



Dear Parents,

Here we are at the end of term at last, after what has been an unusually long Spring term. It's very odd to still be at school after the clocks have gone forward! We have packed in a huge amount since January and this week was no exception. I particularly enjoyed seeing our Year 6 pupils, who will be our Year 7 in September, performing in their class productions of Mary Poppins at the start of the week, and the annual Jazz Evening, which took place last night, is always a highlight.

Mark Reading this morning included the opportunity to celebrate achievements in a whole range of academic and extracurricular activities. From sports colours to the Maths Challenge, reading schemes to the first ever Channing Chancellor, our students have thrown themselves into an extraordinary array of internal and national competitions and challenges. I am very proud of them all for pushing themselves to be 10% braver and try things they might not otherwise have thought possible - and achieving amazing results as a consequence.

Likewise I must commend the staff who were certainly brave (and possibly foolhardy!) for their cameo appearances in today's hotly contested House Singing competition. Ms Newman and I enjoyed a fantastic selection of medleys and it was hard to make our final decisions. Congratulations to the House Officers for coordinating all the music, choreography and rehearsals - and well done on the results:

- Best Solo Singers: Goodwin
- Best House Participation: Spears
- Best Performance: Sharpe
- Overall winner: Waterlow

This was a last hurrah for the House Officers, as today marks the end of the entire team's year in post. I extend heartfelt thanks to each of them on behalf of the school for their hard work and enthusiasm over the last year. They made a memorable Traitors-themed video to mark the end of their reigns (with an actual Claudia Winkleman appearance!) and they are certainly leaving on a high.

Head Girls: Eve & Aimee

Charity Officers: Maisy & Ava

Inclusion Officers: Catrin & Scarlett Da

Sustainability Officers: Bella & Olivia

Goodwin: Kitty & Evie

Sharpe: Scarlett Du & Lauren

Spears: Natalia & Simran

Waterlow: Mia & Tacita

Sixth Form Officers: Caelle, Charlotte & Zoe

Key Stage 4 Officers: Chloe & Poppy

Key Stage 3 Officers: Eliza & Tabitha

In today's Mark Reading they handed over to the new Year 12 team, with whom we look forward to working over the coming year. Congratulations to all those who have been selected:

Head Girls: Annie & Natasha  
Charity Officers: Millie & Scarlett  
Inclusion Officers: Tanvee & Anoushka  
Sustainability Officers: Opal & Satine  
Goodwin: Eve & Bella  
Sharpe: Kezia & Olivia  
Spears: Anna & Cerys  
Waterlow: Elise & Teresa  
Sixth Form Officers: Mimi & Rachel  
Key Stage 4 Officers: Ashani & Molly  
Key Stage 3 Officers: Saskia & Lila

With 55 members of the year group applying for 22 roles this was a highly competitive process and I know that the outcome will have disappointed many of them. However I also know how resilient, determined and committed they are and look forward to seeing them continuing to contribute to the wider life of the school over the coming year.


Before I move on to my usual end of term notes, I want to take a moment to talk about a cultural phenomenon which is unlikely to have escaped your notice over the last couple of weeks. Indeed it's highly likely that you are aware of the recent Netflix series *Adolescence*, which has generated significant conversation among educators and families. The programme explores complex and often troubling aspects of online youth culture, including the rise of influencers promoting misogyny and unhealthy ideas about relationships and identity.

As a school committed to fostering confidence, compassion, and critical thinking, we are taking this opportunity to address these themes with care and clarity. Over the coming weeks, we will be running a special PSHE session for students aged 13–18. The aim is not only to raise awareness but also to empower our girls with tools to respond confidently and safely - whether that means walking away from toxic content, reporting harmful material or calmly challenging ideas when they feel able to do so. We are proud to be part of a community that stands for respectful dialogue, equality and kindness, both online and offline.

We know that parenting in a digital age can feel overwhelming at times. If you have concerns about anything your daughter has seen or heard, or would like guidance on how to talk about these topics at home, we encourage you to reach out to us. As you know we are a Tooled Up school and I found Dr Kathy Weston's [Wednesday Wisdom](#) email last week to be really insightful and helpful. She captures the fear and knee jerk reactions that we can often experience as parents, and offers some thoughtful advice on how we might approach some of these conversations.

The Tooled Up platform also has a host of evidence-based resources addressing topics covered by the series and I am highlighting a few that are particularly useful below:

- For Parents and Staff to identify if children are using vocabulary associated with the world of Incels they have created a glossary with criminologist, Dr Lewys Brace (please note, some readers may find the content offensive and it is for adults' eyes only. You will need to use your TooledUp [login](#) to access it): [Glossary of Incel Terms](#)

- This  [Emoji Table.pdf](#) may also be helpful (especially if you have watched episode 2 of the series)
- For all of the TooledUp resources pertinent to the themes raised in the programme please visit their [Adolescence Resources](#)

TooledUp will also be running a webinar [Adolescence on Netflix: Action Points for Parents and Staff](#) on Wednesday 23 April, exclusively for Tooled Up Members, reflecting on essential lessons, takeaways and actionable steps for parents and staff following the release of the programme, including a Q&A in the session at the end. Please use the link above to register your place, using your Channing [login](#) details.

And so to the holidays. My thanks in advance to Miss Della-Porta, who is leading the Year 8 & 10 ski trip to Austria tomorrow, accompanied by Miss Gibbins, Miss Lindsay, Miss Williams and Mr Garnett. Likewise thanks to Mrs Bannatyne for organising the Classics Trip to Greece, which departs on Sunday, accompanied by Mrs Kennedy, Miss McNamara and Miss Walker. I am grateful to all the staff for giving up their holiday to take our students abroad - but I know that they will all have a very good time doing so!

Today we say farewell to Mr Entwisle, Deputy Head, who will be returning to his passion for teaching, with a new role as a Year 6 Form Teacher at another school. We thank him for all that he has brought to the Junior School over the past two years and we wish him every success for the future. We also bid au revoir to Ms Ramsden, our Senior School Librarian, who is heading to France for a one term sabbatical immersing herself in the language and culture.

Finally, let me wish Chag Pesach Sameach to our Jewish families celebrating Passover in the holidays and our Christian families a wonderful and happy Easter. May these special celebrations bring love and happiness to all - and to all members of our school community, wherever you are spending the holidays, I hope you have a well-deserved rest and joyful time with family and friends.

With warmest wishes

Lindsey Hughes  
Headmistress

## Notices

### Summer Term Extra & Co-curricular Timetable

[☰ Summer Term Extra & Co-curricular Activities - Timetable 2024 - 25](#)

### London Hyrox Competition - Fundraising

Miss MacCallum and Miss Gibbins are set to compete in the London Hyrox Competition this May! A Hyrox race is a distinctive fitness challenge that features an 8K run, consisting of eight 1km segments interspersed with various functional workout stations. They're raising funds for Macmillan, an organization dedicated to supporting those affected by cancer. If you're able to contribute, they would be immensely grateful for any donations to help us reach our fundraising goal.



Here is the [link](#) to their just giving page.



Thank you for your support!

## Forthcoming Events

### Channing Senior School "School-in-Action" Open Mornings

We encourage our current Channing families to share with their friends and extended family that we are hosting two "School-in-Action" Open Mornings in the Summer term. Our Year 8 pupils will be giving prospective families a tour and sharing their experiences with our visitors. 2026 11+ and chance vacancies candidates and their families are welcome to come along. Attendance is by booking in advance using the following links

[Thursday 24 April \(9am - 11am\)](#)

[Tuesday 24 June \(9am - 11am\)](#)

More events will take place in the Autumn term.



CHANNING

# Girls Enjoying Success

## Sustainability News

The eco reps took part in the Big School Litter Pick, a national initiative to get school children to think about and help clean up their local communities. A fantastic team of students and staff took part





and collected six boxes of litter during their lunch break at Waterlow Park. Well done and thank you to everyone who took part.

The Eco Reps also replanted the mini herb gardens in the Senior School with mint, thyme and rosemary.

## Extended Learning

### The Ellery Programme 2025

Year 7 students were invited to participate in this year's Ellery Programme of Extended Learning. Participants had a marvellous time deepening their learning about a wide range of areas that interest them. Many thanks to the teachers who gave up their time to lead the Ellery courses and inspire students to pursue their interests beyond the curriculum.

*Ms Pavlopoulos*

### Mythology

In the Mythology course, students have enjoyed learning about the myth of Romulus and Remus and the ancient history of the foundation of Rome - from their lowly upbringing by a wolf to fratricide and the creation of a new city. Students then planned a creative response to the myth - any or all aspects - and have made a variety of innovative products, ranging from a song about the twins to a stop-motion animation of the story. These superb pieces will be submitted to the Classical Association Key Stage 3 Mythology Competition - good luck to the students!

*Mrs Bannatyne*

### Songwriting Course

In this short songwriting course, students are learning how to take their first steps in composing their own song. From writing/sourcing their lyrics to using the music apps they have on their tablet - eg Garageband - this course guides pupils through the process of creating their own songs. Regardless if pupils are new to songwriting or they are an experienced song creator, this course is for everyone! Offering a safe and supporting environment, we want to believe that our pupils are ready to share their passion for music and songwriting. Pupils have already created music tracks on Garageband on their tablets to bring their lyrics to life!

Watch this space, we have some budding and inspirational singers/songwriters among our Year 7 cohort. Cannot wait to hear their finished product!

*Mr C. Kokkinos*

### Discover German

The Discover German Ellery Programme involved a word search in German for the Oxford University German Olympiad (note the German colour scheme!) and participating in the German Fun Club. Students are currently preparing to Bake German in the final pre-Easter finale.

Rebecca commented on the club: 'We had a great time learning about animals in German like "Hund" for dog and "Katze" for cat. After that, we worked on making a word search in German, which was a fun way to test our new vocabulary. Finally, we created colorful flags from German-speaking countries, learning about their cultures and designs. It was fun and educational, and I can't wait to join again!'



## Talking Books

In Talking Books pupils have been creating a podcast about books. They started by brainstorming a theme for their podcast and decided on the fantasy and dystopian genres as they encompass a lot of the books that pupils enjoy. Then they listened to examples of book podcasts to see what they think makes a successful podcast. In the second and third sessions they developed their script and started recording. The two presenters are doing a great job of keeping the tone lively and upbeat and the guest speakers have crafted 'elevator pitches' for the books they'll be talking about: The Hunger Games by Suzanne Collins, Shatter Me by Tahereh Mafi and The Lord of the Rings by JR Tolkien. The podcast recording will be shared with Year 7 soon!



*Ms Ramsden*

## Chemistry Cave Art

We investigated when and where cave art was painted before making our own paints. We made two different paints - both egg tempera paints - using coloured chalk and ground egg shell soaked in tea as our pigments. Both paints were successful, but the chalk pigment gave a greater depth of colour and was a finer powder and so was easier to paint with, as can be seen in this picture:



After this, we moved on to investigating other pigments that were used to create a range of colours in cave paintings, such as iron and manganese oxides.

*Dr Spinks*

## STEM - Computer Science: Micro Bits

In the Computing Ellery Programme, we program Micro:bits. Micro:bits are small circuits with pins and an LED display. Anyone can program them to flash letters or even play a game on it! It's really fun and is recommended to anyone who likes programming or would like to become a computer scientist one day! The club is weekly at 1:00 PM to 1:30 PM. Ms Sequeira runs it, and (as said before) it's incredible!



*Valentina A*

## STEM - Maths Alien Invasion

In Maths Alien Invasion, we listened to some clues about where 4 alien spacecrafts had landed in Manford. We had to find the scale of the map to help us figure out where the 4 ships had landed so we could use the information to know where to avoid this week. This week, we found the average of our own walking paces calculating the mean, median and mode. We then watched a news show with information about the aliens that have come to the city. We found the areas that they were in and found roughly how to get from some places and back to the car park without going into the alien infested zones. We also calculated how long it would take using our average walking pace. It was very fun and interesting and we also learned new ways to calculate averages.



*Eliza J and Madison Y*

## Animal Behaviour Observations Project

Year 9 extended learners have been taking part in an animal behaviour observations project this half term. This has involved learning about the principles of observing animal behaviour, learning about how animal behaviour observations are conducted in the field and then carrying out and recording animal behaviours observed at the ponds in Waterlow Park. The final part of the project is to analyse the data collected to make conclusions about the health and wellbeing of the animals observed.

## Music News

### Choral and Orchestral Concert

On Thursday 20 March we had our second visit of the year to St Joseph's Church for our annual Choral and Orchestral concert. This year it was the turn of our Channing Community Choir that included parents, friends, siblings and staff to sing alongside the Centemus Chorus and Conabor Choir in a performance of Fauré's Requiem, accompanied by our own Symphony Orchestra.



The concert started with an electrifying and arresting brass fanfare by Malcolm Arnold and led by our Head of Wind Studies, Mr Patrick Dodds, before we then relaxed into Bruch's Romance for String Orchestra and Solo Viola directed by our Head of Strings, Mrs Laura Dodds. Our viola soloist, Zoe Q in Y13 played with real expression throughout with a sensitive accompaniment from the Senior Strings. The Symphony Orchestra then took to the stage for Massenet's 'Meditation' from his opera *Thaïs*, with violin soloist Natalia B in Y13. This

very famous piece of luscious romanticism left the audience spellbound with those gorgeous sweeping melodies played by Natalia with such musical poise and delicacy. The Symphony Orchestra then played the 1st movement from Brahms' 4th Symphony. This 'tragic' symphony with its weeping melodic opening and its fanfare-like second theme was a seriously ambitious piece for the orchestra to tackle, but they rose to the challenge and gave a magnificent performance of this iconic piece of Brahms.

We then had a short interval whilst the stage was reset and our choirs assembled ready to sing Fauré's Requiem. This is a sublime and intimate work and our performing forces gave their all in this moving performance from the lyrical 'Kyrie', to the mysterious 'Offertoire' with a lovely semichorus from the Chamber Choir (coached by our Head of Vocal Studies, Miss Jenny Bacon) singing the 'Hostias' section. The ethereal Sanctus with harp accompaniment followed and the fireworks erupted in the glorious Hosanna. Evie M gave a stylish and exquisite rendition of the famous 'Pie Jesu'. The Community Choir's performance of the Agnus Dei was beautiful and a prelude to the uplifting 'Libera Me' also with a semichorus from the chamber Choir. Excitement returned in the central section with the highly passionate 'Dies irae' section before a triumphal return of the opening melody giving a true sense of freedom. The paradisiacal final movement 'In Paradisum' was sublime.



To finish, our singers and instrumentalists gave an electrifying performance of several songs from *Les Misérables* with a stunning climax in the final bars bringing an end to a wonderful evening of music making. Our thanks to so many of the music team who worked so hard to produce a memorable event for our students, parents and friends. Do watch the performance [HERE](#).

## Music at Lunchtime

What an amazing concert to end the Spring Term! First up was Clarinet Crew : Nuha I in 10CS Flores M-P in 10GH, Georgie M in 10ZB and Ms Wright. They showcased a beautiful blend of harmonies and clarinet precision in their rendition of 'When I'm 64' by Lennon and McCartney.



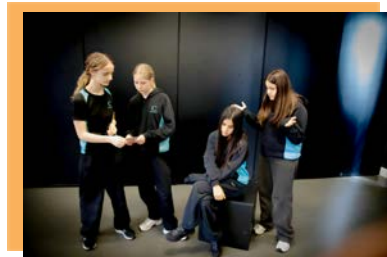
Millie W in 9EHi graced us with a lovely combination of voice and piano while performing 'I love you, I'm sorry' by Gracie Abrams. She perfectly captured the warmth and emotion of the song through her gorgeous singing. Eliana H in 9GHa sang 'Stranger' by Olivia Rodrigo, accompanying herself on the guitar. This was a truly captivating rendition, her impressive voice beautifully blended with the smooth strumming of the guitar. Next up was Thea I in 8VS who performed 'Praeludium and Allegro' on violin by Kreisler. Thea brought an energetic flair to the piece, showing both technical proficiency and musicality. Ending the wonderful concert was Lily M in 11 DK who sang 'Burn' by LM Miranda. Lily poured emotion into this song, and demonstrated her unbelievable vocal range, clarity and stage presence. Huge well done to all the performers

today! Do listen [HERE](#).

*Reviewed by Kezia C*

## LAMDA News

This week the 64 Year 8 and 9 LAMDA students had special double lessons in which they performed their chosen Duologue scene to a peer audience. The feedback they gave each other was both appreciative and insightful. They demonstrated great commitment and creativity on stage, inspiring and entertaining each other along the way. With only 2 lessons left before the evening Showcases and Exams, this experience helped them to celebrate what they have achieved so far and identify their next steps in this final refining stage.



## English News

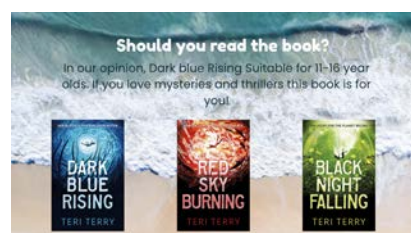
### Independent Reading Project

This week Years 7 and 8 celebrated their independent reading projects by watching a presentation in assembly of the four best book reviews in the Year group. The presentations included a reenactment of a memorable scene and a homemade trailer for a movie version of the book. Well done to the groups who presented their reviews!

The assembly slides, with more information about the books, can be [viewed here](#).

### The Times Newspaper Trip

Last week, a small group of Year 10 students attended a trip to the offices of The Times newspaper. Inspired by the journalists she met, Sofia L wrote an article about the trip for this week's Word From The Head.





## Inside the Newsroom: A Behind-the-Scenes Look at Journalism in Action

As we emerged from London Bridge station and saw the News Building opposite the looming Shard, we knew we were in for an exciting trip. Inside, the sense of purpose was palpable; people dressed with style and sophistication and marched towards the lifts, carrying them to their offices on the upper floors. Our guide expertly led us around the offices, drawing our attention to the paper's rich history and explaining each of the paper's sections to us. Observing the journalists hard at work, writing tomorrow's stories, was fascinating and filled me with excitement.



The building was impressive, the views from the top more so, but the highlight for us all was undoubtedly our conversation with the paper's editor Tony Gallagher. He patiently answered all our questions before inviting us to observe an afternoon conference, where the journalists come together to share which stories and photos have made the cut. We were also given an opportunity to speak with three young journalists who each described their differing paths into journalism. At the end of the trip, I walked out of the building full of admiration and respect for the journalists who worked there. The news never sleeps; there are always stories to tell. If you want to understand today's world and feel connected to the events that shape our present and future, then I urge you all to pick up a newspaper over the Easter holidays and give it a read.

*Sofia L, Year 10*

## Sports News

### Football U12 Middlesex Cup Final

The end of a successful cup run saw the U12 team play Fortismere in the Middlesex Cup Final at Rectory Park. Both teams started nervously which led to a scrappy game with neither team being able to take control of the ball. However despite a couple of Fortismere chances, Channing did have the majority of possession but could only create half chances and a few rushed shots. In one of the few chances Fortismere gained a corner, from which Channing was unable to clear and Fortismere opened the scoring. The lead didn't last long however, another corner this time to Channing saw a great corner from Poppy L beautifully headed in by Eva B.

The second half continued to be scrappy and again against the run of play Fortismere were able to score, this time through a counter attack. Channing responded positively and put a lot of pressure on the Fortismere defence. Anya P had a one on one chance, which the keeper saved well and Luliya R hit the post. In the final minute a goalmouth cancel produced a great opportunity for Phoebe J but unfortunately it just missed the target. The final whistle blew for a defeat in the final game of the season for the Year 7, however it has been a very successful year and the team should be proud of their achievements this year.

### Football U13 v Francis Holland Regent's Park

On Thursday 27 March, a select team of Year 7 and 8s travelled to Paddington Recreation Ground to play an old foe, Francis Holland School. The talent within the Channing side soon began to show. Despite conceding an early goal, Channing quickly asserted control, creating numerous chances. Siena R opened the floodgates scoring the first of her three goals. Dahlia C also got a hat trick including a fantastic far post finish after great play and cross from sister Anoushka. Luliya R finished a good move with a powerful shot into the bottom corner and Anya P scored to finish the game with a resounding 7-1 win.

## STEM News

### Cyber Explorers Challenge

On Wednesday, students from Years 7, 8 and 9 competed in a challenge called Cyber Explorers. It was a fun and educational interactive competition which tested our knowledge on cybernetics and computer security, features and programs. Both team-building and racing against the clock, Cyber Explorers was an exciting experience for us all.

*Maia, Year 7*

The cyber explorers competition was extremely fun and really difficult. We were put in small teams of four. We had to decode ASCII, it was so hard, but also exciting. Even though my team didn't answer all the questions we got a taste of it and also a taste of biscuits after it! It is an experience that I will remember for a long time and I am glad I was chosen.

*Georgina, Year 7*

When we first met our groups, it was a flurry of excitement. We logged in and began our challenges. The challenges consisted of different formats, some had an analysis from a statement or text about a specific term, whilst others were more focused on puzzle solving. For example, we translated the message Awareness & Security. My group, the Code Commanders, managed to solve 16 of the questions. It was both challenging and exciting. I highly recommend this experience to the next group of year sevens as it teaches new and valuable problem solving skills, as well as teamwork.

*Cara, Year 7*

The cyber explorers competition was extremely fun. We were in small teams and had to solve cyber activities. We had to work out how to protect computer networks from hackers. We also had to code and decode ASCII. It was hard but we got to work together and improved our team working! I really recommend trying next year.

*Arina, Year 7*

### Royal Society of Chemistry Olympiad

Five Year 12 students took part in the 57th International Chemistry Olympiad back in January. Designed to challenge and inspire, the UK Chemistry Olympiad is a unique opportunity for students to push themselves further and excel in the chemistry field. Well done to Mei-Xing L, Phoenix M, Eva S and Catherine S who all gained certificates of participation. Particular congratulations go to Natasha H who gained a bronze award.



### STEM week posters: UCL Clean Air Competition

We were delighted to get some wonderful entries for the UCL Clean Air poster competition that was launched during STEM week. The students had to come up with an idea or invention to change the air in a chosen space, making it healthier to breathe. We have submitted three posters to the competition and we look forward to finding out how our students get on. Well done to Evangelina U, Isabella N, Taryn S, Saira C, Ella C, Pavi G and Sophie B, all in Year 10, for their fantastic work!

## STEM Week Poster

"Living Air, Powered by Nature and Intelligence."

### Concept Overview

I am developing an innovative air purification device that combines AI-driven environmental sensing, bio-filtration using plants, and water-based vapour encapsulation to create a more natural and sustainable method for purifying air.

### How it works:

- AI Monitoring & Control System:** The device is equipped with an AI-based environmental sensor suite (e.g., particulate matter sensors, VOC sensors, CO2 sensors, and humidity sensors) to continuously monitor air quality in real time. The AI in real-time adjusts the system based on the pollution levels detected, optimizing energy and water use.
- Bio-filtration Module (Plant Cartridges):** Replaceable plant-based cartridges (modular units) act as bio-filters. Certain plants and mosses are known for their ability to absorb airborne pollutants like formaldehyde, benzene, and nitrogen dioxide. The cartridges will be designed with root absorption and filtration processes, and soil microorganisms to enhance pollutant breakdown, similar to how living walls work but miniaturized.
- Water-Vapour Encapsulation Technology:** The system releases a fine, controlled mist or vapour (using atomization or ultrasonic transducers) into the air. This mist is designed to encapsulate particulate matter and pollutants. The droplets will act as micro-carriers that agglomerate pollutants in the air.
- Self-Regenerating Water Cycle:** The water used for misting can be partially recycled through condensation and filtration, reducing water consumption and improving sustainability.

### Scientific Principles Behind It:

- Bio-filtration** - Leveraging the natural pollutant-absorbing capabilities of plants and beneficial microbes in soil-based zones.
- Wet Scrubbing Concept** - It is similar to industrial scrubbers, the water mist agglomerates airborne particles and gaseous pollutants, making them easier to capture.
- AI Optimisation** - will be using machine learning to adapt the operation depending on room size, pollution level, humidity, and even plant health status.

# "THE BIOSHIELD"

**THE OUTER LAYER**  
THE FIRST LAYER OF OUR CURTAINS WILL HAVE A POLYPROPYLENE NANOFIBRE MESH, OFTEN USED IN PURE MASKS. THIS TECHNOLOGY RELIES ON ITS ULTRA-FINE FIBRES WHICH CREATE A DENSE NETWORK OF SMALL PORES AND THEREFORE INCREASE THE SURFACE AREA FOR AIRFLOW. UNUSUALLY, THIS WILL TRAP ON THE LARGER PARTICLES (E.G. DUST) CAPTURING THE SMALLER PARTICLES SUCH AS VIRUS-LADEN PARTICLES FOR OPTIMIZATION. THESE SHEETS COULD BE LAYERED WITH SHEETS OF MELT-BLOWN POLYPROPYLENE THAT WILL ALSO CAPTURE PARTICLES THROUGH ELECTROSTATIC ATTRACTION; THIS IS DUE TO THE MELT-BLOWN FIBRES BEING CHARGED.

**THE MIDDLE LAYER**  
IN THE MIDDLE LAYER, THERE WILL BE SILVER NANOPARTICLES EMBEDDED IN POLYESTER. PAGES TO ENHANCE THE ANTISEPTIC PROPERTIES BY KILLING BOTH BACTERIA (INCLUDING MICROGRAMMUS) AND BIOSPORA (SPAWNTING MICROGRAMMUS GENUS). THESE NANOPARTICLES CAN BE INCORPORATED INTO THE POLYESTER BEFORE EXTRUSION VIA ELECTROSPINNING. DURING UV, SILEVER OXIDE FORMS SILVER IONS IN THE PRESENCE OF MOISTURE, PREVENTING CONTINUOUS ANTIBIOTIC ACTUAL.

**THE INNER LAYER**  
THE INNER LAYER OF OUR CURTAIN DESIGN WILL INCLUDE A SECOND LAYER OF AN ANTI-MICROBIAL AGENT IN ORDER TO INCREASE THE OVERALL EFFICIENCY OF THIS TECHNOLOGY. CHITOSAN IS A BIOPOLYMER DERIVED FROM CRUSTACEAN RESIDUES (SUCH AS CRAB SHELLS) THAT CAN BE APPLIED TO POLYESTER. FIBRES THROUGH UV COATING OR ELECTROSPINNING. THIS MAYER WILL SHOW BIOPOLYMER ACTUAL, PREVENTING THE VIRUSES FROM INACTIVATING AS THEY PASS THROUGH THE MIDDLE LAYER.

**POLYPROPYLENE IS A RELATIVELY CHEAP MATERIAL WHICH IS EASY TO PRODUCE. THE MESHES OF POLYESTER IS ALSO AFFORDABLE AND IS WIDELY AVAILABLE IN THE INDUSTRIAL INDUSTRY.**

**THESE CURTAINS HAVE THE ABILITY TO WORK IN HOSPITALS, BUT IT WOULD BE BEST TO BE USED IN KITCHENS AND BATHS SUCH AS CHANGING ROOMS, SHOWERS AND OTHER PUBLIC AREAS TO HELP CREATE AN EXTRA LAYER OF PROTECTION AND SAFETY.**

**BIOBREEZE CAN HELP PROTECT PATIENTS, DOCTORS AND NURSES IN THE HOSPITALS FROM A RANGE OF DISEASES AND BACTERIA. THIS WOULD IMPROVE THE OVERALL EFFICIENCY OF THE HOSPITAL, AND ALLOW FOR AN INCREASED OPERATIONAL OF THE HOSPITAL.**

**POLYESTER IS A HIGHLY DURABLE MATERIAL THAT HAS A LONG LIFESPAN. IT IS ALSO EASY TO MAINTAIN AND DOES NOT REQUIRE A LOT OF CARE. IT IS ALSO EASY TO RECYCLE AND CAN BE USED AS A REPLACEMENT FOR OTHER MATERIALS.**

## BioBreeze: Revolutionizing Air Quality in Underground Stations

### What is BioBreeze?

BioBreeze is a revolutionary air purification system that combines the natural filtration power of aquatic moss with advanced UV-C lights to clean underground air.

Powered by solar energy, it provides a sustainable, low-maintenance solution to reduce pollution, improve commuter health, and enhance overall air quality in busy underground spaces.

### The Solution: BioBreeze Air Purification Pod

- Cloud Moss Walls:** Moss naturally filters CO<sub>2</sub> and pollutants, releasing oxygen to freshen the air.
- UV-C Lights:** UV-C lights neutralize harmful pathogens, creating a safer environment.
- Solar Power:** A self-sustaining, eco-friendly energy source that cuts operational costs.

### The Problem: Polluted Air in Underground Stations

Underground stations are hotspots for poor air quality, posing serious health risks to millions of commuters daily. The main culprits include:

- Harmful pollutants:** like CO<sub>2</sub> and particulate matter from crowded spaces.
- Stale, recycled air:** that feels heavy and unpleasant to breathe.
- Bacteria and viruses:** thriving in crowded, poorly ventilated environments.

High energy costs associated with traditional ventilation systems and cleaning efforts.

These issues not only compromise commuter health but also contribute to the spread of illnesses and reduce overall productivity. The question is: how can we create a healthier, safer, and more sustainable environment for everyone?

### Practical considerations

- Low Maintenance:** Moss thrives in shaded areas with minimal water, making it ideal for underground environments.
- Durable Design:** Protective galvanized iron barriers ensure safety and longevity.
- Customizable Aesthetic:** The exterior can be painted to match station designs, blending seamlessly into any environment.

### Before

Lots of pollutants in the air, with a higher risk of catching colds and flu. Roughly 1000 ppm of CO<sub>2</sub>.

### After

Air fewer unwanted microbes, with CO<sub>2</sub> at only around 200 ppm, 800 ppm difference.

### Cost Effective Solution

- \$1000 PER 100 FT WALL** - significantly cheaper than traditional ventilation systems.
- Minimal maintenance and energy costs due to solar power and self-sustaining moss.
- Total cost for 212 London Underground stations: Just £271,000, cleaning 555,948 kg of CO<sub>2</sub> annually.**

### Health Impacts

- Enhanced Mental Well-Being:** Fresher air boosts serotonin levels, reducing stress and fatigue.
- Reduced Illness:** Cleaner air means fewer airborne bacteria and viruses, leading to fewer sick days.
- Enhanced Productivity:** A healthier environment fosters a more focused and productive workforce.

### Environmental Impact

- Fights Climate Change:** By absorbing significant amounts of CO<sub>2</sub>, BioBreeze contributes to global efforts against climate change.
- Sustainable Design:** Solar-powered and eco-friendly, it aligns with green energy goals.

### Space-Efficient Design

- Only 0.5 ft deep** - perfect for crowded stations without disrupting foot traffic.
- Safe and unobtrusive, even during peak hours.

### Diagram: Absorbs an estimated 3.3-5.6 kg of CO<sub>2</sub> daily per 100 ft<sup>2</sup> wall.

The diagram shows a cross-section of the pod. On the left, a 'wall of the bio device' contains a 'layer of cloud moss'. On the right, 'UV-C light' is shown entering the pod. Arrows indicate air flow from the right side into the pod and then out the top. A note says: 'The wall has holes to allow O<sub>2</sub> and CO<sub>2</sub> in for sunlit, respiration - photosynthesis and to prevent drought.'

## Social Impact News

### Masterclasses: Maths in Architecture

Channing and St. Aloysius' College students attended the first Masterclasses organised by the Social Impact team at Channing.



The talk on Maths in Architecture was led by an Engineer, Susan Mantle, and Architect, James M, both of whom have worked on major building projects at Channing. The brief was to consider Maths in Architecture and in turn, Structural Engineering. Ms





Mantle and Mr M showed how maths is integral in their roles, with examples of their work.

*They discussed their different roles, while highlighting the significance of maths and creativity in both fields. They specifically covered mathematical principles like the Golden Ratio and Da Vinci's Vitruvian Man; this demonstrated how geometry and trigonometry ensure balance and precision when designing structures. Overall, this talk emphasised just how crucial maths is in making our environment functional, safe and aesthetically pleasing and the importance of collaboration in a workplace.*

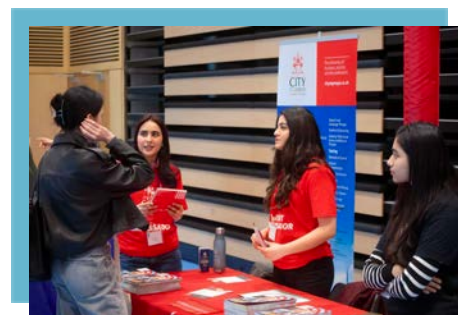
*Isabella N*

## Higher Education News

### Springboard Day 2025

On Thursday 28 March, Year 12 were fortunate to have Springboard Day: time dedicated to giving students valuable insights into future academic and career opportunities. The event was divided into two sections: a series of talks followed by a fair in the Sports Hall featuring a range of universities and employment sectors. Year 12s from St Aloysius' College also joined us for the day.

The first lecture was delivered to the whole year group by Exeter University about how to choose our universities and courses. Then 4 different universities - Lancaster, Bath, UEA and Sheffield - gave talks to smaller groups about student life at university. After lunch we were able to opt for different talks that ranged from information about applying to Oxbridge, subject specific talks including Law, Psychology and Physics, or other options like Art Foundation courses, degree apprenticeships and gap years.



The second part of the event was a fair where representatives from universities and companies talked to us about university courses, career prospects, and entry requirements. This interactive session allowed us plenty of time to ask questions, explore different options, and network with professionals.

Overall, Springboard Day was an amazing opportunity to provide clarity on our future choices and make informed decisions about higher education and life beyond Channing.

*By Natasha B and Maika P-Y (Y12 Careers Leaders)*

### Visit to Oxford's Wadham College and the Oxford Internet Institute research project

On 2 April, a group of 17 Year 12s and 2 teachers gathered at the Paddington Statue in order to embark on a trip to Oxford. On arrival in the city we set off on a short but scenic walk through the city passing several colleges, the Radcliffe Camera and the Bodleian Library. Mrs Bannatyne and Ms Wilberforce explained the library system and shocked us with the fact that every book ever published was stored in the Bodleian, due to its status as a copyright library.

Arriving at Wadham College, established in 1610 by Dorothy Wadham, we met Dr Hugh Munro, the Access and Outreach officer who had the previous week come to Channing on Springboard Day. He took us up to a large seminar room to meet Professor Ekaterina Hertog and her research team. Professor Hertog is a fellow of Wadham College and Associate Professor in AI and Society at the Oxford Internet Institute. Her team is researching parental controls over electronic devices and are convening focus groups of young people to gather ideas from those arguably most affected. We

were one of ten groups they were interviewing and it was very insightful to see how they conducted their research. After an intense hour and a half of discussion, we went to have some lunch in a very modern new building in the college, usually used as an informal study centre.

After lunch Dr Munro gave us a tour of the college, showing us around the grounds, the hall and chapel. He told us about college events and traditions, including the alpacas that came in during exam season so students could take a break from rigorous revision to spend some time with the animals. After our tour, we went back to the seminar room where Dr Munro and his colleague from Lincoln College spoke more about admissions, specifically about personal statements. The most interesting information was the 'So What?' principle, reflecting on what the super curricular activities we get involved with actually provide for us in terms of academic credibility. After some questions and subject specific advice we thanked Mr Munro and he took us back to the gates of Wadham and said goodbye.

We then walked swiftly to Keble College across the road, a beautiful redbrick college and had a brief tour around given by Ms Wilberforce and Mrs Bannatyne. As we went into the chapel, we were serenaded by a powerful organ while we wandered around the space, in awe of the scale and skill that must have gone into building it. After a jam-packed day of walking, talking and learning we were sad to say goodbye to the beautiful city of Oxford. As we piled into the train, Greggs doughnuts in hand, we settled in for a 50 minute train ride back to Paddington and back home.

*By a Year 12 student*

## Channing Archives

When the sun is shining and you're just hanging out with your friends...



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