



For the Love of Learning

King Alfred's Academic Enrichment Newsletter Christmas and Term 3



Dear Students (and Parents/Carers),

Welcome to the Academic Enrichment Newsletter for Christmas and Term 3!

There are so many opportunities for our students to continue to nurture their intellectual curiosity and independent learning!

For ease of navigation and to avoid repetition, and as most institutions are now offering a mix of both in-person and online events, the Newsletter is divided into three sections:

(a) [Events and Exhibitions](#) organised by Institutions such as Museums and Academic Bodies – in-person events and online events will be clearly signposted.

(b) [Websites to explore](#)

(c) [The Competition Corner](#)

The Academic Enrichment Newsletter is part of the work of the Academic Enrichment Programme (AEP) at King Alfred's, and its aim is to share with the whole school some of the various opportunities on offer in our immediate locality that students can pursue independently. We would like to develop an ever-stronger partnership with our parents in promoting the intellectual development and curiosity of all our students.

Pam Stokell

Head of Academic Enrichment

Subject Taster Talks and more!



**UNIVERSITY OF
CAMBRIDGE**

Magdalene College Subject Tasters

Magdalene Fellows and PhD students will be leading online Subject Taster sessions on a variety of subjects available to study at the University of Cambridge. The

sessions are intended to provide an insight into the subject at university level; to signpost to further information about specific courses; and encourage students to engage with sample material based on undergraduate-level course content.

Application Deadline: 5pm, 14th January 2025

Open to: State school students in Year 12 and Year 11

[Apply here](#)



TRINITY COLLEGE
UNIVERSITY of OXFORD

Trinity College Oxford's Enrichment Programme: Talks and Study Skills Workshops for students in Year 12 and Year 11

Taking place online at 4.30-5.30pm on Wednesdays,

this programme offers students:

- A look at why and how they might easily take part in academic enrichment;
- Academic taster and department subject talks with the opportunity for guests to ask questions and take part in interactive polls;
- Study skills sessions from our resident academic support expert;
- Workshops on the key skill of personal statement writing, to help university applicants to present and reflect on their enrichment experiences as positively as possible.

For more information and to sign up for the programme, visit: [Trinity Enrichment Programme 2025 | Trinity College Oxford](#)

In person and/or Livestreamed) from Museums and other Academic Bodies



Yes, the Royal Institution was set up for the dissemination of scientific ideas, but they are careful to appeal to a very broad

range of interests, and their talks are an excellent place to start looking out for those priceless links between subjects that make learning so exciting. (And which will make you stand out from the crowd if you choose to apply to a top-level university.)



The Royal Institution YouTube Channel holds an archive of their lectures (about an hour long each), but if you are running short of time, you can also find a series of “Ri Shorts” at [\(181\) Ri Shorts - YouTube](#) which are short video talks about 10 minutes long,

And there is also the Royal Institution Animations selection at [\(181\) Ri Animations - YouTube](#) which are typically 5 minutes or less.



And below you will find this term’s recommended selection of three of the longer talks:



Recorded Talk: The Most Surprising Discoveries from this Universe

Join Gresham Professor of Astronomy Chris Lintott as he unravels tales of peculiar accidents, remarkable individuals, and the occasional human oversight that have collectively shaped some of the most pivotal celestial revelations.

[The most surprising discoveries from our universe – with Chris Lintott](#)



Recorded Talk: The Science of Mental Health

In this talk, Neuroscientist Dr Camilla Nord reframes mental health as an intricate, automated process that is different for all of us, relying on the way our bodily processes and our expectations of the world interact in our brains. She explains how our brain uses dopamine to learn what to expect, and how that can change the way we feel day to day. She looks at a variety of treatments, from therapy and medication to

recreational drugs and electrical brain stimulation, to show how they work - and why they sometimes don't.

[The science of mental health - with Camilla Nord](#)



Recorded Talk: The Scientist vs the Art Forger

Over the last few decades, the art world has faced a troubling rise in forged paintings. In response, scientific techniques for detecting these forgeries have become more sophisticated and effective. We are thrilled to offer you the unique opportunity to join Professor Jehane Ragai in delving into the ongoing battle between scientists and forgers, revealing the leading-edge and traditional methods used to uncover art deceptions. [The scientist vs the art forger - with Jehane Ragai](#)

And did you know – the Ri has a Podcast!

Ri Science Podcast



Most of those amazing talks which you can watch anytime on the Ri's Youtube channel are also available as podcasts, so you can listen in wherever you are. The link below will take you to the great talk by Lucy Cooke, who will take you on a journey through an array of different animal examples as she explores evolution: [Podcast: How did females evolve? - with Lucy Cooke | Royal Institution \(ri.org\)](#) And there is lots more at: [Browse our science online | Royal Institution \(ri.org\)](#)

The Linnean Society Online Talks



The Linnean Society of London is the world's oldest active biological society, dating back to 1788. It has a wide and varied programme of talks, and you can also arrange to visit their library at Burlington House, London.

[The Linnean Society | Communicating Nature Since 1788](#)

FREE Online talks from the Linnean Society

Many of the talks from the Linnean Society are recorded and available through their youtube channel: [\(3\) Linnean Society - YouTube](#). Below are some recommendations to whet your appetite and hopefully prompt you to look for other talks!

[The Return of the Siamese Crocodile | Pablo Sinovas](#)

[PDrawn to Extinction: Depicting the Thylacine | Jack Ashby](#)

[The Jewel Box: How Moths Illuminate Nature's Hidden Rules | Tim Blackburn](#)

Sixth Formers, if you have a study period during the day, it might be worth checking whether you can catch one of their lunch-time talks. Check out the events page online at: [Upcoming Events | The Linnean Society](#)



The London Mathematical Society

The London Mathematical Society runs a series of talks - the LMS Popular Lectures - which are free public lectures that present exciting topics in mathematics and its applications to a wide audience. They are for anyone with an interest in mathematics, including those without high-level maths training.

There is a real treasury of past talks to be found at [the LMS YouTube channel](#) - click 'subscribe' to be alerted when new videos are added.

You can watch previous LMS Popular Lectures [here](#).



The Oxford Martin School – Finding solutions to the world's most urgent challenges

The University of Oxford boasts that there is no research organisation in the world that is quite like the [Oxford Martin School](#) in that it brings researchers from across all disciplines to work together on finding solutions to some of the world's most pressing challenges.

As part of sharing their work, they have a series of talks – a mixture of in-person and online – most of which are free and open to all. It's worth keeping an eye on their [events](#) page, and also to go browsing through their archive of past talks at: [Past Events | Oxford Martin School](#). You will find something here that is relevant to almost any academic interest. Well worth scanning through if you are doing/considering an EPQ on a topic that involves a threat to the world or to society.



The Royal Society – dedicated to promoting excellence in science for the benefit of humanity

The Royal Society is a Fellowship of the world's most eminent scientists and is the oldest scientific academy in continuous existence.

Like many such institutions, they have a freely accessible Youtube channel, which is well worth browsing through, even if you think that “science isn’t your thing”!

Their channels includes most of their past lectures. Recommended for this Bulletin is the [Ferrier Lecture 2023](#), given by Professor Richard Morris, on “The Making, Keeping and Losing of Memory”.

And if you are short of time, the [youtube channel](#) also includes many 6-10 minute videos explaining some of the Big Ideas in science, as well as the series “New Science in less than 15 minutes”.



In-person Talk: Lifetime – The New Science of the Body Clock, and how it can revolutionise your Sleep and Health

Thursday, 9th January 2025 at 5:30 – 6:30pm

At the Bodleian Weston Library, Broad Street, Oxford. OX1 3BG

For Students 16+.

Our biology is governed by a 24-hour biological (circadian) clock that advises us when it is the best time to sleep, eat, think, and undertake a myriad of other essential tasks.

Progress in understanding the fundamental nature of circadian biology has been astonishing, and this knowledge has added to our wonder and appreciation of the biological world.

However, with this appreciation comes an emerging realisation of how essential circadian rhythms are to our health and wellbeing.

I have heard Professor Russell Foster speak before now (you’ll find him on the Instant Genius Podcast – further down this Newsletter!) – he is a very engaging speaker, and what he has to say may well revolutionise how you think about sleep and how your body reacts throughout the day. Tickets are FREE, but must be booked in advance: [Life Time | History of Science Museum](#)



There are some fabulous museums almost on our doorstep – why not take a look around the University Museums of Oxford?

We are lucky to have some world-class museums just a short bus ride away. However, do check on their websites as many of the exhibitions still require you to book a timed ticket in order to reduce congestion in the galleries.

Take a look at:

[The Ashmolean Museum](#)

[The Weston \(Bodleian\) Library](#)

[The Pitt Rivers Museum](#)

[The History of Science Museum](#) and

[The Natural History Museum.](#)

Please note that there are other museums in Oxford, but these five are the University Museums and all are centrally situated within walking distance of one another. For example, you might like to visit the [Soldiers of Oxfordshire Museum](#) in Woodstock, and our Vale and Downland Museum in Wantage.

And calling all students interested in stories, reading and books: the [Story Museum](#) is on the lookout for **Youth Collection Ambassadors** – a great opportunity to volunteer at the Museum and gain behind-the-scenes experience at a truly magical place! Click on the link above to find out more!



[Explore in Person](#)

[The Main Exhibition at the Ashmolean - Money Talks: Art, Society and Power](#)

Available until 5th January 2025



This thought-provoking Exhibition reveals how currency and art come together in design and culture to promote or challenge our views. It will feature works by some of the best-known artists, from Rembrandt to Warhol. Most of the imagery on our currency begins its life as art, before being mass produced on coins and notes. It has a dramatic impact on what and who we imagine is valuable.

Money itself is a popular theme in art – artists have long explored and commented upon the

balance between power, wealth and plenitude through using money artistically in novel ways.

To book your tickets and find out more, please visit: [MONEY TALKS: ART, SOCIETY & POWER | Ashmolean Museum](#)

Please note: this exhibition has timed tickets, priced at £15.30, with concessions down to £7.65 for a 12-17-year-old child, and free entry for children under 12.



[At the Ashmolean - Explore in Person:](#)

[A few of the Free Exhibitions and displays at the Ashmolean:](#)

(Please note: although entry to all of these exhibitions is FREE, it is advisable to book a free general admission ticket in advance. Please book your tickets at: [EXHIBITIONS | Ashmolean Museum](#))



Kabuki Legends

Available until 23rd February 2025

Japanese artist **Takahashi Hiromitsu** creates dynamic, colourful prints showing exciting moments in kabuki, a traditional form of dance-drama. This is the second show in a two-part exhibition of his works.

Gallery 29



Artwork of Chung Yee and his 1960s Hong Kong Contemporaries

Available until 9th November 2025

Cheung Yee was a leading figure of innovation in the Hong Kong art scene, especially during the 1960s, when the city established its own identity as an artistic centre..

Gallery 11



Sculpture: Deep-rooted things by Daphne Wright

Available until 7th December 2025

This exhibition features several new works in plaster which consider the tradition of still lifes and respond to the sculptures in the [Cast Gallery](#). Daphne Wright works in unfired clay and jesmonite and has long experimented with casting.

Gallery 8

[Explore at Home](#)

[Dive into the Ashmolean's Collection of Short Story Videos](#)

This is a great collection of *short* snippets that reveal more about some of the recent exhibitions, as well as some of the hidden stories behind some of the items in the Collections. Stimulating and thought-provoking. Do take a look!

[STORIES | Ashmolean Museum](#)

[Have you looked at the Home Learning Section?](#)

Ideal for KS3 exploration on a rainy day! Here you will find videos, short articles, photographs and things to make and do, on topics from Ancient Egypt to the Anglo Saxons, as well as jigsaw puzzles, Animal Crossing characters, and art and craft activities to do at home.

[HOME LEARNING | Ashmolean Museum](#)



[And if you are inspired to see more, then browse through the Ashmolean's Treasures](#)

You might retort that the whole of the Ashmolean Museum is filled with Treasures, so these items that are especially selected as the Museum's Treasures must have great significance indeed, possibly because of their rarity, or the place they held at the time. Do take a look, and then maybe head over to the Museum to see them for real!

[TREASURES | Ashmolean Museum](#)



[Explore online:](#)

[The Ashmolean for Young People](#)

This is a great section to explore, with advice on the sorts of careers that you find within a museum (you might be surprised!!), as well as challenges and other activities to try out at home.

[YOUNG PEOPLE | Ashmolean Museum](#)

From the Soldiers of Oxfordshire Museum



Exhibition: Oxfordshire to the Orne

Available until 20th December 2024

2024 marks the 80th anniversary of D-Day.

It is an opportunity to restate and refresh some of the compelling stories of the Oxfordshire and Buckinghamshire Light Infantry, and the Pegasus Bridge operation

in particular (see the recorded talks for an account of this). But there will also be many other less dramatic stories of how the county was involved in the run-up to D-Day. **Recorded Online Talks**



The Soldiers of Oxfordshire Museum has amassed a fantastic collection of recorded talks, with titles including *The Secret Life of Ian Fleming*; *The Pegasus Bridge Story* and *T.E. Lawrence: the Unconventional Warrior*. You can find all three series of talks here:

[Online Talks – Soldiers of Oxfordshire Museum](#)

Step into the Pitt Rivers Museum

Step into the Pitt Rivers and it is like stepping back in time, into a Museum ages past, where exhibits from all over the world crowd in on you from all sides. But the Pitt Rivers is totally modern in its outlook and seeks to represent the world in all its wonder and diversity. Booking is now only needed if you are attending a special event with limited numbers.

Explore in Person

In addition to the permanent Exhibitions, do take a look at some of the current temporary exhibitions and displays at the Pitt Rivers:



Exhibition – Hawaii: Ma Uka to Ma Kai

Journey through the Hawaiian landscape in this special exhibition, a unique collaboration showcasing the contemporary works of various artists and artist groups. With displays across the Museum linked to the Exhibition.



Mo'olelo of the Ahupua'a

Available until March 2025

Encounter Hawaiian stories of living, working, playing and learning within a sustainable landscape through this display of paintings by Solomon Enos on the first floor of the museum.

Didcot Case (Lower Gallery)



Nothing without us: Experiences of Disability – Museum Trail

Nothing Without Us is a co-produced gallery trail that shares the lived experiences of disabled people, their stories revealed by objects in the Pitt Rivers Museum. This trail invites you to reflect on how such experiences have not only shaped their lives, but have a deeper connection and meaning that matters for all of us.



His Dark Materials – Trail around the Museum

If you are a fan of Phillip Pullman's *His Dark Materials*, and you watched the BBC HBO TV series, then do pop along to the Pitt Rivers as, dotted all around the galleries, you will find props from the series. To find out more, visit: [His Dark Materials | Pitt Rivers Museum \(ox.ac.uk\)](#)



Online Archive: Curious about some of the Past Pitt Rivers Exhibitions that you may have missed?

You will find many of the past exhibitions here: [Past exhibitions | Pitt Rivers Museum \(ox.ac.uk\)](#)

Pitt Youth Action Team



Are you wondering what goes on behind the scenes at a vibrant Museum such as the Pitt Rivers? The Pitt Youth Action Team are a group of like-minded young people – typically aged between 16 and 19 – who meet at the Museum once a month. They are offered opportunities to have a real impact on the way the Museum interprets its collections, usually going behind the scenes to advise and consult with staff over exhibition materials, run activities at public events and plan projects. If you would like to know more, please [contact](#) the young people's co-ordinator at the Museum.

At The History of Science Museum of Oxford:

The Museum is open between 12:00 and 5:00pm Tuesday to Sunday.



Exhibition: A healthy future for all? – Explore the science behind the pandemic headlines

To save lives during the COVID-19 pandemic, scientists took innovative approaches to produce rigorously tested, clinical-grade vaccines and drugs at speed.

But how can these new techniques deliver wider healthcare benefits for all of us?

A Healthy Future for All? empowers you to discover the science for yourself. Find out how the immune system works, and explore how researchers are using the pandemic experiences to prepare for the next pandemic outbreak.

[A Healthy Future for All? | History of Science Museum \(ox.ac.uk\)](#)

Explore in Person at the History of Science Museum:



Exhibition: Step into Lyra's Worlds – props and costumes from the BBC HBO series *His Dark Materials*

The History of Science Museum influenced the design of the Alethiometer. Come and discover your Daemon and journey through the Museum with your daemon guide to discover stories of creative leaders, resourceful adventurers, daring visionaries and ingenious scholars.

There are objects and stories to find as a family in each gallery before you enter the world of Philip Pullman's international best-selling trilogy, *His Dark Materials*. Step into Lyra's study, under a canopy of stars and Dust, to discover props and costumes from the BBC HBO production, including Lyra's alethiometer from the series.

Explore the Museum's intriguing dials and devices that inspired Philip Pullman to create the alethiometer. *Basement Gallery*.

Alice in Typhoidland: The Past and Present of Typhoid

Discover the long history and cutting-edge research behind the typhoid vaccination and its roll-out.

Discover how Victorian doctors and scientists helped make typhoid visible and developed the first typhoid vaccines, and **Learn** about the current challenges of typhoid across the world and what researchers in Oxford are doing to tackle it.

To find out more about the Exhibition, visit: [Alice in Typhoidland | History of Science Museum \(ox.ac.uk\)](https://www.historyofsciencemuseum.org.uk/exhibitions/alice-in-typhoidland)

You will find the Exhibition in the *Basement Gallery*.



Display: The Disease of Greed – Fake, falsified and substandard medicine

Fake objects in museums may seem harmless, but fake medicines and misinformation have real consequences for all of us.

Come and investigate hoaxes, forgeries and fakes in the world of public health in Southeast Asia. Bear in mind that, although this display explores the problem in one area of the world, the issues arising are not confined to that area. Take a closer look online before visiting the display: [2024 Fakes](https://www.genial.ly)

[Display \(FINAL\) \(genial.ly\)](https://www.genial.ly)



Meet Guglielmo Marconi – one of the minds who made the modern world

Through the work and experiments of Marconi, Radio was born. This exhibition explains some of Marconi's journey of discovery and its legacy in the terms of radio and microwave physics. Explore how Marconi's science experiments revolutionised the way that the whole world stays connected.

Basement Gallery (You can also explore some the exhibition at home: [Making Waves | History of Science Museum \(ox.ac.uk\)](https://www.historyofsciencemuseum.org.uk/exhibitions/making-waves))



Display and Online Story

One of the most famous artefacts on display at the History of Science Museum is Einstein's blackboard, hanging high on the wall of the Basement Gallery.

This blackboard is more than a glimpse into the mind of a genius, however: it is a key moment in our understanding of the Cosmos. To find out more, visit the online story

here: [Einstein's Blackboard \(shorthandstories.com\)](https://www.shorthandstories.com) and, next time you're in Oxford, pop into the museum to see the blackboard for yourself.

Step back into online version of previous Exhibitions, dating back to the 1995!

The History of Science Museum has been creating virtual versions of their past Exhibitions for over 25 years – a real treasure trove of learning. Do take a look at:

[Past exhibitions and displays | History of Science Museum \(ox.ac.uk\)](https://www.historyofsciencemuseum.org.uk/exhibitions/past-exhibitions-and-displays)



Dear Harry...



Discover the Collection: Science in the Islamic World

The History of Science Museum houses one of the world's most comprehensive collections of astronomical instruments from the Islamic World.

Ranging from the 800s CE to the present day, these scientific objects were created and used by people living in *lands where the majority religion was — or is — Islam*.

While the artisans who made them came from different regions — Europe, Africa, the Middle East and Asia — the objects themselves still share many similar, distinctive characteristics.

And though the instrument makers all lived and worked in the Islamic World, they were not all themselves Muslim. The result is a fascinatingly rich and diverse collection. For more information, please go to: [Science in the Islamic World | History of Science Museum \(ox.ac.uk\)](https://www.hsm.ox.ac.uk/collections/science-in-the-islamic-world)



Online Exhibition: Mirror of the Stars



“Pick up an Astrolabe, and you hold the Universe in your hands.” Join Museum curators Dr Federica Gigante and Mathilde Daussy-Renaudin to explore how astrolabes mirrored the traditional view of the Earth at the centre of our moving universe. This step-by-step tour of the Exhibition takes you through what astrolabes were and how they were used in so many aspects of everyday life. Visit:

[Mirror of the Stars | History of Science Museum \(ox.ac.uk\)](https://www.hsm.ox.ac.uk/exhibitions/mirror-of-the-stars)



Read the Blog: Why our History Matters – a look at the decolonisation project that will explore the origins of the founding collection

Consider the role of museums in general and then explore the origins of some of the key collection artefacts, learn about the way the items were procured and discover some of the hidden voices and stories within them.

[Finding and Founding Blog One Our History Matters | History of Science Museum \(ox.ac.uk\)](https://www.hsm.ox.ac.uk/blog/finding-and-founding)



Watch again: the collection of recent past talks

Scroll down the page to reach the Museum's Youtube collection of recent past events, which include a talk on Board Games and Mediaeval Medicine, and a discussion on whether science can always be considered “fact”.

[What's on | History of Science Museum \(ox.ac.uk\)](https://www.hsm.ox.ac.uk/whats-on)

You can also go on to take a virtual tour of the galleries at:

[Current Displays and Exhibitions | History of Science Museum \(ox.ac.uk\)](https://www.hsm.ox.ac.uk/current-displays-and-exhibitions)

And from the Natural History Museum of Oxford:



Special Exhibition: Breaking Ground

Available until September 2025

The Breaking Ground Exhibition explores the age of 19th Century discovery as, through fossils and new methods of study, our understanding of prehistory came alive. The exhibition focuses on the work of William Buckland, geologist and palaeontologist, and Mary Buckland (née Morland), a scientific illustrator. They both helped to establish new scientific methods and ideas, which led to fascinating discoveries in palaeontology, including the first ever dinosaur to be named to science.

This exhibition showcases important specimens and fossils along with drawings, prints and paintings made by Mary Buckland and others, which helped spread the understanding of extinct groups of animals and plants among the 19th-century scientific community. It is a marvellous journey not just of discovery, but of the developing scientific methodology of the time. Find out more at [Breaking Ground | Oxford University Museum of Natural History](#)



Explore in Person: New Displays now open

What connects prairie dogs to blister beetles? How do spiders communicate with each other? And why are cockatoos considered pioneers? Check out the new displays to find out. To get an online taste, please visit: [Life, As We Know It | Oxford University Museum of Natural History](#)

[of Natural History](#)

In addition, the museum has a number of events (talks, panel discussions, tours, workshops) over the coming months. Below is a selection, but do take a look at their [WHAT'S ON | Oxford University Museum of Natural History](#) to find a full listing. Many of their events are free, but most need to be booked in advance.



Display: Victorian Spiritualism

Available until 6th January 2025

Victorian spiritualism was a popular, yet controversial, movement from the mid-19th century that claimed spirits existed and that the living could communicate with them. This display draws together archive material that illustrates popular spiritualist practices of the time, including mesmerism, table turning and 'spirit writing'.

Presentation Display Case

Talk: Gilbert White's Mammals

Monday 13th January, 2025 19:00-20:00

Rev Gilbert White is best known as the author of *The Natural History and Antiquities of Selborne*, and commonly referred to as the 'Father of Ecology'. In this talk, Stephanie Holt explores his overlooked studies of British Mammals.

Rev Gilbert White's work has influenced the great and the good of natural history, including Charles Darwin and Sir David Attenborough, and many, many naturalists, amateur and professional, both here and abroad.

No need to book. Entry is £3 at the door.





A Treasure of Online Exhibitions!

From Architecture to Animals, and from Bacteria to Brains, browse through the Museum's collection of digital exhibitions and learn more about all aspects of the Natural World. Dive in at: [Online exhibitions | Oxford University Museum of Natural History](#)



The Learning Zone, from the University of Oxford's Natural History Museum



This is packed with resources and ideas for learning about the Living World, the Earth, and Fossils. Most of the materials are aimed at upper KS2 and KS3, so if you are in Years 7-9, you should find plenty of interest: games, videos, activities, and ideas for further exploration. Do take a look! [Home | The Learning Zone \(ox.ac.uk\)](#)

The Natural History Museum has a number of regular family-friendly events, such as *Science Saturdays*, *Autism-Friendly Openings* and *Family Friendly Sundays*. Do take a look at their website to check out the whole programme of events: [WHAT'S ON | Oxford University Museum of Natural History](#)

The museum also holds regular sessions on object handling. To find out more, head to [WHAT'S ON | Oxford University Museum of Natural History](#) where you will find several pages' worth of events.



[Young People at the University of Oxford's Museum of Natural History](#)

DO visit this section for ideas of how to get involved (e.g. the regular Youth Forum for ages 16-19) as well as online challenges and resources. Keep an eye on this page as it is updated.

[Young people | Oxford University Museum of Natural History](#)

[From the Bodleian Libraries](#)

If you find yourself in the city of Oxford, why not take a walk down Broad Street and pop into the Bodleian Library to see one or more of the four Exhibitions listed below. All are FREE to enter, and you do not need to book beforehand.

Also, do take a look at the Events listings, as many of these are free to access as well. Please visit: [Events & Exhibitions | Visit the Bodleian Libraries \(ox.ac.uk\)](#)



In-person Exhibition: Write Cut Rewrite

Available until 5th January 2025

Write, Cut, Rewrite is an exhibition dedicated to the creative importance of editing in literature, often referred to as 'killing your darlings'.

Often, in the attempt to find the perfect form, the author cuts more words than the ones that are eventually published, and one might expect these discarded fragments to end up in waste-paper baskets and disappear. But many are preserved in libraries and archives, a testament to the importance of this form of creative undoing in the writing process.

Free admission. *The Treasury, Weston Library.*



Exhibition: Oracles, Omens and Answers

Available until 27th April 2025

Discover how people have sought answers to life's big questions throughout history.

Drawing on material from across time and cultures – from oracle bones from Shang Dynasty China (ca. 1250-1050 B.C.E.) to an autobiography of Ronald Reagan's White House astrologer – *Oracles, Omens and Answers* will

explore the different techniques humans have used to unveil the past, understand the present and predict the future.

St Lee Gallery, Weston Bodleian Library. Free admission, no booking required.

You will find the full list at [Events & Exhibitions | Visit the Bodleian Libraries \(ox.ac.uk\)](#).



The Story Museum is looking for Youth Collection Ambassadors – could this be you?

Oxford's wonderful Story Museum is looking for young people to join their Youth Collection Ambassadors Group.

This is a dynamic group of young people, aged 11-16, who work together to

develop the Museum's 1001 Stories Collection, as well as the Object Collection as a whole. If you are interested in finding out more, please head over to our Academic Enrichment Blog for details of the scheme and a registration form: [King Alfred's Academy - Story Museum Youth collection Ambassadors \(kaacademy.org\)](#)



Section 2. Sites to explore online

Homerton College: Future Ready!



Calling all Year 10 students keen to develop their critical thinking and essay writing skills!

Students who take part in the online programme in March 2025 will get to create their own

university style essay on this year's topic 'Is knowledge dangerous?' while developing their critical thinking and essay writing skills, preparing them for GCSEs/Highers... and for university!

Application Deadline: 9am, 9th January

Course Dates: 4th March-26th April

Open to: State school students in Year 10

[Apply here](#)

Langevity – Are you in Years 10, 11 or 12? Do you love Languages?

This scheme involves a series of webinars that introduce students to a range of language-oriented degrees, most of which can be studied without any previous knowledge of the languages that form part of the course. The aim is to increase interest in languages at A-Level and Degree-level.

Application Deadline: 12pm, 13th January

Course Date: Between 23rd January and 13th March

Open to: Students in Year 12, 11 and 10

[Find out more and apply here](#)



RAL Space Youtube Channel

There is a wealth of videos on this channel – not just recordings of talks and educational videos, but some very informative reviews of careers and some of the myriad opportunities available through the Science and Technology Facilities Council. [RAL Space - YouTube](#)



BBC Science Focus

You don't need to subscribe to the monthly *Science Focus* Magazine (although it would make a very nice Christmas present!) – you can just register to receive the daily email full of news updates in the world of science and technology, and you can dip into the website for updates on all aspects of science, including health, wellbeing, oceanography, geology, space, and much more. Well worth exploring.

[BBC Science Focus Magazine - science, nature, technology, Q&As](#)





Podcast: Instant Genius, the podcast from the BBC Science Focus Magazine

If you prefer to absorb your super curriculum by just listening as you travel to and from school, then this is an excellent one. Each episode features a world-leading expert who will talk to you about the latest ideas and research in all sorts of areas of science and technology. Absolutely fascinating.

[Instant Genius Podcast | BBC Science Focus Magazine](#)



The Reith Lectures 2024 – Exploring four Questions about Violence

This year's Reith Lectures were given by Forensic Psychiatrist Dr Gwen Adshead and explores four crucial questions about violence to help us understand this phenomenon. They include *Are all violent people evil?* And *Does Trauma Cause Violence*.

At this site, you will also find Reith Lecture collections from previous years, including The Future of AI and the four

freedoms of Franklin D Roosevelt. [BBC Radio 4 - The Reith Lectures](#)



Trinity College Public Lectures – forthcoming and past

Trinity College Cambridge run several series of annual lectures on four diverse and interesting subjects:

- The Birbeck Lectures, on topics within Ecclesiastical History
- The Clark Lectures, on topics of English Literature
- The Lees Knowles Lectures, on aspects of Military History, and
- The Turner Lectures, on Philosophy of the Sciences.

You can explore the website and find recordings of past talks here: [Public Lectures - Trinity College Cambridge](#)

The Special Species Games – Create your own species!



Every species has its own unique scientific name that is chosen by the individual or team that discovers it. The name usually reflects something about the species itself. Carl Linnaeus came up with the 'binomial' naming system, which means two names. Every species is known by two names - we are *Homo sapiens* (meaning human thinking, or wise).

You can come up with your own Special Species by combining together different Latin or Greek words and imagining what the species would look like and why the species might have developed those features through evolution.

[The Special Species Game | The Linnean Society](#)



Cambridge from the Inside – a podcast about living and studying at Cambridge

The "Cambridge from the Inside" podcast is produced by students and academics from Trinity Hall: home to a friendly community of undergraduate and graduate students, tucked away on a beautiful riverside site by the city-centre. It is one of the oldest Colleges of Cambridge University, founded in 1350. The podcast is designed to give our students a taste of what it is like to live and study at

Cambridge, with interviews and presentations from undergraduate and graduate students, as well as academics in various different fields of research. [\(302\) Trinity Hall Cambridge - YouTube](#)



Trinity Hall's Youtube Channel

And in addition to the above podcast, there is also a wealth of videos with information about the application process, interviews, admissions tests and generally living and studying at Cambridge.

[\(302\) Trinity Hall Cambridge - YouTube](#)



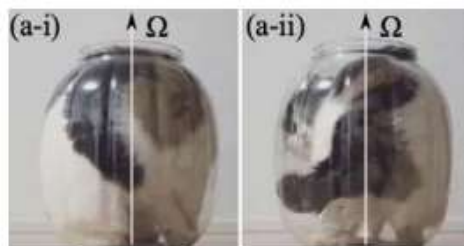
The Ig Nobel Prize for Science Research – Research that makes you laugh...and then makes you THINK

One of the remarkable things about science is that it is one of our most creative pursuits, but this tends to get lost during our early

steps into the world as science as, these days, there is so much that we need to know before we can start being creative with it. This website displays science at its creative best: scientists using our current scientific knowledge to ask silly questions and apply rigorous scientific research to explore ridiculous ideas.

Visit the website at: improbable.com to find out more about the annual Ig Nobel Prize, and then head over to [Past Ig Winners](#) to browse over the amazing science since the prize's inception in 1991. According to the prestigious journal *Nature*, "The Ig Nobel Awards are arguably the highlight of the Scientific Calendar".

I have to say my favourite bit of improbable research earned the 2017 Ig Nobel Prize for Physics for using fluid dynamics to probe the question "Can a Cat be both a Solid and a Liquid?" (given that they can squeeze themselves to fit any container).



Improbable Research – the Podcast

And if you have some time to spare as you travel to school, why not listen to some improbable research along the way? The podcast can be found at [Podcast](#), and you can also find some video documentaries about the Ig Nobel Prize at: [Improbable TV](#)



The University of Oxford Independent Science Magazine

The Oxford Scientist is the University of Oxford's foremost science magazine. It is entirely student led, and publish [one issue per term](#). The editors pride themselves on

creating a magazine that is both packed with interesting science, and graphically gorgeous. A must-read for any student considering STEM at university or as a higher-level apprenticeship. Recommended from Year 10 upwards, but we do know there are some stunningly bright scientific minds in our younger years so this is a recommendation only. [The Oxford Scientist - The University of Oxford's independent science magazine \(oxsci.org\)](#)



Three great resources for students of A Level Chemistry, from the University of Oxford:



Explore Chemistry – a series of inspiring talks for Sixth Form Students

State school A level (or equivalent) Chemistry students and teachers are invited to this series of enlightening online talks by Oxford research chemists, followed by a Q&A. Talks will be live and the sessions recorded for use afterwards by subscribers if they are unable to attend. For 2024-25, live sessions will be held on

Mondays from 17:15-18:00* in order to minimise disruption to the school day. Students may attend without a teacher, provided we have a teacher contact and the student signs up with a valid school email address.

You can sign up here: [Career and Research Talks | Department of Chemistry \(ox.ac.uk\)](#)



Chirality Workshops from the Dept of Chemistry

This online workshop for UK state school students focuses on the 3D shapes of molecules, what the word 'chiral' means, the importance of chiral molecules in biology, and about the resources available to research chemists looking at proteins. Additionally, we consider current research focused on the main protease in SARS-

CoV-2, the virus responsible for the recent global pandemic. A self-directed resource is included.

There are a number of dates to choose from, but all are for the same workshop. Find out more at [What's on | Department of Chemistry \(ox.ac.uk\)](#)

Recordings of past University of Oxford Chemistry Conferences



Diverse topics such as the role that natural products can play in the future of drug discovery; the chemistry behind bird navigation and migration; cures from within, and others.

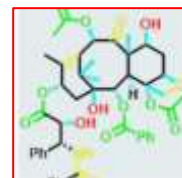
Well worth a visit!

[Schools' Chemistry Conferences | Department of Chemistry \(ox.ac.uk\)](#)

More Learning Resources, for both GCSE and A Level

Some great learning resources from the University of Oxford to encourage your own exploration into the world of chemistry:

[Learning Resources | Department of Chemistry \(ox.ac.uk\)](#) The list includes wider reading suggestions, youtube videos, podcasts, websites and more!

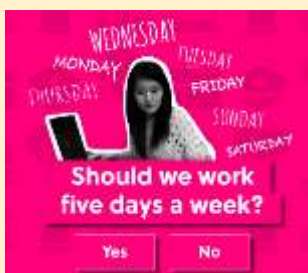


Recorded Talk: Chemistry for Archaeology

The Sixth Form Autumn Chemistry Conference back in September featured Associate Professor Amy Styring who shared fascinating insights into the use of chemistry in archaeology to study ancient diets and migrations; Dr Calum Patel then gave a captivating account of his innovative work in fluorine chemistry across various

industries. You can catch up on the conference at

[Schools' Chemistry Conferences | Department of Chemistry](#)



EXPLORE

Explore is an engaging digital resource from the University of Oxford. As the 'Home of Big Questions', it aims to challenge those from 11 to 18 years

with debates and ideas that go beyond what is covered in the classroom. Big questions tackle complex ideas across a wide range of subjects and reflect the kind of critical thinking students undertake at university. [Explore | The Home of Big Questions](#)



A website to keep an Eye on: Science Oxford

Science Oxford, based in Headington, has some fantastic family days and other events, but also run STEM Careers experience days for years 11-13 during school holidays. Well worth signing up to their newsletter to make sure you don't miss out on anything.

[What's On - Latest Events & Clubs - Science Oxford](#)

News from the Department of Physics



This is a fantastic webpage that takes you through some of the latest news and discoveries relevant to the Field of Physics, You can filter the news items by research

theme and department (a great way of finding out just how many sub-departments exist at the Oxford Department of Physics), and you can also choose to filter by audience so that you pick out the news items that have been selected especially for school students and prospective applicants.

[Latest news and comment | University of Oxford Department of Physics](#)



Oxford Womxn in Computer Science (OxWoCS) Challenge Club

(Women in Year 12 (16-17) from UK State schools)

OPEN

Date of next event: January-May 2025.

The Oxford Womxn in Computer Science (OxWoCS) Challenge club is an annual event created by the Oxford Womxn in Computer Science society alongside the Oxford Department of



Computer Science. It aims to create a community of young women with a passion for mathematics and its applications. The club will consist of monthly mathematical and Computer Science related problem sheets which will be sent out for students to solve. These problems are designed to stretch and challenge students. At the end of each month, students will take part in an online discussion lead by an Oxford Computer Science student, to discuss the problems including solutions and techniques. We expect that students who are selected to join the programme to participate in each of the online sessions. We anticipate that the problem sheet to take about 6-8 hours of work, each month, in your free time, before the live session.

Further information and for how to apply: www.cs.ox.ac.uk/ChallengeClub

Please get in touch via outreach@cs.ox.ac.uk if you have any questions.



Oxford Online Maths Club - Welcome to the club!

The Oxford Online Maths Club is a weekly livestream from the University of Oxford. It's free, interactive, casual, and relaxed, and the livestreams are recorded so that you can watch back afterwards if you can't make it to the live broadcast on Thursday afternoons. Our regular host is Dr James Munro, and we often

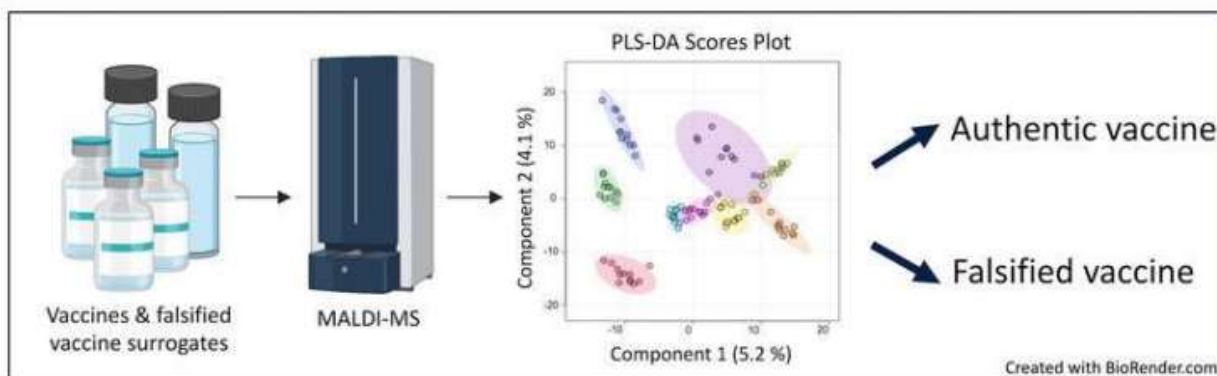
have current Oxford students answering questions in chat and appearing on the livestream to talk about maths.

The club is mostly aimed at people about to apply to university or about to start a Maths course, but everyone's welcome and there's no registration needed. Whether you're the only person you know who's interested in mathematics, or if you're an entire sixth-form maths club looking for more maths content, we're here for you.

[Oxford Online Maths Club | Mathematical Institute](#)

Learning Resource: Mass Spectrometry for vaccine screening

A team from the University of Oxford have developed a first of its kind mass spectrometry method for vaccine authenticity screening using machine learning. Find out more at [Scientists develop new method to detect fake vaccines | Department of Chemistry](#)



Video Documentary: [On the Edge of Existence – Rediscovering a Lost Coral](#)

Earlier this term, I took some of our Year 9 students to hear Dr Bryan Wilson giving a talk about his work. The students absolutely loved his work, and Dr Wilson told us that he had a video of his work on the Oxford Sparks website.



Dr Wilson has also promised that he would try to find time to come and give a KAAEP talk at our school in the near future. If you would like a little preview of what you are in for, you can watch his video



documentary here: [On the Edge of Existence: Rediscovering a Lost Coral - Oxford Sparks](#)

Two new projects from Zooniverse

For all those citizen science enthusiasts, here are two projects to whet your appetite. If neither of these grab your attention, then head over to [Projects — Zooniverse](#) where you will find hundreds of other projects, on all sorts of topics, from languages to astrophysics, and from medicine to the Arts. **And did you know that working on Zooniverse projects can count towards the volunteering bit of your D of E qualification?**



Monsoon Voyages

This project aims to digitise and analyse historical rainfall data of SE Asia from the mid-19th to mid-20th centuries. There is a critical need for long-term climate records to better understand past climate and inform future plans for agriculture, water supply, and flood management. This project is about digitising mid-19th Century ship logbooks of the British Royal Navy. Many ships frequented these areas as part of the east-west trade route, so there is a lot of data from many ports along the Malaysian and Indonesian coasts.

These ship logbooks not only contain climate history, but they are also first-hand witnesses of some of important historical events, for example, Second Anglo-Chinese War ("Opium war") of 1856 – 1860, Anglo-Japanese hostilities of 1863 – 1864, etc. These records offer rich perspective into monsoon behaviour, extreme weather events, and seasonal variability. By rescuing and digitising historical weather records, you are helping to ensure that valuable data is not lost to time. Read more at www.monsoonvoyages.org

Get involved and give the project a try at: [Monsoon Voyages — Zooniverse](#)



Space Warps – ESA Euclid

Massive galaxies warp space-time, bending light rays so that we can see around them to even more distant galaxies. These gravitational lenses are super rare but in previous surveys you have already helped us find hundreds of new candidates. We're improving our analysis using your data, and finding even more interesting images - come and help us find more lenses!

In this new project, we will be inspecting new high quality imaging data from the ESA Euclid Space Telescope in which many previously unknown strong lenses will be hiding. We can expect many new lenses, more than we have discovered before, to be revealed in this exceptional data.

We are very excited to ask you for help to inspect the candidates. In this first batch, we have around 30,000 images to inspect.

Join us and be a cosmic lens hunter!

To get started, please visit: [Space Warps - ESA Euclid — Zooniverse](#)

Especially for Y10s – Y13s looking to broaden their super curriculum in preparation for University Applications (also great for EPQ ideas!):

Super-curricular activities are not mandatory. However, they can help you make a competitive application, and prepare you for a challenging academic environment, so we strongly recommend them. Super-curricular participation can enhance your personal statement, give you greater confidence in your subject choice, show that you are serious about your area of study, and give you a wealth of ideas to draw upon in discussions if you're invited to interview. It's likely that you'll develop new ideas and opinions, critical thinking and analytical skills, and an ability to understand new information from different sources – this is all great preparation for succeeding at university. [Super-Curricular Activities \(cam.ac.uk\)](https://www.cam.ac.uk/extra-curricular)



The University of Oxford's Digital Resources Hub

The University of Oxford has compiled the best of its digital resources into a Digital Resources Hub to support learning and exploration. It is helpfully organised by age to help you find the resources that are best suited to your stage in education. They can also help parents and teachers to feed the curiosity of growing minds and inspire them to think broadly. These resources can also enable older students to explore their passions and interests further, and to discover more about Oxford. Go to: [Digital resource hub | University of Oxford](https://www.oxford.ac.uk/digital-resources)



HE+

This website is for anyone interested in exploring ideas and developing their own critical thinking skills. Each topic is produced by Cambridge postgraduate students and academics at the cutting edge of research in their field. The topics provide guided activities, questions to think about and suggestions for further reading.

It is aimed at older students, but there is absolutely no reason why younger students cannot take a look and start thinking ahead. The main subject pages also give you a quick guide to what it would be like to study the subject at university level and suggest some further resources to check out. Click on a subject icon or search all topics to get started! Visit the HE+ website at <https://www.myheplus.com/>

Super Curricular Suggestions from the University of Cambridge:



Strong applicants to Cambridge and other competitive universities tend to have explored their chosen subject through wider reading outside the classroom, as well as doing very well in their GCSEs and A-levels. We call this sort of exploration 'super-curricular', as it builds on and enhances what you are studying in school. This selection of suggested reading lists and resources has been gathered from the Cambridge departmental and College websites, other universities and other sources on the internet. These lists provide some suggestions for places to start exploring your own interests in your chosen subject independently - you do not need to engage with any of the specific websites, books, podcasts etc mentioned and can easily find your own alternatives. The following lists are

suggestions only. [super-curricular suggestions.pdf \(cam.ac.uk\)](https://www.cam.ac.uk/extra-curricular/super-curricular-suggestions)



Trinity College Library Quad

This is a treasure of super-curricular enrichment: a collection of resources from current Oxford Trinity College Students. The difference here is that all these resources come recommended as having been helpful in preparing for university.

[Library Quad | Trinity College Oxford](https://www.trinity.ox.ac.uk/library-quad)

Competition Corner

“Why bother entering competitions? I am probably not going to win anything.”

And this is very true. But entering academic/educational competitions is an excellent way of stretching your brain and your abilities, and you will learn and hone many skills along the way. Once you are in Year 10+, entering academic competitions and being able to reflect on your experiences is something that will make you stand out in university and high-level apprenticeship applications. So *do* get into the habit of checking the **Competition Corner** of the *KAAEP Bulletin*, or looking online for other competitions. (If you find something, do please let me know so I can share it with others!)

Year 12 is an important year for this as the most competitive universities seek out those students with the motivation and enthusiasm to enter academic competitions.

- (a) They make you stand out from the crowd - you can talk about your research in your personal statement.
- (b) They help you to explore and discover new interests.
- (c) They are a good way of testing whether studying the subject at university is really for you.
- (d) They improve and develop your critical thinking and essay writing skills in readiness for stepping up to university.

“It is a great idea to enter a competition in an area that you enjoy or are good at whilst you are still at school. If you win or are placed, that is excellent, but even if you don’t, it demonstrates commitment, interest, drive and immediately differentiates you from others. It looks good on your UCAS Form.” Student Ladder – Steps to Success.



For Years 7 to 9: An Art Competition from the Centre for Personalised Medicine

For this competition, students in Years 7-9 are asked to create art about how personalised medicine affects our planet. Students working individually or in groups can create a drawing, a painting, a collage, a sculpture – anything goes as long as it’s something you can take a photo of. Every entrant receives a certificate, and there are cash prizes for the best artworks. Click on the following links to see the absolutely brilliant pieces created by winners and finalists for [2022-23](#) and [2023-24](#).

Entries can be submitted electronically, and in the past some of the best artwork has been exhibited at the John Radcliffe Hospital, the Centre for Human Genetics, and St Anne’s College in Oxford.

To find out more and for details of how to enter, visit [Oxford CPM Art Competition](#).

The deadline to submit your work is **Friday 31 January 2025**.



Armstrong Arts and Humanities Essay Competition 2025

The essay questions in this competition cover the breadth of arts and humanities subjects offered at undergraduate level at the University of Cambridge. Questions are often multi-

disciplinary, designed to encourage entries to consider the connections between various subjects, and to allow entries to approach the question from varying angles. Effective essays will present a clear argument supported by specific, relevant examples. The deadline to submit your work is: **Monday 3rd February 2025, 6pm.**

For more information and details of how to submit your entry, visit:

<https://www.magd.cam.ac.uk/undergraduate/access-and-outreach/essay-competition>



Fitzwilliam College Competitions

This year, Fitzwilliam College will be running essay competitions in Ancient World and Classics, Archaeology, Economics, Land Economy, Medieval World and Slavonic Studies. They will also be running an Architectural Design

Competition and, new for 2025, they will be launching French and German translation competitions.

Deadline: 6pm, 28th February

[Find out more here](#)

Girton College Humanities Writing Competition

Girton College are excited to announce this annual competition, which is an opportunity for students to research and write beyond the curriculum, using one or more of the Lawrence



Room museum objects, as their focus. Essays or creative responses (such as dramatic monologues or short stories) are equally welcome. The judges are looking for the ability to connect different areas of knowledge, to think about details and to communicate clearly.

The deadline to submit your work is **Thursday 20th March 2025, 5pm.**

For more information and details of how to submit your entry, visit:

<https://www.girton.cam.ac.uk/humanities-writing-competition>



Film of the Month Competition – any film, any genre, any time of year

This is an ongoing competition for young people aged between 5 and 19. Although it does say “any film”, there are some guidelines that you need to follow. You can submit at any time. The website has guides and resources to support your film-making as well.

If you are interested in the idea, take a look at: [Details of our active competitions. - Film of the Month - Into Film](#)



Ghost Stories – a Writing Competition for 12-18-year-olds

Few stories are as much fun to write as a good, spine-tingling ghost story. Those that get your readers on the edge of their seats!

This competition is open all year round, and is free to enter.

For more information and details of how to enter, please visit: [Fright Club \(12-18 Year-Olds\) | Young Writers](#)

