes account of the blossoming relationship between mathematics and physics and the research that could revolutionize our understanding of reality. A masterful account of some of the most groundbreaking ideas in physics in the past four decades. *The Universe Speaks in Numbers* is essential reading for anyone interested in the quest to discover the fundamental laws of nature.

From rocket scientists to code breakers, discover the incredibly inspiring stories of more than 30 women who fought through the obstacles, shattered the stereotypes, and embraced their STEM passions. Prepare to be inspired. With more than 200 photos and original interviews with several of the amazing women covered, *Power in Numbers: The Rebel Women of Mathematics* is a full-color volume that takes aim at the forgotten influence of women on the development of mathematics over the last two millennia. Each biography reveals the amazing life of a different female mathematician, from her childhood and early influences, to the obstacles she faced and the great achievements she made in spite of them. Learn how: After her father terminated her math lessons, Sofia Kovalevskaya snuck algebra books into her bed to read at night. Emmy Noether became an invaluable resource to Albert Einstein while she was in the Navy. Native American rocket scientist Mary Golda Ross developed designs for fighter jets and missiles in a top-secret unit. Katherine Johnson's life-or-death calculations at NASA meant that astronauts such as Alan Shepard and John Glenn made it home alive. Shakuntala Devi multiplied massive numbers in her head so her family could eat at night. Pamela Harris proved her school counselors wrong when they told her she would only succeed as a bilingual secretary. Carla Cotwright-Williams began her life in the dangerous streets of South-Central Los Angeles before skyrocketing to a powerful career with the Department of Defense in Washington DC. One thing uniting these women's stories is that at some point on their journeys, someone believed in them; someone made them think the impossible was perhaps not so impossible. May their stories empower the next generation of STEM rebels to continue advancing mathematical theory, bringing awareness to the

field, and increasing our Power in Numbers.

How our intuitive understanding of numbers is deeply rooted in our biology, traceable through both evolution and development. Humans' understanding of numbers is intuitive. Infants are able to estimate and calculate even before they learn the words for numbers. How have we come to possess this talent for numbers? In *A Brain for Numbers*, Andreas Nieder explains how our brains process numbers. He reports that numerical competency is deeply rooted in our biological ancestry; it can be traced through both the evolution of our species and the development of our individual minds. It is not, as it has been traditionally explained, based on our ability to use language. We owe our symbolic mathematical skills to the nonsymbolic numerical abilities that we inherited from our ancestors. The principles of mathematics, Nieder tells us, are reflections of the innate dispositions wired into the brain. Nieder explores how the workings of the brain give rise to numerical competence, tracing flair for numbers to dedicated “number neurons” in the brain. Drawing on a range of methods including brain imaging techniques, behavioral experiments, and twin studies, he outlines a new, integrated understanding of the talent for numbers. Along the way, he compares the numerical capabilities of humans and animals, and discusses the benefits animals reap from such a capability. He shows how the neurobiological roots of the brain's nonverbal quantification capacity are the evolutionary foundation of more elaborate numerical skills. He discusses how number signs and symbols are represented in the brain; calculation capability and the “neuromythology” of mathematical genius; the “start-up tools” for counting and developmental of dyscalculia (a number disorder analogous to the reading disorder dyslexia); and how the brain processes the abstract concept of zero.

Discusses the best methods of learning, describing how rereading and rote repetition are counterproductive and how such techniques as self-testing, spaced retrieval, and finding additional layers of information in new material can enhance learning.

Have you ever heard of a person who left you wondering, "How could someone be so twisted? So evil?" Prompted by clues in her sister's diary after her mysterious death, author Barbara Oakley takes the reader inside the head of the kinds of malevolent people you know, perhaps all too well, but could never understand. Starting with psychology as a frame of reference, Oakley uses cutting-edge images of the working brain to provide startling support for the idea that "evil" people act the way they do mainly as the result of a dysfunction. In fact, some deceitful, manipulative, and even sadistic behavior appears to be programmed genetically—suggesting that some people really are born to be bad. Oakley links the latest findings of molecular research to a wide array of seemingly unrelated historical and current phenomena, from the harems of the Ottomans and the chummy jokes of "Uncle Joe" Stalin, to the remarkable memory of investor Warren Buffet. Throughout, she never loses sight of the personal cost of evil genes as she unravels the mystery surrounding her sister's enigmatic life—and death. *Evil Genes* is a tour-de-force of popular science writing that brilliantly melds scientific research with intriguing family history and puts both a human and scientific face to evil.

“Witty, compelling, and just plain fun to read . . .” —Evelyn Lamb, *Scientific American* The Freakonomics of math—a math-world superstar unveils the hidden beauty and logic of the world and puts its power in our hands The math we learn in school can seem like a dull set of rules, laid down by the ancients and not to be questioned. In *How Not to Be Wrong*, Jordan Ellenberg shows us how terribly limiting this view is: Math isn't confined to abstract incidents that never occur in real life, but rather touches everything we do—the whole world is shot through with it. Math allows us to see the hidden structures underneath the messy and chaotic surface of our world. It's a science of not being wrong, hammered out by centuries of hard work and argument. Armed with the tools of mathematics, we can see through to the true meaning of information we take for granted: How early should you get to the airport? What does “public opinion” really represent? Why do tall parents have shorter children? Who really won Florida in 2000? And how likely are you, really, to develop cancer? *How Not to Be Wrong* presents the surprising revelations behind all of these questions and many more, using the mathematician's method of analyzing life and exposing the hard-won insights of the academic community to the layman—minus the jargon. Ellenberg chases mathematical threads through a vast range of time and space, from the everyday to the cosmic, encountering, among other things, baseball, Reaganomics, daring lottery schemes, Voltaire, the replicability crisis in psychology, Italian Renaissance painting, artificial languages, the development of non-Euclidean geometry, the coming obesity apocalypse, Antonin Scalia's views on crime and punishment, the psychology of slime molds, what Facebook can and can't figure out about you, and the existence of God. Ellenberg pulls from history as well as from the latest theoretical developments to provide those not trained in math with the knowledge they need. Math, as Ellenberg says, is “an atomic-powered prosthesis that you attach to your common sense, vastly multiplying its reach and strength.” With the tools of mathematics in hand, you can understand the world in a deeper, more meaningful way. *How Not to Be Wrong* will show you how.

Unleash powerful teaching and the science of learning in your classroom *Powerful Teaching: Unleash the Science of Learning* empowers educators to harness rigorous research on how students learn and unleash it in their classrooms. In this book, cognitive scientist Pooja K. Agarwal, Ph.D., and veteran K–12 teacher Patrice M. Bain, Ed.S., decipher cognitive science research and illustrate ways to successfully apply the science of learning in classrooms settings. This practical resource is filled with evidence-based strategies that are easily implemented in less than a minute—without additional prepping, grading, or funding! Research demonstrates that these powerful strategies raise student achievement by a letter grade or more; boost learning for diverse students, grade levels, and subject areas; and enhance students' higher order learning and transfer of knowledge beyond the classroom. Drawing on a fifteen-year scientist-teacher collaboration, more than 100 years of research on learning, and rich experiences from educators in K–12 and higher education, the authors present highly accessible step-by-step guidance on how to transform teaching with four essential strategies: Retrieval practice, spacing,

interleaving, and feedback-driven metacognition. With *Powerful Teaching*, you will: Develop a deep understanding of powerful teaching strategies based on the science of learning Gain insight from real-world examples of how evidence-based strategies are being implemented in a variety of academic settings Think critically about your current teaching practices from a research-based perspective Develop tools to share the science of learning with students and parents, ensuring success inside and outside the classroom *Powerful Teaching: Unleash the Science of Learning* is an indispensable resource for educators who want to take their instruction to the next level. Equipped with scientific knowledge and evidence-based tools, turn your teaching into powerful teaching and unleash student learning in your classroom.

Top 10 Pick for Learning Ladders' Best Books for Educators Summer 2021 A groundbreaking guide to improve teaching based on the latest research in neuroscience, from the bestselling author of *A Mind for Numbers*. Neuroscientists and cognitive scientists have made enormous strides in understanding the brain and how we learn, but little of that insight has filtered down to the way teachers teach. *Uncommon Sense Teaching* applies this research to the classroom for teachers, parents, and anyone interested in improving education. Topics include: • keeping students motivated and engaged, especially with online learning • helping students remember information long-term, so it isn't immediately forgotten after a test • how to teach inclusively in a diverse classroom where students have a wide range of abilities Drawing on research findings as well as the authors' combined decades of experience in the classroom, *Uncommon Sense Teaching* equips readers with the tools to enhance their teaching, whether they're seasoned professionals or parents trying to offer extra support for their children's education.

How can a prime number be 'sexy' and 'safe' at the same time? Why shouldn't Aussie cricketers be scared of the number 87? And how many bacteria live in your pants ... All the answers and more are in Adam Spencer's *Big Book of Numbers*. This is a book for readers of all ages who love numbers, who want to love numbers, or who just love to laugh and learn about the wonderful world we live in. For 15 years Adam Spencer has been entertaining us. On triple j and ABC radio and television, he's established himself as Australia's funniest and most famous mathematician. And now, by popular demand, we have his *Big Book of Numbers*, a fascinating journey from 1 to 100. Praise for Adam Spencer's *Big Book of Numbers* 'If you find this book boring, you should be in a clinic.' John Cleese 'Funny yet with hidden depths, like its author. A brilliant introduction to the world of numbers.' Brian Cox 'Even the page numbers will start to look fascinating once you've read this book!' Amanda Keller 'This book will bring out the inner geek in anyone who knows how to count to 100.' Brian Schmidt, Winner, 2011 Nobel Prize in Physics 'Funny, informative and, even better for dummies like me, all the answers are in the back.' Wil Anderson 'Excellent. Can't wait to geek-out my dinner party guests with my new maths facts!' Maryanne Demasi, Catalyst, ABC Television

The companion book to COURSERA's wildly popular massive open online course "Learning How to Learn" Whether you are a student struggling to fulfill a math or science requirement, or you are embarking on a career change that requires a new skill set, *A Mind for Numbers* offers the tools you need to get a better grasp of that intimidating material. Engineering professor Barbara Oakley knows firsthand how it feels to struggle with math. She flunked her way through high school math and science courses, before enlisting in the army immediately after graduation. When she saw how her lack of mathematical and technical savvy severely limited her options—both to rise in the military and to explore other careers—she returned to school with a newfound determination to re-tool her brain to master the very subjects that had given her so much trouble throughout her entire life. In *A Mind for Numbers*, Dr. Oakley lets us in on the secrets to learning effectively—secrets that even dedicated and successful students wish they'd known earlier. Contrary to popular belief, math requires creative, as well as analytical, thinking. Most people think that there's only one way to do a problem, when in actuality, there are often a number of different solutions—you just need the creativity to see them. For example, there are more than three hundred different known proofs of the Pythagorean Theorem. In short, studying a problem in a laser-focused way until you reach a solution is not an effective way to learn. Rather, it involves taking the time to step away from a problem and allow the more relaxed and creative part of the brain to take over. The learning strategies in this book apply not only to math and science, but to any subject in which we struggle. We all have what it takes to excel in areas that don't seem to come naturally to us at first, and learning them does not have to be as painful as we might think.

A TikTok sensation, this rom-com about a young woman who agrees to fake date a colleague and bring him to her sister's wedding has "everything you could want in a romance" (Helen Hoang, *New York Times* bestselling author). Catalina Martín desperately needs a date to her sister's wedding. Especially since her little white lie about her American boyfriend has spiralled out of control. Now everyone she knows—including her ex and his fiancée—will be there and eager to meet him. She only has four weeks to find someone willing to cross the Atlantic and aid in her deception. New York to Spain is no short flight and her raucous family won't be easy to fool. Enter Aaron Blackford—her tall, handsome, condescending colleague—who surprisingly offers to step in. She'd rather refuse; never has there been a more aggravating, blood-boiling, and insufferable man. But Catalina is desperate, and as the wedding draws nearer, Aaron looks like her best option. And she begins to realize he might not be as terrible in the real world as he is at the office.

When a career-ending injury left elite athlete and professional football player Lewis Howes out of work and living on his sister's couch, he decided he needed to make a change for the better. He started by reaching out to people he admired, searching for mentors, and applying his past coaches' advice from sports to life off the field. Lewis did more than bounce back: He built a multimillion-dollar online business and is now a sought-after business coach, speaker, and podcast host. In *The School of Greatness*, Howes shares the essential tips and habits he gathered in interviewing "the greats" on his wildly popular podcast of the same name. In discussion with people like Olympic gold medalist Shawn Johnson and Pencils of Promise CEO Adam Braun, Howes figured out that greatness is unearthed and cultivated from within. The masters of greatness are not successful because they got lucky or are innately more talented, but because they applied specific habits and tools to embrace and overcome adversity in their lives. A framework for personal development, *The School of Greatness* gives you the tools, knowledge, and actionable resources you need to reach your potential. Howes anchors each chapter with a specific lesson he culled from his greatness "professors" and his own experiences to teach you how to create a vision, develop hustle, and use dedication, mindfulness, joy, and love to reach goals. His lessons and practical exercises prove that anyone is capable of achieving success

and that we can all strive for greatness in our everyday lives.

Keep your virtual students focused and meaningfully engaged with this invaluable teaching resource *Engaging Learners through Zoom* delivers numerous practical strategies and helpful advice on how to engage students virtually. Many of the tools are also applicable in face-to-face and hybrid environments. Backed by cognitive neuroscience research, this book is a collection of dozens of active, synchronous online learning structures that can be used in any discipline, perfect for K-12 through higher education. This book provides teachers, college educators, administrators, and trainers the antidote to Zoom fatigue! Transform Zoom (or any video-conferencing platform) into an ideal environment for students to focus more fully, learn more effectively and have more fun! Dr. Brennan, accomplished author, professor and distance education expert, improves learner performance and addresses equity in education with: Over 150 active learning strategy examples with step-by-step directions Ideas for including diverse content across 83 different disciplines Multiple examples for 26 of the most commonly taught courses *Engaging Learners through Zoom* belongs in the collection of every educator who wants to motivate and inspire their students to excel in a virtual learning environment.

Finding a career path that you're passionate about can be difficult—but it doesn't have to be! With this bestselling guide, learn how to find a fulfilling career that fits your personality. *Do What You Are*—the bestselling classic that has helped more than a million people find truly satisfying work—is now updated for the modern workforce. With the global economy's ups and downs, the advent of astonishing new technology, the migration to online work and study, and the ascendancy of mobile communication, so much has changed in the American workplace since this book's fifth edition was published in 2014. What hasn't changed is the power of Personality Type to help people achieve job satisfaction. This updated edition, featuring 30% new material, is especially useful for millennials and baby boomers who are experiencing midlife career switches, and even those looking for fulfillment in retirement. This book will lead you through the step-by-step process of determining and verifying your Personality Type. Then you'll learn which occupations are popular with each Type, discover helpful case studies, and get a full rundown of your Type's work-related strengths and weaknesses. Focusing on each Type's strengths, *Do What You Are* uses workbook exercises to help you customize your job search, get the most out of your current career, obtain leadership positions, and ensure that you achieve the best results in the shortest period of time.

NATIONAL BESTSELLER • “More impressive than all but a few novels published so far this decade . . . a wheeling meditation on the wired life, on privacy, on what being human in the age of binary code might mean . . . [Joshua] Cohen, all of thirty-four, emerges as a major American writer.”—The New York Times **NAMED ONE OF THE TEN BEST BOOKS OF THE YEAR BY VULTURE AND ONE OF THE BEST BOOKS OF THE YEAR BY NPR AND THE WALL STREET JOURNAL** “Book of Numbers . . . is shatteringly powerful. I cannot think of anything by anyone in [Cohen's] generation that is so frighteningly relevant and composed with such continuous eloquence. There are moments in it that seem to transcend our impasse.”—Harold Bloom The enigmatic billionaire founder of Tetration, the world's most powerful tech company, hires a failed novelist, Josh Cohen, to ghostwrite his memoirs. The mogul, known as Principal, brings Josh behind the digital veil, tracing the rise of Tetration, which started in the earliest days of the Internet by revolutionizing the search engine before venturing into smartphones, computers, and the surveillance of American citizens. Principal takes Josh on a mind-bending world tour from Palo Alto to Dubai and beyond, initiating him into the secret pretext of the autobiography project and the life-or-death stakes that surround its publication. Insider tech exposé, leaked memoir-in-progress, international thriller, family drama, sex comedy, and biblical allegory, *Book of Numbers* renders the full range of modern experience both online and off. Embodying the Internet in its language, it finds the humanity underlying the virtual. Featuring one of the most unforgettable characters in contemporary fiction, *Book of Numbers* is an epic of the digital age, a triumph of a new generation of writers, and one of those rare books that renew the idea of what a novel can do. Praise for *Book of Numbers* “The Great American Internet Novel is here. . . . *Book of Numbers* is a fascinating look at the dark heart of the Web. . . . A page-turner about life under the veil of digital surveillance . . . one of the best novels ever written about the Internet.”—Rolling Stone “A startlingly talented novelist.”—The Wall Street Journal “Remarkable . . . dazzling . . . Cohen's literary gifts . . . suggest that something is possible, that something still might be done to safeguard whatever it is that makes us human.”—Francine Prose, The New York Review of Books

Organized around seven factors that determine whether we have a good day at work, Webb offers specific tools to use based on how our brains work, and she shows how to incorporate them into conversations, meetings, and projects in a way that will increase productivity, confidence, and enjoyment.

NATIONAL BOOK AWARD FINALIST • NATIONAL BESTSELLER • An audacious, darkly glittering novel set in the eerie days of civilization's collapse—the spellbinding story of a Hollywood star, his would-be savior, and a nomadic group of actors roaming the scattered outposts of the Great Lakes region, risking everything for art and humanity. Now an original series on HBO Max. Kirsten Raymonde will never forget the night Arthur Leander, the famous Hollywood actor, had a heart attack on stage during a production of *King Lear*. That was the night when a devastating flu pandemic arrived in the city, and within weeks, civilization as we know it came to an end. Twenty years later, Kirsten moves between the settlements of the altered world with a small troupe of actors and musicians. They call themselves The Traveling Symphony, and they have dedicated themselves to keeping the remnants of art and humanity alive. But when they arrive in St. Deborah by the Water, they encounter a violent prophet who will threaten the tiny band's existence. And as the story takes off, moving back and forth in time, and vividly depicting life before and after the pandemic, the strange twist of fate that connects them all will be revealed. Look for Emily St. John Mandel's new novel, *Sea of Tranquility*, coming in April 2022!

The irresistibly engaging book that "enlarges one's wonder at Tammet's mind and his all-embracing vision of the world as grounded in numbers" (Oliver Sacks, MD). Thinking in Numbers is the book that Daniel Tammet, mathematical savant and bestselling author, was born to write. In Tammet's world, numbers are beautiful and mathematics illuminates our lives and minds. Using anecdotes, everyday examples, and ruminations on history, literature, and more, Tammet allows us to share his unique insights and delight in the way numbers, fractions, and equations underpin all our lives. Inspired variously by the complexity of snowflakes, Anne Boleyn's eleven fingers, and his many siblings, Tammet explores questions such as why time seems to speed up as we age, whether there is such a thing as an average person, and how we can make sense of those we love. His provocative and inspiring new book will change the way you think about math and fire your imagination to view the world with fresh eyes.

THE KEY TO A BETTER BODY—in shape, energized, and youthful—is a healthy brain. With fifteen practical, easy-to-implement solutions involving nutritious foods, natural supplements and vitamins, positive-thinking habits, and, when necessary, highly targeted medications, Dr. Amen shows you how to: * Reach and maintain your ideal weight * Soothe and smooth your skin at any age * Reduce the stress that can impair your immune system * Sharpen your memory * Increase willpower and eliminate the cravings that keep you from achieving your exercise and diet goals * Enhance sexual desire and performance *

Lower your blood pressure without medication * Avoid depression and elevate the enjoyment you take in life's pleasures. Based on the latest medical research, as well as on Dr. Amen's two decades of clinical practice at the renowned Amen Clinics, where Dr. Amen and his associates pioneered the use of the most advanced brain imaging technology, *Change Your Brain, Change Your Body* shows you how to take the very best care of your brain. Whether you're just coming to realize that it's time to get your body into shape, or are already fit and want to take it to the next level, *Change Your Brain, Change Your Body* is all you need to start putting the power of the brain-body connection to work for you today.

A book for learners of all ages containing the best and most updated advice on learning from neuroscience and cognitive psychology. Do you spend too much time learning with disappointing results? Do you find it difficult to remember what you read? Do you put off studying because it's boring and you're easily distracted? This book is for you. Dr. Barbara Oakley and Olav Schewe have both struggled in the past with their learning. But they have found techniques to help them master any material. Building on insights from neuroscience and cognitive psychology, they give you a crash course to improve your ability to learn, no matter what the subject is. Through their decades of writing, teaching, and research on learning, the authors have developed deep connections with experts from a vast array of disciplines. And it's all honed with feedback from thousands of students who have themselves gone through the trenches of learning. Successful learners gradually add tools and techniques to their mental toolbox, and they think critically about their learning to determine when and how to best use their mental tools. That allows these learners to make the best use of their brains, whether those brains seem "naturally" geared toward learning or not. This book will teach you how you can do the same.

For salespeople tired of feeling stressed out, burned out, and bummed out that their customers don't want to hear from them, *A Mind for Sales* is the guide they need to develop a success mindset and the habits required to breakthrough to a whole new level of sales performance. Everybody knows the world of sales can be tough, and it's easy to get discouraged when the rejections start piling up, and your customers stop picking up the phone. The wrong thought patterns can start to set in, and pretty soon you aren't making your quota and are looking through job listings on your lunch break, waiting for the axe to fall. Mark Hunter's own start in sales was inauspicious, to say the least. He was fired from his first two stints before he began to learn the lessons that he covers in *A Mind for Sales*. He discovered that sales can be incredibly rewarding, such as when your customers call you for advice, thanking you for improving their business, and letting you know they just referred you to colleagues. The difference is simply developing mindset and momentum habits. The good news is that you can learn how to grow a mind for sales like Hunter's: "Today, sales is my life. It has gone way past being a job. I do not even see sales as a profession anymore; it is a lifestyle, and one I am proud to be living. I cannot imagine doing anything else." Let *A Mind for Sales* inspire and prepare you to form the new thoughts and habits you need to succeed and to realize the incredible rewards that a successful life in sales makes possible. Feel reenergized by renewed purpose and success in your sales role by following the success cycle approach outlined in the book. Receive practical strategies on how to change your mindset and succeed in sales. Learn the daily habits needed to maximize productivity and make hitting the ground running strategy #1. Gain real-world insights from Hunter's vast experience as a highly successful sales professional and sales coach.

The murder of a world-famous physicist raises fears that the Illuminati are operating again after centuries of silence, and religion professor Robert Langdon is called in to assist with the case.

Publishers Weekly bestseller · A joyful and accessible homeschool guide to making learning a part of everyday life Parents who are deeply invested in their children's education can be hard on themselves and their kids. When exhausted parents are living the day-to-day grind, it can seem impossible to muster enough energy to make learning fun or interesting. How do parents nurture a love of learning amid childhood chaos, parental self-doubt, the flu, and state academic standards? In this book, Julie Bogart distills decades of experience--homeschooling her five now grown children, developing curricula, and training homeschooling families around the world--to show parents how to make education an exciting, even enchanting, experience for their kids, whether they're in elementary or high school. Enchantment is about ease, not striving. Bogart shows parents how to make room for surprise, mystery, risk, and adventure in their family's routine, so they can create an environment that naturally moves learning forward. If a child wants to pick up a new hobby or explore a subject area that the parent knows little about, it's easy to simply say "no" to end the discussion and the parental discomfort, while dousing their child's curious spark. Bogart gently invites parents to model brave learning for their kids so they, too, can approach life with curiosity, joy, and the courage to take learning risks.

Why is math so hard? And why, despite this difficulty, are some people so good at it? If there's some inborn capacity for mathematical thinking—which there must be, otherwise no one could do it—why can't we all do it well? Keith Devlin has answers to all these difficult questions, and in giving them shows us how mathematical ability evolved, why it's a part of language ability, and how we can make better use of this innate talent. He also offers a breathtakingly new theory of language development—that language evolved in two stages, and its main purpose was not communication—to show that the ability to think mathematically arose out of the same symbol-manipulating ability that was so crucial to the emergence of true language. Why, then, can't we do math as well as we can speak? The answer, says Devlin, is that we can and do—we just don't recognize when we're using mathematical reasoning.

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