Cambridge University Schools' Debating Competition 2021 - Pupil Reflection

Thursday 4 March 2021

Last weekend, three teams of Salopians were entered into the Manchester regional round of the Cambridge Debating competition. Two pupils who participated in the debate reflect on their time in the competition.

Eva H (G, V):

"Last Saturday, Sapna and I were lucky enough to take part in a virtual debating competition, hosted by Cambridge. As a pair, we represented Shrewsbury's C team, and did four British Parliamentary style rounds throughout the day. Although we were already familiar with debating, thanks to the inter-house competitions we take part in, the nature of this competition was new territory for us both.

"We had 15 minutes after the motion was released, before the round began and each competitor delivered a 5-minute speech. A feature of the structure that I found the most interesting were the Points of Interest, questions asked to the speaker in the middle of their speech, which I felt made the live debates very engaging. Although we did not qualify for the next round, I was glad of the opportunity as I was able to practice responding live to both questions and the motion."

Sapna C (G, V):

On Saturday the 27th Eva and I were very fortunate to get the chance to take part in an all-day parliamentary style debating competition, which was hosted by Cambridge. We started of trembling with nerves, but as we did more debates, we got much more comfortable with the debating style and gained confidence.

"Our first motion discussed whether voting should be made compulsory, however we unfortunately lost this debate. We performed much better in the second debate where we had to argue against the motion that university admissions should be randomised. In Our penultimate debate, which was probably our best, we won the controversial argument that parents should pass a test before having kids.

"We ended the competition by coming second in an intense debate on whether zoos should be banned, a cause I was very passionate about. Overall, it was an incredibly enjoyable day, and I loved every minute of it. It something that I would like to participate in again in the future."

Old Salopians give insight into career paths as part of National Careers Week 2021

Thursday 4 March 2021

On Wednesday 3rd March the school enjoyed the company of seven former pupils who spoke to our fifth form, as well as fifth formers from some local schools, about their careers. It was an eclectic mix of professionals who are excelling in industries that are popular pathways for Salopians, such as law, journalism, medicine, engineering, marketing and investment banking. The timing of these talks was in line with National Careers Week, a five-day celebration of careers related activity and opportunities.

The aim of discussions like these is twofold. One is to increase insight, to help participants really understand what this profession really entails which can be very difficult to appreciate without actually speaking to someone. The other is just as important and this is to encourage action. Across all seven of those talks, hints, tips and advice will have been provided about practical things pupils can do now to help increase their chances of gaining entry into occupations in the future. It is those who take this advice who ironically are often asked back to talk to pupils about their career in subsequent years. Proactivity normally yields more than inactivity.

National Careers Week is an excellent initiative but in some ways is a concept that should be challenged, in a wholly positive way. Isn't every week at school National Careers Week? Of course, there are events which bring careers planning into perspective and focus; this term alone pupils have been able to attend a range of activities, such as conferences, inspirational speaker presentations, the national enterprise challenge, option choice lectures, participate in video interviews, attend Oxbridge meetings and so on. Wider than this though, you could argue that every choice you make whilst a school, every interaction you have, is helping build towards a future career. Moving away from the obvious academic sphere, effective engagement in cocurricular activities for example has a clear link to developing many of the skills and competencies required by most employers, such as teamwork, leadership, problem solving and resilience. One of the reasons so many of our pupils are looking forward to being back on site is because of the opportunity to communicate with peers, and the ability to communicate effectively in the workplace is always going to be essential, perhaps even more so now with the increased expectation of being able to communicate effectively 'in remote'. One of the wonderful things about being back on site will be the chance to interact with a huge range of people with a huge range of responsibilities. Without knowing it, pupils are building networking skills and future contacts that will prove invaluable in the years ahead.

The point I am trying to make is that just like education is not limited to the classroom, careers understanding is not limited to the first week of March. It goes much wider than that, and those who make the most of all the opportunities presented to them are those who are more likely to have more options available to them as they progress through life.

We are incredibly fortunate at the school to enjoy enormous support from both our parent and alumni body, whose input has proven so invaluable to the Futures Department. If you are interested in contributing to the wide range of activities that we offer pupils around careers related planning, I would be delighted to speak to you. The brochure via this link provides further details.

Chris Wain, Head of Futures

Lectures to watch recommended by our Physics Faculty

Thursday 4 March 2021

The Physics Faculty (with the help of our Lower Sixth Physics Ambassador Students) have compiled a list of excited Physics lectures and events for the month of March.

The events range from an online masterclass to CERN to climate change. Something for everyone. Simply click on the links to register for the events.

Making the Solar Orbiter - Tuesday, 16th March 17:00-18:00

The missions to explore the heliosphere and the region around the sun that is dominated by solar winds. It was launched in February 2020 and is a joint program by NASA and ESA, presented by the Cambridge Physics Centre.

https://isaacphysics.org/pages/cpc_lectures#march

Oxford Physics Online Masterclass 2021 - Saturday 20th March 2021, 10am - 3pm

This is an online Zoom webinar aimed at L6th students.

The day will include advice on applying to study Physics at the University of Oxford, a lecture about an area of cutting-edge physics research, an interactive problem-solving workshop and more. Students will be encouraged to ask questions and engage with the speakers through the webinar platform. If you are interested but unable to attend the live event, you can also sign up to access recordings of the event afterwards.

This is a free event, students can register

here. https://www2.physics.ox.ac.uk/events/2021/03/20/oxford-physics-online-masterclass

All About CERN - Monday, 22nd March 19:00-20:00

CERN is the world's largest particle physics laboratory, supported by your taxes of about £1.60 per year. So, who are we, what do we do, how do we do it, and who benefits?

Click here to register – non-members welcome!

https://localevents.theiet.org/c09268

Learning Physics from Ancient Microbes: Archaea and Life at Extreme Conditions – Tuesday 23rd March 19:00-20:00

"My lab specialises in developing new techniques in microscopy and applying these to understand how microbes move around and survive in the wild. I will discuss some of our field work at Great Salt Lake in Utah (USA), and in Boulby Mine in Redcar and Cleveland (UK)." Register here: https://register.gotowebinar.com/register/3154625716865841164

Clouds and Climate Change – Wednesday 24th March 19:00-20:00

Presented by Prof. Tom Choularton, Centre for Atmospheric Science, University of Manchester. Cloud feedbacks are a fundamental and persistent problem in climate science and are the dominant uncertainty in assessing global and regional climate sensitivity.

The talk will begin with an overview of what is known about clouds and climate based on the 2013 IPCC 5th Assessment report. There will then be a discussion of some recent projects designed to increase our understanding and produce better treatments of clouds in Global Models.

The projects described will address issues concerning warm (liquid clouds) and mixed phase or ice clouds.

Finally, it has recently been proposed that cloud seeding can be a possible method of geoengineering to reduce the effects of increasing greenhouse gases. These ideas will be discussed. Register here to attend.

https://register.gotowebinar.com/register/1103952967805736972

Salopians reviewing research for journal publication

Thursday 4 March 2021

Frontiers is a leading Open Access Publisher and Open Science Platform whose journals are led and peer-reviewed by editorial boards of over 100,000 researchers.

The Frontiers journals cover more than 900 academic disciplines and are one of the largest and most highly cited publishers in the world. Frontiers for Young Minds (FYM) is a scientific journal within the Frontiers collection that is written by scientists and reviewed by children and teenagers. Every Frontiers for Young Minds article has to pass the judgement of the Young Reviewers before it can go online!

Our pupils have been asked to peer review the latest new discovery article entitled "What solutions does nature offer for environmental problems". Written by a team of scientists from the Leibniz Center for Agricultural Landscape Research and Ruhr University Bochum in Germany, this article explains how we can use and implement natural solutions to help solve some of the biggest environmental problems facing society today.



Our Young Reviewer team, made up of 4 pupils from 3rd to L6 form, have been preparing for this review by taking part in the Science "Go Further" programme, run by Dr Broadhouse and Mr Wray through the first half of the Lent Term in remote. During this 4-week programme they were introduced to the peer review process, why it is so important and how to critically review scientific papers, presenting their viewpoints to the group as they went. In doing so they have learnt about cutting edge discoveries from the maths behind human behaviour to the biochemistry of how fungi communicate, all the while honing their critical thinking and science communication skills.

This week they will be putting these skills to the test. Upon reading they will provide feedback and explain to the authors how to best improve the article before publication. Ensuring that the cutting-edge discoveries detailed in the article is in a language that is accessible and engaging for other for young readers. By working together with Dr Broadhouse, Mr Wray and the authors they will create an article that is both accurate and interesting. This article will soon be published online in FYM with our pupils named as the Young Reviewers.

Kate's charity challenge raises more than £1,200 for Midlands Air Ambulance

Thursday 4 March 2021

One Salopian has completed an amazing fundraising challenge by walking and running over 120 miles and has raised more than £,1,200.

Throughout February, Kate B (IV, MSH) walked and ran 121 miles as part of the Air 30 Airbase challenge; an initiative organised by the Midlands Air Ambulance as part of the charity's 30th anniversary celebrations.



Kate was taking part in the challenge along with her cousins Charlotte and Elliot, in order to raise money after her friend Henry, who also completed a fundraising challenge, was taken to hospital by the Midlands Air Ambulance following an accident last year.

Kate's final fundraising total was an amazing £1,225 and along with her cousins' and Henry, the team have raised £9,500, with hopes to reach a grand total of £10,000.

Kate said: "It has gone well, with a few different obstacles we all completed our individual set tasks. I did enjoy the challenge, and I feel that now I still have the motivation to go outside because I was outside so much!

"It is an amazing charity and I wish to do more challenges in the future."

The fundraisers even managed to raise awareness for the charity after Kate featured in several news items about Henry and the challenge, which were seen on ITV News, BBC News Online and Birmingham Live.

Well done Kate on completing your challenge and raising money for a good cause.

Art historian and writer to return for talk on Expressionism

Thursday 4 March 2021

Earlier this term the Art Department welcomed Ben Street (virtually), who gave a fascinating and timely talk on Kara Walker's striking work Fons Americanus, currently on display in Tate Modern's Turbine Hall.

We are pleased to announce that Ben will return on Monday March 8th to give a second talk. This time he will explore Expressionism, the early 20th century art movement most commonly associated with Weimar Germany and Scandinavian artists such as Edvard Munch, whose ubiquitous painting *The Scream* has become a poster boy for the movement.



Ben is an art historian and writer. He has been an educator and lecturer at many museums, including the National Gallery, Tate and Dulwich Picture Gallery, and is the author of several books on art. His forthcoming book is out this April, a children's book, illustrated by Jay Wright, called *How To Be An Art Rebel*. He has also contributed to programmes about art for the BBC. His website is www.benstreet.co.uk

In October 2020 Ben Street's previous book 200 Words to Help You Talk About Art was published. This is an excellent resource, which provides clear and concise explanations of key terms used in History of Art, and of which all our Sixth Form History of Art students have a copy.

Please contact Stewart Harrison: smh@shrewsbury.org for the Zoom link.

Professor David Crystal: Let's Talk about Conversation

Thursday 4 March 2021

On Tuesday 23rd February, the Sidney Society enjoyed a thought-provoking lecture from Professor David Crystal, pivoting on the findings of his 2020 book, Let's Talk: How English Conversation Works.

Professor Crystal is renowned in the field of linguistics and has written 120 books on the matter, as well as having appeared on the radio and lectured at the Universities of Bangor and Reading.

A keen audience of sixty, consisting by parents and pupils, was introduced to his initial findings surrounding the difficulty of recording genuine conversation. He revealed that through his cunning and craft he would secretly record friends at his house in conversation and disclose only later that he had done so, granting him undiluted, natural dialogue to study. The role of interruptions in conversation he found, more often than not, to be established on agreement and affirmation rather than contention. The formal structuring and syntax of the written sentence is abandoned in conversation, he told us, with conversation composed of "topic chunks" lacking distinct full stops. He substantiated this assertion with the evidence that one of his friends had spoken a near five-minute sentence on one occasion, whilst being recorded!

Professor Crystal went on to explain the fact that the placement and intonation of words is critical in understanding the meaning of sentences in conversation. Additionally, our proclivity to devise words of our own like "thingamabob" and use filler phrases such as "like" or "sort of", are indicative of our innate fear of silence. He stressed the importance of conversation as a reciprocal act, and one in which assessment and feedback, often through single words, is constant from both parties. Therefore, the zoom environment, he suggested, was almost antithetical to natural conversation.

When asked whether, because of his studies, he was an expert conversationalist, Professor Crystal replied that because of his fascination with the way conversation works, he often finds himself listening to how people say things, rather than what they say, and is less willing to participate himself!

World Book Day 2021

Friday 5 March 2021

This week saw Shrewsbury School mark World Book Day, a worldwide celebration of books and reading.

To commemorate World Book Day this year there were several exciting opportunities for our Salopians to be involved in.

Pupils and staff were invited to take part in the Big Book quiz, which comprised over 30 questions featuring everything from Harry Potter to Hunger Games, Shakespeare to Stephen King and Tolkien to Twain. Salopians were challenged to put their literary knowledge to the test to try and get their names on the leader board.

Shrewsbury School also hosted award-winning author Alex Wheatle, who talked about his life and writing on a Zoom call organised by Authors Aloud.

Alex's books (*Straight Outta Crongton*, *Liccle Bit*, *Home Boy*, *Cane Warriors* and *The Humiliation of Welton Blake*) are packed with passion and energy, but also wit and a huge amount of empathy for the characters. Alex grew up in care. His turbulent childhood was recently dramatised in an episode of Steve McQueen's *Small Axe* BBC drama series (available on iplayer at https://www.bbc.co.uk/iplayer/episode/m000q6rf/small-axe-series-1-alex-wheatle) His latest novel for teenagers *Cane Warriors* is shortlisted for the Shrewsbury School Book Award 2021.

This was a moving and important talk. Alex talked openly about on his difficult upbringing in a care home, his troubled teenage years in Brixton and his arrest, aged 18 for his part in the 1981 Brixton uprising. Alex spoke about the power of books and education to challenge racism. Reading encourages empathy, he said and introduces other points of view, cultures and histories. It was the desire to highlight the history of his own ancestors that inspired his latest YA novel *Cane Warriors* which is inspired by a slave uprising in Jamaica in 1760. (Email library@shrewsbury.org.uk to borrow from the library, or click here to read the e-book) A recording of Alex's talk will be available from Monday. I would encourage everyone to

hear his powerful words. Finally, Salopians were offered a free World Book Day book token so that they could choose a World Book Day book to enjoy. Book tokens can be downloaded from the library news page on firefly https://shrewsbury.fireflycloud.net/library/news-from-the-library)

NEW Mathematics Newsletter

Friday 12 March 2021

Welcome to the very first edition of the Mathematics Newsletter.

My name is Dr Kathryn Broadhouse and I am the new STEM Fellow for Mathematics and Science at Shrewsbury School.

For the first part of this year, I have had the pleasure of working closely with the maths department and we thought it high time we let everyone know the wonderful work both staff and students are getting up to in the maths world at Shrewsbury.

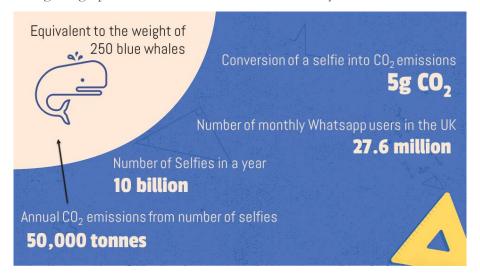


Image above created by 4th Form pupils Archie, Charlie and Jasper.

This edition includes:

- 1. The latest student maths projects being carried out in the department 4th form have been tackling some of the world's biggest problems with mathematical modelling.
- 2. The latest maths articles aimed at young people.
- 3. Up and coming maths competitions at Shrewsbury and across the UK and how to get involved.
- 4. The latest free online maths lectures.
- 5. The latest research in mathematical mindset and how this impacts classroom performance.
- 6. This edition's pick of undergraduate university maths courses, why study maths and what makes this course stand out for us.
- 7. Cross-curriculum fun with art and maths mashups from around the world this time we look at how crochet was used to visualise hyperbolic planes and how this went on to highlight mass coral bleaching with global warming in an art installation that travelled the globe.

Being our first edition, we had a lot to get through, moving forward the overall format will look very different so watch this space! I hope you enjoy this half term's edition.

Please follow this link to read the first edition of the Mathematics Newsletter

Restart Africa Sundowner Event

Friday 12 March 2021

In these troubled pandemic times, it is nice to see little glimmers of hope and ingenuity. It was heart-warming to see that Restart Africa's idea to host an online 'Sundowner' event in conjunction with Shrewsbury School was met with enthusiasm and generosity.

Those of you who follow the school's charity activity will have noticed Restart before. Ridgemount, Mary Sydney and Radbrook have been raising money for the charity and a group of 'Top athletes' involving some parents, teachers and pupils have been sponsored for running seven 10 kms over seven weeks for Restart and the Shrewsbury Ark. Restart is also heavily connected with Shrewsbury as Jules Winkley, Anna Peak and myself are all Trustees of the charity and Mary Coulson's grandchildren Jolyon and Sophia are current pupils here with Benedict last year's deputy Head of school having only recently left.



Restart was founded by Mary Coulson MBE in Gilgil Kenya in response to the violence that erupted after the elections in 2008. She had noticed the street children in and around Gilgil and founded the charity to give these abandoned, abused, and unwanted children a chance to live in safe and secure surroundings. The aim of the Sundowner event was to give friends, supporters, and newly interested recruits a chance to catch up with what has been happening at Restart whilst also hoping to attract new sponsors. The event was effortlessly hosted by LBC's wonderful flagship presenter Shelagh Fogarty. She anchored the event and was responsible for introducing the assembled 'zoomers' to Stephen Sackur the eminent BBC journalist and presenter of Hard Talk. Stephen is the first patron of Restart and he explained why he was pleased to accept the invitation to be a figure head for the charity. His son had very much enjoyed volunteering at Restart, and he has been a firm fan of the charity ever since.



Over the course of the event Mary Coulson explained why the charity is still needed and the work it does and Annie Smith an ex-volunteer explained what volunteering there involves. Incidentally as I write this report Harry W (Rt) is currently volunteering there following in the footsteps of Minty P (MSH) and Tiggy C (MSH) who beat him to it by a couple of weeks!

If you are interested in the charity, please do have a look at the recording of the event. I challenge you not to smile at the video of young Esther showing you round! She may be responsible in a direct way for the evening raising over £3,000 in new donations. It looks like zoom is here to stay! If anyone is interested in volunteering, I am more than happy to point them in the right direction.

Giles Bell

Futures & Higher Education Bulletin

Friday 12 March 2021

Futures and Higher Education Bulletin Edition 10 Lent Term 2021 from the Futures Department, full of useful information, reminders, resources and weblinks for Fifth and Sixth Formers and their parents.

Please follow the link to download it as a pdf: Futures Bulletin Edition 10, Lent Term 2021.

Bastille Society Lecture- Brexit: A brief history of divorce

Friday 12 March 2021

On the last Thursday 'in remote', the Bastille Society was lucky enough to welcome the esteemed Professor Robert Tombs (St. John's College, Cambridge) to speak on perhaps the most divisive subject of our time: Britain's departure from the European Union.

The lecture was eagerly anticipated, not least due to the Salopian affinity for *The Spectator*, in which Professor Tombs writes eloquently on numerous subjects surrounding the EU, France and British History.

Professor Tombs approached the subject with a unique take. Instead of making his standpoint immediately clear he spoke about the inevitability of the divorce. To begin, he offered an insight into the history of Britain's relationship with Europe. Beginning with the Battle of Hastings, union with the continent was explored via the Angevin Empire and the Glorious Revolution of 1688. By then Britain had transformed from 'European laughingstock to world power'. Finally, he addressed Britain's changing status as a consequence of the two world wars, and the rise of American and Soviet power.

Professor Tombs dismissed claims that the post-war period (1950-1970) signified a major loss of power for Britain, instead presenting statistics which indicated otherwise. It became clear, due to Tombs' justifications, that during these years it would be unfair to label Britain as the 'sick man of Europe' – that Europe was not necessarily the lifeboat to Britain's poor economic performances of the 1960s.

To finish his concise yet fascinating lecture, Tombs dealt with divorce from the EU. He explained it with three main reasons. One, the fact that UK growth had been ahead of the EU average since 1991, which meant we had the confidence to leave. Two, that our attitudes towards Europe, given our geography, history and culture, are relatively different to that on the mainland, although he did not think this argument bore too much weight. Finally, he accounted for Brexit through the fact that the UK left because it could. The UK was not a part of the Eurozone, distinguishing it from other member states. Had the UK adopted the Euro in 2001 then the economic argument for 'remain' would have been very difficult to ignore.

Plenty of students took the opportunity to ask such a distinguished historian questions pertaining to Brexit and the future of the UK. All were answered with the same engaging tone with which the lecture was delivered. Students were emboldened to questions both their own views but also those of others, and one can be sure that it will be present in our minds for long into the future.

Joseph M (SH)

Final push for Strava elevation challenge

Thursday 18 March 2021

After the roaring success of a series of lockdown challenges, it's time for one final push to get the last Strava mission completed.

The #40in40 Lockdown challenge was the first of its kind, with the hope of pupils, staff and the Shrewsbury community covering enough miles to circumnavigate the globe, covering 40,000km in 40 days.

Over 80 per cent of pupils took part in the first Lockdown challenge, with more than 70 members of staff clocking in their miles and 217 members of the Shrewsbury community on Strava joining in.

The #40in40 goal was reached quickly thanks to the large numbers taking part and was increased to the #80in40 challenge, with the result for that challenge totalling an impressive 81,283km covered in 40 days.

As well as getting people moving, it was also a chance to raise money for a number of charities in the process. The total raised by our pupils so far is an impressive £22,885.

Director of Sport Andrew Pembleton said: "We really wanted the pupils to stay active during a time of remote learning and to feel connected to their school community in some way, all while doing it safely.

"We had 675 pupils take part across the houses for the #40in40 challenge, which was a fantastic effort from our Salopians.

"Overall, everyone has done amazingly, and I'm so pleased with how so many people have got on board with the challenges. The aim of this initiative was to keep people active, ensure we were helping to take care of people's mental health as well as keeping everyone connected at a time where we couldn't be together.

"The entire community got behind the initiative: staff, parents and Old Salopians, and those overseas too. It was a great way to bring the Shrewsbury community closer together."

After the success of the Lockdown challenge, Andrew felt the community could go that extra step further before pupils returned to site and added two further challenges.

The first of those challenges was to cover the distance to our Sister Schools in Bangkok and on to Hong Kong, a total distance of 11,000km in 10 days, before all our pupils returned to site on March 8.

Of course, that target was well and truly beaten, and our amazing community covered 11,600km in 12 days.

Andrew said: "We reached out to our Sister Schools in Bangkok and Hong Kong who were really proactive with this challenge. It was impressive to see them get involved, and the team out there produced a great video at the end of the challenge."

https://twitter.com/ShrewsburySport/status/1369213689979674624

The final challenge is still active and looks to reach an elevation of 408,000m (408km), the same elevation that the International Space Station is currently orbiting the earth at.

Three weeks in, the Shrewsbury School community have climbed a total of 265,606m. This challenge lasts until the end of Lent Term, so let's get the community walking, cycling or running to reach our goal and declare this challenge 'out of this world'!

Future Shrewsbury School pupil becomes published author

Thursday 18 March 2021

A prospective Shrewsbury School pupil has taken inspiration from her time at the school's rowing club to write a poem that is part of a book she has had published.

Amelia B, a year eight pupil and Head Girl at Packwood Haugh, has written a book entitled *Different Angles*, a collection of 13 poems, a diary of emotions and events, published my Austin Macauley.

One of the poems was inspired by the time she spent with the Shrewsbury School Rowing Camp, with others covering events such as her boarding life at Packwood-Haugh, entitled 'The Ingredients of a Cake.'

Now a published author, Amelia was selected to help announce the winners of our Prep School Essay competition and share her thoughts on knowing when she's ready to write, how to overcome frustration when writing and how important it is for pupils to use their imagination.

She was interviewed by Maurice Walters, Deputy Head Academic about her writing.

Amelia intends to join Shrewsbury School in September, where her sister Eleanor is in fourth form in EDH.

The 12-year-old has already been interviewed on BBC Radio Shropshire, and with local newspapers also covering her story.

Different Angles will be released on March 31 and will be available from Waterstones, Amazon, WHSmith and Austin Macauley Publishers.

Last chance to race against the world

Thursday 18 March 2021

There's not long left to take part in the Global Schools' Running Race and be a part of a race competing against runners from over 17 other countries, which has now received the backing of Lord Coe.

The race has attracted the attention of Salopians, schools across the UK, and schools from Bahrain, Singapore, China, Canada and Ethiopia having already completed their races, and interest coming from Sweden, Australia and Thailand, among many more countries.

Lord Coe, President of World Athletics, has sent a video of support for the event, praising the hard work of our race organisers for 'thinking outside of the box' by creating the race, as well as highlighting the importance of keeping active.

Race Organiser, Sam Griffiths, said: "Our inspiration for this virtual event is our passionate belief in the importance of staying active and the benefits that come from it both for physical and mental wellbeing, even more important amongst youngsters at the moment.

"So much has been taken away from this generation- all around the world- but yet there is light on the horizon, and we want to really harness that sense of optimism and possibility in aiming to unite youngsters all around the world through the shared joy of running.

"The Global Schools' Running Race (perhaps one of the first of its kind) isn't necessarily so much about competition and seeing who's the fastest; rather, it's about joining together and sharing in the enjoyment of something that is love all around the world. With the sport of cross-country running having originated at Shrewsbury School, we feel something of a responsibility and duty in promoting the sport of running and celebrating in its rich traditions alongside all that running offers to youngsters to this day.

"So, lace up those trainers and give it a go; you can even compare yourself against... the rest of the world!"

Runners are invited to pick their own route, across any terrain, covering the precise distance which will then be logged and compared to find the winner of each age category. The distances range from 2km for U9 with U13, U15, U19 and Age 19+ completing a 5km race with prizes awarded to the overall male and female winners of each age category.

To register your interest visit https://www.eventbrite.co.uk/e/global-schools-running-race-tickets-142488249189

All race times must be submitted no later than midday on Sunday, March 21 to Kirsten Webb at the following email address, please include full name, race category and school name in your email: kwebb@shrewsbury.org.uk

Salopian walks Shropshire Way to raise money for Ambulance charity

Thursday 25 March 2021

One Salopian has spent more than 40 hours walking to raise money for a national charity.

Issy H, (IV, MSH) walked the South Shropshire Way, a total distance of 122 miles to raise money for TASC – The Ambulance Staff Charity.



Issy said that she completed her challenge in 11 stages and felt 'relieved and proud to finish the walk'.

"I decided to choose the TASC because it helps members of the ambulance service who have suffered mental and physical trauma whilst providing an extraordinary service to the public and I cannot thank them enough."

At the end of her challenge, Issy has managed to raise an amazing £747 for TASC, which will go towards working to support current and retired Ambulance Services personnel and their families, regardless of role, to enhance their mental and physical well-being during times of need.

Issy is now focusing her spare time on completing her virtual work experience with the Chartered Institute of Marketing.

Well done Issy!

McEachran Prize 2021

Thursday 25 March 2021

An update on this year's McEachran Prize, the School's most eccentric competition. An unexpected lockdown feast

The staging of this most eccentric of school prize competitions, which dates back in one form or another to the late 1970s in honour of the legendary Frank McEachran -- 'Kek' to his pupils, 'Mac' to the staff -- looked impracticable in this year's intermittently remote conditions. Thanks, however, to the intellectual endeavours of Salopians, the English Faculty's determination, and skills of Film Fellow David Clifford, the competition not only took place 'in remote' but has arguably reached a new standard.



The nature and genesis of the McEachran Competition is explained at the start of the film by this year's adjudicator, recently retired Churchill's Housemaster and former member of the English Faculty, Richard Hudson. Richard ran the competition for most of his 17 years at Shrewsbury, taking over the torch from the late Mike Schutzer-Weissmann, and this year passing it on to Lauren Temple. As the emphasis on cross-curricular learning has increased, so have the always vague 'Mornington Crescent' type rules of the competition become deliberately vaguer. But the essence has remained the same: to deliver a brief talk, based on any aspect of a short text ('the spell', to use the McEachran terminology) which will interest the audience, be intellectually coherent and show originality. Unlike in so much of today's world, substance takes precedence over presentation.

The talks given by this year's eleven talented competitors fulfilled these requirements *par excellence*, and there is something for everyone in the speeches. The topics from the Fifth Form range from racial diversity as a human construct (Sapna C, G); the relationship between ambition and happiness (Siena G, M); hope for the future (Eva H, G); persecution of minorities (Jack S, R); and diversity and the media (Mia W, G). The Sixth Form explore concepts from materialism and the cycle of desire (Theo P, PH); a disturbingly modern concern reflected in *Tess of the d'Urbervilles* (Alice S, M); man in opposition to nature (Ed B, Rt); the contribution to the richness of language made by syntactical ambiguity (Joe M, SH); Galileo's influence upon Milton (Kira W, M); and a celebration of nature liberated by lockdown (Orlando W, Rt). This impressive group of Salopians have skilfully captured everything the McEachran Competition should be.

A link has been sent to all pupils to watch the competition and see who has won this year's McEachran Prize!

Richard Hudson

Futures & Higher Education Bulletin

Thursday 25 March 2021

Futures and Higher Education Bulletin Edition 11 Lent Term 2021 from the Futures Department, full of useful information, reminders, resources and weblinks for Fifth and Sixth Formers and their parents.

Please follow the link to download it as a pdf: Futures Bulletin Edition 11, Lent Term 2021.

Salop's Got Musical Talent and Showcase Concert

Thursday 25 March 2021

An opportunity to watch our latest Salop's Got Musical Talent concert plus a Visting Music Teachers Showcase.

A Special Salop's Got Musical Talent

I am delighted to bring you a special end-of-term *Salop's Got Musical Talent Concert* which is loaded with lots of treats, human, canine and valedictory!

- 1. O. Connor tuba with Snoopy the Spaniel. Muppets Theme Tune
- 2. D. Inglis-Jones voice. Stars Schonberg
- 3. Mr Wilson organ. Hornpipe Humoresque Rawsthorne
- 4. L. Rogstad voice. Adelaide's Lament Loewe
- 5. M. Powell-Turner double bass and voices. Let Us Wander Purcell
- 6. M. Wheeler violin. Violin Sonata No.1 Tartini
- 7. E. Bannister voice. Cry Me A River Hamilton
- 8. I. Wilkinson voice. Si Mes Vers Avaient Des Ailes Reynaldo Hahn
- 9. J. Gould saxophone. And It's Good Night From Him Darren Lord

Thank you for your listening during the past weeks. We've enjoyed having your company and look forward to seeing you here at some point in future.

Happy Easter!

Stephen Williams, Director of Music

Visiting Music Teachers Showcase

Our wonderfully talented team of Visiting Music Teachers present a special online concert.

Exploring performances from the lighter end of the repertoire will be:

- Mr Taylor jazz piano
- Mr Bradley-Fulgoni piano
- Mrs Theobald oboe
- Mrs Landon and Mr McKenzie flute and clarinet
- Mrs Robinson and Mr Lewis violin and double bass
- Mr Alldridge trombone
- and Ms Turpin voice.

This is not just an opportunity to enjoy lovely music, but a chance to see the wealth of talents our teachers possess.

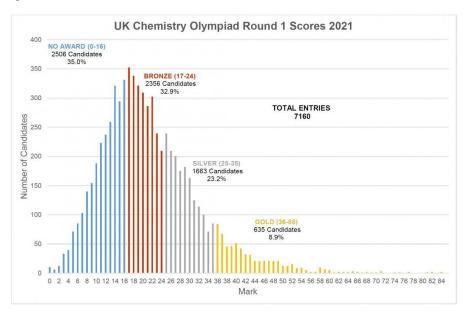
Stephen Williams, Director of Music

Results from the Chemistry Olympiad 2021

Thursday 25 March 2021

Seventeen Sixth Form students took part in Round 1 of the International Chemistry Olympiad in remote this year, with a majority from the Lower Sixth.

With this in mind, the certificates achieved are even more impressive as the competition aims to stretch students to think beyond the A Level course, and first-year A Level students have encountered relatively little content at the time of sitting the challenging paper. To earn four gold, five silver and five bronze medals is above the national average, with over 7000 students having taken part.



Designed to challenge and stimulate the most talented young chemists in the country, further information on the Olympiad is available at https://edu.rsc.org/enrichment/uk-chemistry-olympiad.



Students were tasked, in two hours, to attempt questions on organic synthesis, phosphorous chemistry, carbon capture technology, nuclear magnetic resonance spectroscopy, conformations of organic molecules and xenon; many of the questions are inspired by recent news and discoveries each year. In this way, the Olympiad encourages students to see the relevance of

chemical problems to the real world and to consider the instrumental role chemists have in solving big issues.

Certificates were awarded to:

Gold:

- Edward H
- Rosa L
- Eudora X
- Yuhan W

Silver:

- Annie F
- Edward H
- Hannah H
- Janet L
- Kate R

Bronze:

- Ellie L
- Gordon S
- Maarten S
- Bubbles W
- Cynthia Z

Appointment of Head of Adventure from September 2021

Friday 26 March 2021

We are delighted to announce the appointment of Mr Tom Folker as our very first Head of Adventure at Shrewsbury School.



Tom was the standout candidate at interview and impressed with his background experience, passion for the outdoors, and vision for developing the area of adventure education. Currently a senior outdoor instructor at a school near Auckland New Zealand, Tom has over 14 years of experience in outdoor education including working at both Abbotsholme School and Marlborough College in the UK, alongside time spent delivering outdoor education programs for a number of organisations across the UK including the Girl Guides.



Tom writes, "I am excited to be joining Shrewsbury School with its enviable history of exploration and adventure. I look forward to continuing to develop this history by opening up new and more varied opportunities for the students of Shrewsbury School to learn outdoors, try new adventurous activities and undertake expeditions,

utilising the mountains, hills and rivers that surround the school and the school's bunkhouse in North Wales, as well as other venues in the UK and indeed around the world."



Deputy Head Co-Curricular Peter Middleton comments, "With a wealth of experience running trips as wide-ranging as ice-climbing in Norway to caving in Slovenia and with experience in the Duke of Edinburgh's Award, Tom will significantly enhance this area of School life for our pupils, and we are excited to welcome him to our team next academic year. Shrewsbury's rich tradition in adventure and exploration stretches back to Charles Darwin's voyage of the Beagle through to Sandy Irvine's Everest expedition in 1924 alongside more recent explorers amongst our alumni including fellow Everest climber Adam Booth, author and adventurer Alastair Humphreys and globe-trotting author and documentary-maker Sir Michael Palin. We very much hope that with the creation of this new role, we will see the next generation of Salopians inspired to follow in their footsteps, encountering learning and challenge in the outdoors, the thrill of adventure and the rich reward of embracing new experiences and challenges."



Salopians enter Virtual Science Fair

Friday 26 March 2021

As part of our ongoing collaboration with Oundle School and Imperial College London, this year the traditional Science Fair was turned virtual competition and three talented Shrewsbury School pupils have entered.

The competition has been opened to all Year 10 and Year 11 members of the Oundle, Shrewsbury and Imperial STEM Potential cohorts – scientifically-minded pupils from state schools in each area who are selected from applications each year – and the 4th and 5th Form of the partner schools. The submissions will be judged by STEM Potential teachers including a representative of Imperial College London and the standard is always impressive.

The students have been invited to research and/or investigate a scientific/mathematical/technological problem or topic that interests them and submit multiple pieces of detailed work after a period of two months. This may involve conducting experiments at home, online and offline research and designing/building an article of scientific/technological interest.

Hal C (IV, Rt) has researched the methods computers use to general random numbers while Anu S (V, Rt) and Godwin Y (V, SH) have combined to jointly investigate the search for extraterrestrial life.

The final submission consists of three parts.

- 1. An **abstract**: this introduces the title of the project and a summary of what was achieved in no more than 300 words.
- 2. A **recorded presentation**: this demonstrates the research and/or experiments, lasting no more than 7 minutes.
- 3. A **poster:** this summarises the project.

The posters of both Shrewsbury School submissions are below – we wish Hal, Anu and Godwin the very best of luck in the competition!

How Computer Generate Random Numbers

Generating Random Numbers is not simple.

Computers use 2 methods to generate random numbers

1. Pseudo-Random Number Generators

- They use Linear Congruential Generators (LCG)
 The LCG uses the algorithm below.

$$X_{n-1} = (aX_n + c) \mod m$$

a = Multiplier | c = Increment | m = Modulus | X = Seed

A piece of information from the outside world would be allocated to the seed.

numbers would be allocated to the constants

The calculated number would replace the previous number in the sequence within the algorithm

The algorithm would be performed, and the next number would be calculated

2. True Random Number Generators

- TRNGs observe information from the outside world to generate random.
- numbers.

 The data collected from the outside world is known as ENTROPY.

Examples of Entropy:

- Listening to Atmospheric Noise
- Measured amounts of Time

E.G. Measuring the time in milliseconds from 02:00 to when you press the letter ' $\,$

The Ideal Piece of Entropy

- To Measure the radioactive decay of an atom.
- Because according to quantum theory:
 'The decay of substances is completely random'

3. Uses

· Pseudo random number generated numbers are used in:

Video Games

Shuffle Playing

True random number generated number are used in:

Online Gambling

Web Encryption

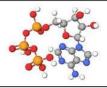
nbers The numbers must be

Life Beyond Earth

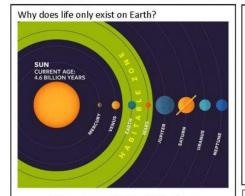
Basic building blocks of life:

- Water
- Amino acids
- ATP
- DNA









- We are located in the Goldilocks zone
- Not too far and not too close to the sun
- Just warm enough for liquid water to exist
- Earth has oxygen in its atmosphere

Detecting exoplanets:

1. Transit method

As planets orbit their stars, and pass in front of them, the brightness of a star slightly lowers in a regular time interval. The regular dips in brightness shows the presence of an exoplanet.

2. Radial velocity method

Not only do stars have a gravitational attraction on planets, but planets also have a pull on stars. This pull causes the star to move very slightly. This movement can be detected by changes in its radial velocity.

3. Microlensing method

Gravity also slightly bends light. For giant planets transiting, light is bent from both sides and more light is received by the telescope. The spike in brightness suggests that an exoplanet is present.

Is life possible on Mars?

- The Perseverance Rover has just landed on Mars
- It aims to search for evidence for past life, water and test oxygen production
- It is also in the Goldilocks zone and is quite similar to Earth
- It has a higher surface temperature than Earth
- It does not have enough oxygen in its atmosphere



Conditions for life:

- The star has to be in the Galactic Habitable Zone, away from the cosmic catastrophes (supernovas, gamma ray bursts...)
- The star has to be in a stable stage, e. g. a main sequence star
- The exoplanet has to be in the Goldilocks zone
- The size of planet matters: the stronger the gravity, the thicker the atmosphere and therefore better conditions for life
- A magnetic field should also be present to protect humans from outer space events, e.g., solar winds

Aliens?

- The drake equation
 estimates the number of
 technologically advanced
 civilizations in our galaxy
- The Arecibo message was sent
- We are more likely to find aliens than finding organisms on an exoplanet
- NASA says that we will be likely to find aliens in the next decade







Global Social Leaders appeal for food bank donations

Friday 26 March 2021

The Global Social Leaders Society is looking to keep a strong connection going with Shrewsbury Food Bank and is appealing for any pupils to bring donations back with them when they return after the holidays.

Henry L, (L6, Rb) said: "The Food Bank are looking for any non-perishable food or toiletries, and each week they make other specific requests, which can be found at https://www.barnabascommunityprojects.org.

Launch of the inaugural Shrewsbury STEM Magazine

Friday 26 March 2021

It is with great excitement that we present to you the first ever STEM magazine.

Led by L6 editor Thea H, this edition brings together a huge range of articles that cohesively and comprehensively cover the most pressing topics that face our society today, including the latest research in mental health, soil health, plastic waste, special relativity, lithium batteries and the science behind the most effective face mask.

The writers include the Darwin Presidents (Annie F, Marco C, Ellie L, Thea H and Ella H) and talented pupils from across the school; they have combined to produce a magazine that enables the reader to easily engage with the fascinating yet complex world of STEM (science, technology, engineering and maths).

The authors have translated their passion for STEM so effectively into print that this 25+ article edition is something you won't be able to put down. It was an absolute joy to help review these articles before publication and all the students involved should be extremely proud of the final product that resembles less of a school magazine and more of a journal akin to New Scientist.

We are pleased to release the e-copy for the enjoyment of the whole school community below. Please follow this link to read the Shrewsbury STEM Magazine.

A limited number of hard copies will be printed and distributed for viewing around school site (and of course for contributors). More prints may be made if there is an appetite for this; if you decide you'd like a hard-copy for yourself, please get in touch with Mr Wray.

David Wray, Head of Science Outreach

Global Schools' Running Race brings athletes from around the world together

Friday 26 March 2021

Shrewsbury School launched the Global Schools' Running Race as a way to bring young athletes together from across the world to help improve their physical and mental wellbeing.

The event saw participants from schools across 17 countries worldwide including Bahrain, Ethiopia, Monaco and Singapore compete alongside other schools from Shropshire and the UK. Participants ran a set distance of either 2km and 5km, dependent on their age, and submitted their results to Shrewsbury School.

All participants have enjoyed the serious fun of the challenge and the opportunity to be active.



An impressive set of results came from runners a small town in Ethiopia called Bekoji, where the Hunt visited in December 2019 as part of a running tour to East Africa. It is known as the 'Town of Runners' having produced over a dozen Olympic gold medallists and world champions- even though there are only 16,000 inhabitants of the town. All three top spots in the over-19 male category were taken by runners from Bekoji, who all ran 5km in sub-15 minutes!



Salopians who took part submitted some fantastic times, with a few of our pupils and staff making the global leader board in their respective age categories:

- Brad K (IV, R) 3rd place in male under-15 5km
- Harrison C (L6, R) 2nd place in male under-19 5km
- William S (V, R) 3rd place in male under-19 5km
- Francesca H (U6, EDH) 2nd place in female under-19 5km
- Sophia U (V, EDH) 3rd place in female under-19 5km
- Kate Evason (Marketing Manager) 3rd place in female over-19 5km

We received support from the President of World Athletics, Lord Coe, who sent a video praising the hard work of the school's race organisers for 'thinking outside of the box' by creating the race, as well as highlighting the importance of staying active.

The campaign received attention from national and local press; an article was featured in Athletics Weekly; race organiser Sam Griffiths was interviewed on BBC Radio Shropshire and the race was also reported in the Shropshire Star.



Race Organiser, Sam Griffiths, said:

"The inspiration for the Global Schools' Running Race originates from our passionate belief in the importance of staying active which benefits both physical and mental wellbeing. So much has been taken away from this generation- all around the world- but yet there is light on the horizon, and we wanted to really harness that sense of optimism and possibility to unite young people through the shared joy of running.

"The beauty of the Global Schools' Running Race is that anyone can take part.

"The focus of the race wasn't necessarily about the competition and seeing who's the fastest; rather, joining people together and sharing in the enjoyment of something that is loved all around the world. With the sport of cross-country running having originated at Shrewsbury School, we always feel something of a responsibility and duty in promoting the sport and celebrating in its rich traditions."

The Global Schools' Running Race has proved such a success that it has now been established as an annual event, with hopes that next year it will bring schools together again now that such a positive outcome has developed throughout such testing times.

Well done to all involved in making the event so successful.

Please follow this link to view the 2021 Race Winners.
Please follow this link to view the full published list of results.



"As an example, this week they are looking for tinned main meals, custard, and toilet roll. When pupils are returning in April, if they could bring with them some items for the food bank, this would be greatly appreciated. Another way that this could be achieved (for overseas parents) would be through donations which can be made through this link: https://www.barnabascommunityprojects.org/donations.



"We feel this is a very worthy cause at this time and would really appreciate your help."