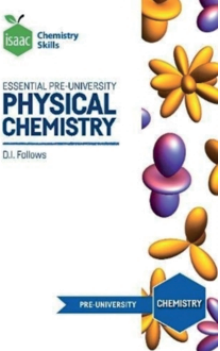
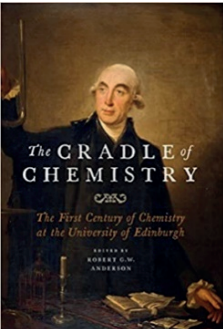
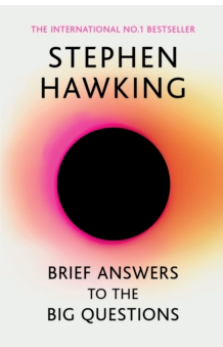


## Chemistry OCR GCE 'A' Level

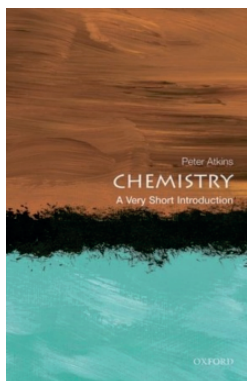
TITLE	AUTHOR	ISBN
 <p><b>Essential pre-university physical chemistry</b> ESSENTIAL PRE-UNIVERSITY PHYSICAL CHEMISTRY helps you master the concepts of physical chemistry required in final-year school courses and entry-level university. Use the exercises to practise applying fundamental principles of physical chemistry to a range of real-life systems, beginning with manipulating the essential equations. All problems can be answered on the Isaac online platform. Registration is free and gives both students and teachers personalised support through a sophisticated online marking system for all problems.</p>	David Follows	9781838216030
 <p><b>The cradle of chemistry: the first century of chemistry at the University of Edinburgh</b> From the mid eighteenth century, many medical students from across the world made their way to Edinburgh, drawn by the reputation of the faculty and the quality and nature of its teaching. Chemistry, in particular, had star performers, notably William Cullen and Joseph Black, whose innovative teaching styles excited and inspired their audiences. This book, which is based on conference papers given at the Crawford tercentenary meeting held at the Royal Society of Edinburgh in October 2013, describes the progress of chemistry at the University of Edinburgh from the appointment of the first professor, James Crawford, in 1713 to the career of Thomas Charles Hope, a century or so later.</p>	Robert Anderson	9781906566869
 <p><b>Brief answers to the big questions</b> The world-famous cosmologist and #1 bestselling author of A Brief History of Time leaves us with his final thoughts on the universe's biggest questions in this brilliant posthumous work. Is there a God? How did it all begin? Can we predict the future? What is inside a black hole? Is there other intelligent life in the universe? Will artificial intelligence outsmart us? How do we shape the future? Will we survive on Earth? Should we colonise space? Is time travel possible? Throughout his extraordinary career, Stephen Hawking expanded our understanding of the universe and unravelled some of its greatest mysteries.</p>	Stephen Hawking	9781473695993

## Chemistry OCR GCE 'A' Level

### TITLE

### AUTHOR

### ISBN

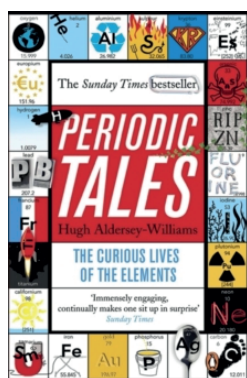


#### **Chemistry : a very short introduction**

Most people remember chemistry from their schooldays as largely incomprehensible, a subject that was fact-rich but understanding-poor, smelly, and so far removed from the real world of events and pleasures that there seemed little point, except for the most introverted, in coming to terms with its grubby concepts, spells, recipes, and rules. Peter Atkins wants to change all that. In this Very Short Introduction to Chemistry, he encourages us to look at chemistry anew, through a chemist's eyes, in order to understand its central concepts and to see how it contributes not only towards our material comfort, but also to human culture. Atkins shows how chemistry provides the infrastructure of our world, through the chemical industry, the fuels of heating, power generation, and transport, as well as the fabrics of our clothing and furnishings. By considering the remarkable achievements that chemistry has made, and examining its place between both physics and biology, Atkins presents a fascinating, clear, and rigorous exploration of the world of chemistry - its structure, core concepts, and exciting contributions to new cutting-edge technologies.

Peter  
Atkins

9780199683970



#### **Periodic Tales: The Curious Lives of the elements**

Everything in the universe is made of them, including you. Like you, the elements have personalities, attitudes, talents, shortcomings, stories rich with meaning. Here you'll meet iron that rains from the heavens and noble gases that light the way to vice. You'll learn how lead can tell your future while zinc may one day line your coffin. You'll discover what connects the bones in your body with the Whitehouse in Washington, the glow of a streetlamp with the salt on your dinner table. Unlocking their astonishing secrets and colourful pasts, Periodic Tales is a voyage of wonder and discovery, showing that their stories are inextricable from the stories of our own lives.

Hugh  
Aldersey-  
Williams

9780141041452

## Chemistry OCR GCE 'A' Level

### TITLE

### AUTHOR

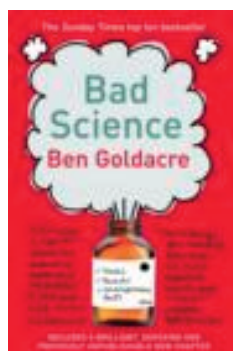
### ISBN



**The disappearing spoon and other true tales of madness, love, and the history of the world from the periodic table of the elements**

Sam Kean 9780552777506

Why did Gandhi hate iodine (I, 53)? Why did the Japanese kill Godzilla with missiles made of cadmium (Cd, 48)? How did radium (Ra, 88) nearly ruin Marie Curie's reputation? And why did tellurium (Te, 52) lead to the most bizarre gold rush in history? The periodic table is one of our crowning scientific achievements, but it's also a treasure trove of passion, adventure, betrayal and obsession. The fascinating tales in *The Disappearing Spoon* follow carbon, neon, silicon, gold and every single element on the table as they play out their parts in human history, finance, mythology, conflict, the arts, medicine and the lives of the (frequently) mad scientists who discovered them. Why did a little lithium (Li, 3) help cure poet Robert Lowell of his madness? And how did gallium (Ga, 31) become the go-to element for laboratory pranksters? *The Disappearing Spoon* has the answers, fusing science with the classic lore of invention, investigation, discovery and alchemy, from the big bang through to the end of time.



**Bad Science**

Ben Goldacre's wise and witty bestseller, shortlisted for the Samuel Johnson Prize, 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'. Along the way, the self-confessed 'Johnny Ball cum Witchfinder General' performs a successful detox on a Barbie doll, sees his dead cat become a certified nutritionist and probes the supposed medical qualifications of 'Dr' Gillian McKeith. 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.

Ben Goldacre 9780007284870

## Chemistry OCR GCE 'A' Level



### TITLE

#### **Chemistry for breakfast: the amazing science of everyday life**

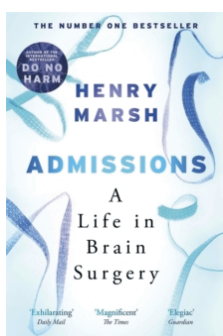
A perfect book for readers of *The Physics of Everyday Things* and *Storm in a Teacup*. Have you ever wondered why your alarm clock sends you spiralling? Or how toothpaste works on your teeth? Why do cakes and cookies sometimes turn out dry? (Hint: you may not be adding enough sugar.) In *Chemistry for Breakfast*, award-winning chemist and science communicator Mai Thi Nguyen-Kim reveals the amazing chemistry behind everyday things (like baking and toothpaste) and not-so-everyday things (like space travel). With a relatable, funny, and conversational style, she explains essential chemical processes everyone should know and turns the ordinary into extraordinary. Over the course of a single day, Mai shows us that chemistry is everywhere: we just have to look for it. In the morning, her partner's much-too-loud alarm prompts a deep dive into biological clocks, fight-or-flight responses, and melatonin's role in making us sleepy. Before heading to the lab, she explains how the stress hormone cortisol helps wake us up, and brews her morning coffee with a side of heat conduction and states of matter. Mai continues her day with explainers of cell phone technology, food preservation, body odor, baking, the effects of alcohol, and the chemistry behind the expression "love drunk." All the while, she shows us what it's really like to be a working chemist, and fights against the stereotype of a nerd playing with test tubes in a lab coat. Filled with charming illustrations, laughter, and plenty of surprises, *Chemistry for Breakfast* is a perfect book for anyone who wants to deepen their

### AUTHOR

Mai Thi  
Nguyen-  
Kim,

### ISBN

9781778400322



### **Admissions: A Life in Brain Surgery**

Henry Marsh has spent four decades operating on the human brain. In this searing and provocative memoir following his retirement from the NHS, he reflects on the experiences that have shaped his career and life, gaining a deeper understanding of what matters to us all in the end.

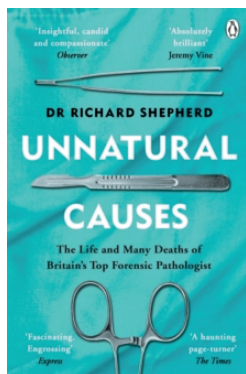
Henry  
Marsh

9781474603874

## Chemistry OCR GCE 'A' Level

### TITLE

#### Unnatural Causes



Meet the forensic pathologist, Dr Richard Shepherd. He solves the mysteries of unexplained or sudden death. He has performed over 23,000 autopsies, including some of the most high-profile cases of recent times; the Hungerford Massacre, the Princess Diana inquiry, and 9/11. He has faced serial killers, natural disaster, 'perfect murders' and freak accidents. His evidence has put killers behind bars, freed the innocent, and turned open-and-shut cases on their heads. Yet all this has come at a huge personal cost. Unnatural Causes tells the story of not only the cases and bodies that have haunted him the most, but also how to live a life steeped in death.

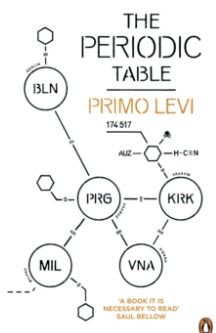
### AUTHOR

Dr Richard  
Shepherd

### ISBN

9781405923538

#### The Periodic Table

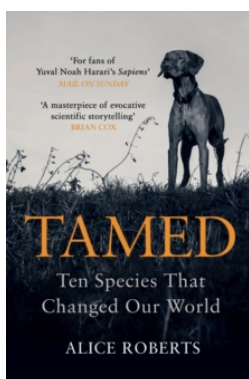


'So it happens, therefore, that every element says something to someone' Inspired by the rhythms of the Periodic Table, Primo Levi assesses his life in terms of the chemical elements he associates with his past. From his birth into an Italian Jewish family through his training as a chemist, to the pain and darkness of the Holocaust and its aftermath, Levi reflects on the difficult course of his life in this heartfelt and deeply moving book.

### Primo Levi

9780241956816

#### Tamed: Ten species that changed our world

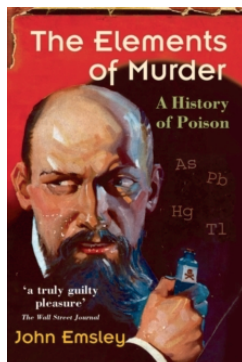


The extraordinary story of the species that became our allies. Dogs became our companions. Wheat fed a booming population. Cattle gave us meat and milk. Maize fuelled the growth of empires. Potatoes brought us feast and famine. Chickens led us to wonder about tomorrow. Rice promised us a golden future. Horses gave us strength and speed. Apples travelled with us. HUMANS TAMED THEM ALL. For hundreds of thousands of years, our ancestors depended on wild plants and animals to stay alive - until they began to tame them. Combining archaeology and cutting-edge genetics, Tamed tells the story of the greatest revolution in human history and reveals the fascinating origins of ten crucial domesticated species; and how they, in turn, transformed us.

### Alice Roberts

9781786090010

## Chemistry OCR GCE 'A' Level



### TITLE

#### **The Elements of Murder: A History of Poison**

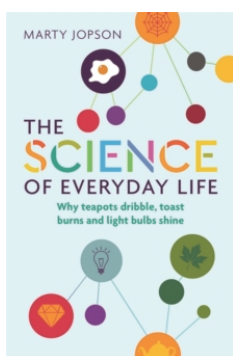
This book is about elements that kill. Mercury, arsenic, antimony, lead, and thallium can be lethal, as many a poisoner knew too well. Emsley explores the gruesome history of these elements and those who have succumbed to them in a fascinating narrative that weaves together stories of true crime, enduring historical mysteries, tragic accidents, and the science behind it all. The colourful cast includes ancient alchemists, kings, leaders, a pope, several great musicians, and a motley crew of murderers. Among the intriguing accounts is that of the 17th century poet Sir Thomas Overbury, who survived four attempts to poison him with mercury but died when given the poison in enema form - under whose direction remains uncertain. Here, too, is detailed the celebrated case of Florence Maybrick, convicted of poisoning her violent husband James with arsenic, but widely believed at the time to be innocent. The question of her guilt is still disputed. Threaded through the book alongside the history is the growing understanding of chemistry, and the effects of different chemical substances on the human body. Thousands suffered the ill effects of poisonous vapours from mercury, lead, and arsenic before the dangers were realized. Hatters went mad because of mercury poisoning, and hundreds of young girls working in factories manufacturing wallpaper in the 19th century were poisoned by the arsenic-based green pigments used for the leaves of the popular floral designs. Even in the middle of the 20th century, accidental mercury poisoning caused many deaths in Minamata Bay, while leaded petrol poisoned the whole planet, and arsenic still continues to poison millions in Asia. Through vividly told stories of innocent blunders, industrial accidents, poisoners of various hues - cold, cunning, desperate - and deaths that remain a mystery, Emsley here uncovers the dark side of the Periodic Table.

### AUTHOR

John  
Emsley

### ISBN

9780192806000



#### **The science of everyday life : why teapots dribble, toast burns and light bulbs shine**

Have you ever wondered why ice floats, how the GPS on your mobile phone works (and what it has to do with Einstein), or why woollen jumpers shrink in the wash? In this fascinating scientific tour of household objects, The One Show's resident scientist Marty Jopson explains the answers to all of these, and many more, baffling questions about the chemistry and physics of the stuff we use every day. Always entertaining and with no special prior scientific knowledge required, this is the perfect book for anyone curious about the science that surrounds us.

Marty  
Jopson

9781782439608