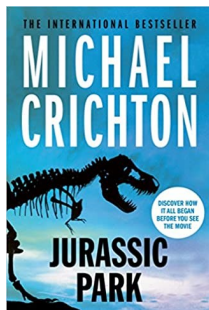


FICTION:



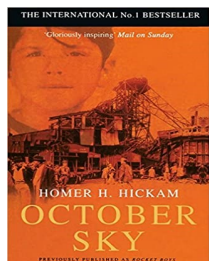
The Martian by Andy Weir. Six days ago, astronaut Mark Watney became one of the first people to walk on Mars. Now, he's sure he'll be the first person to die there. After a dust storm nearly kills him and forces his crew to evacuate while thinking him dead, Mark finds himself stranded and completely alone with no way to even signal Earth that he's alive—and even if he could get word out, his supplies would be gone long before a rescue could arrive.



Jurassic Park by Michael Crichton. On a remote jungle island, genetic engineers have created a dinosaur game park. An astonishing technique for recovering and cloning dinosaur DNA has been discovered. Now one of mankind's most thrilling fantasies has come true and the first dinosaurs that the Earth has seen in the time of man emerge. But, as always, there is a dark side to the fantasy and after a catastrophe destroys the park's defense systems, the scientists and tourists are left fighting for survival...



[Frankenstein by Mary Shelley] Frankenstein tells the story of gifted scientist Victor Frankenstein who succeeds in giving life to a being of his own creation. However, this is not the perfect specimen he imagines that it will be, but rather a hideous creature who is rejected by Victor and mankind in general.



October Sky by Homer Hickam Three years in the life of Sonny Hickam, from the moment he sees the Sputnik satellite overhead in to his successful launch of a prizewinning rocket. A nostalgic and lyrical memoir of growing up and one boy's dream to rival the Russians in the race for space.

WEBSITES:

- A collection of research project summaries with questions and answers. <https://bristoloutreachproject.wordpress.com/research-projects/>
- A useful source of information about the industries, research and news relating to chemistry: <https://www.chemistryworld.com/>

PODCASTS:

Chemistry World Podcasts by the RSC

Chemical stories, interviews, news and opinions, delivered directly to your device.



University of Oxford chemistry podcasts

Lots of brilliant podcasts (some easier to follow than others!) from one of the leading chemistry departments in the world, offering world-class teaching along with 80+ research groups at the cutting-edge of experimentation, commercialization, and fundamental science.



INSPIRATION:

We think there is colour, we think there is sweet, we think there is bitter, but in reality there are atoms and a void.

DEMOCRITUS, C. 460 – C. 370 BC



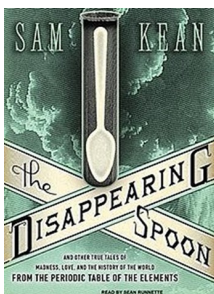
Ilkley Grammar School
A Moorlands Learning Trust Academy

Chemistry

POST-16
SUBJECT ENHANCEMENT

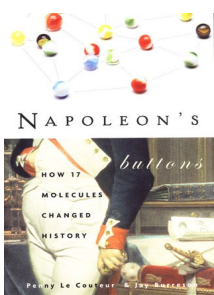


NON-FICTION



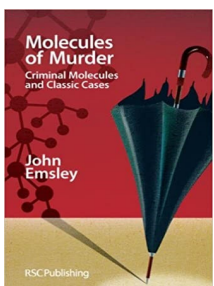
The Disappearing Spoon...and other true tales from the Periodic Table by Sam Kean.

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 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.



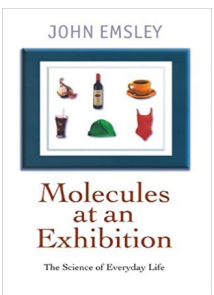
Napoleon's Buttons: How 17 Molecules Changed History by Penny Le Couteur and Jay Burreson.

This fascinating book tells the stories of seventeen molecules that, like the tin of those buttons, greatly influenced the course of history. These molecules provided the impetus for early exploration and made possible the ensuing voyages of discovery.



Molecules of Murder: Criminal Molecules and Classic Murders by John Emsley

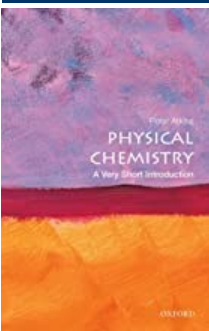
This book follows on from John Emsley's "Elements of Murder". The book describes ten highly toxic molecules which are of particular interest due to their use in notorious murder cases. Each chapter explores the discovery of the molecules, their chemistry and effects in humans, followed by a re-examination of their deliberate misuse in high profile murder cases!



Molecules At An Exhibition: Portraits of Intriguing Materials in Everyday Life by John Emsley

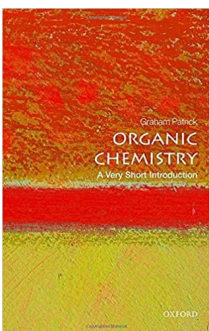
What ingredient in Coke can remove rust from chrome? What is the bitterest substance on earth? What is the worst smelling one? In this entertaining tour of chemistry these and many other questions are answered.

NON-FICTION



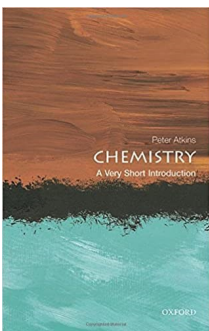
Physical Chemistry: A Very Short Introduction by Peter Atkins

With his typical clarity and hardly a formula in sight, Peter Atkins' Very Short Introduction explores the contributions physical chemistry has made to all branches of chemistry. Providing an insight into its central concepts Atkins reveals the cultural contributions physical chemistry has made to our understanding of the natural world.



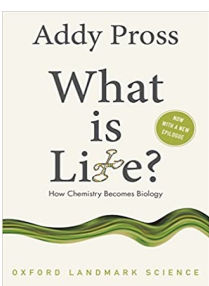
Organic Chemistry: A Very Short Introduction by Graham Patrick

The author covers the whole range of organic compounds and their roles. Beginning with the structures and properties of the basic groups of organic compounds, he goes on to consider organic compounds in the areas of pharmaceuticals, polymers, food and drink, petrochemicals, and nanotechnology. He looks at how new materials, in particular graphene.



Chemistry: A Very Short Introduction by Peter Atkins

Most people remember chemistry from their schooldays as 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.



What is Life?: How Chemistry Becomes Biology by Addy Pross

Seventy years ago, Erwin Schrödinger posed a profound question: 'What is life, and how did it emerge from non-life?' This problem has puzzled biologists and physical scientists ever since.

SCHOOL INFORMATION

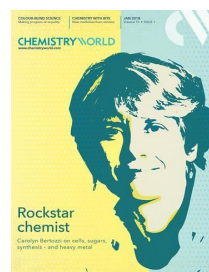
Exam Board: AQA

Subject Leader: Mrs S. Batch

Minimum grade required: Grade 6 in either Separate Chemistry or in Combined Science

MAGAZINES & PERIODICALS:

You may wish to consider subscribing to:



Chemistry World by the RSC

Chemistry World is a magazine for the global chemical science community. It provides a mix of articles, from essential news and research discoveries through to thought-provoking features and opinion columns. Stories published daily online and in monthly print and app issues.



Education in Chemistry by the RSC

The RSC's flagship magazine for chemistry educators and learners. Content and resources is of the highest quality for an international readership, and aim to be central to those in the global chemical science community as a vehicle for engaging with ideas, with each other, and with the Royal Society of Chemistry.



Chemistry Review by The University of York

Aims is to make chemistry exciting and understandable. It is an ideal resource for students taking AS/A2 and Higher chemistry, but many of the articles are also both useful and relevant to undergraduate chemists.