



ROYAL SOCIETY OF **CHEMISTRY**

Royal Society Top of the Bench Competition

In October, Phoebe, Noel, Rehan and Ayan competed in the regional heat of the Top of the bench competition at the University of Huddersfield in which they undertook a practical designed to test their general laboratory skills and then completed a theory task focusing on their Chemistry knowledge. The team did incredibly well and won the heat, so secured a place in the national final.

Last Saturday, the team headed off to the University of East London to compete against thirty other schools in the national final. Again, they completed a practical



challenge and a theory paper. Although they did not place in the top six schools, it is a fantastic achievement to reach the final and we are very proud of them!

MedSoc Students

On Wednesday this week, 28 MedSoc students took part in an event ran in school by a company called Meducators.

Meducators is an educational company that provides interactive workshops aimed at those interested in the



healthcare field in the future. The workshop provides students with first-hand experience of some of the basic skills and fundamental concepts taught to healthcare students in their early years at university.

The students were split into two groups and explored a number of stations and scenarios including:-



• Reflexes - students had the opportunity to expand on their knowledge related to the 'reflex arc' of motor and sensory neurones. They were shown how tendon hammers are used and had the chance to practice using them with their peers

• Vital signs – students learnt about the four main signs that are routinely monitored by all healthcare professionals – temperature, respiratory rate, pulse rate and blood pressure. They had the opportunity to practice using the blood pressure monitor and cuff on their peers.

• X-Ray Interpretation – understanding the function of the bones in the human skeletal system

• Medical ethics – exploring ethical dilemmas and discussing roup the concepts of morals and rights in complex cases.

Those involved in the workshop ranged from Year 8 to Year 13 and it was fantastic to see the ambition in the room from every single student, regardless of what year they were in. Everyone got involved with both the verbal

discussions and debate, as well as the hands-on use of the medical equipment. It was wonderful to see students being inquisitive and asking the Meducators some really interesting questions about the world of medicine (some even stayed behind at the end!). Dr Kal and Zack from the company commented on how interested all students were in what was being discussed and the extent of their medical knowledge was impressive!

A special thank you to Olivia Smith, Saneha Kauser and Mia Harrison in Year 13 for initially making contact with Meducators and asking for this event to take place – it was certainly very engaging and interesting!

Mrs Lenski.

Seniors Take The Win



The Senior Netball team played a home fixture against Shelley College on Wednesday 22nd March.

Dominant from the start, they showed outstanding skill and endurance over the 4 quarters. Summer and Libby took us to an 11-0 lead in the first quarter. Excellent defending from Beth Waterfield ensured that by half time we had only conceded 2 goals, with Heckmondwike leading 20 – 2 at half time.

Ella, Natalie, Polly and Ava played fast and fluently, linking well to ensure we kept possession through defensive and attacking phases.

Final score 31 – 7. A fantastic performance, showing strength, speed and agility.

Thank you all for playing and special thanks to the year 13 students, Natalie Kanyimo and Libbey Sweeney who have contributed to HGS netball over the last 7 years.

Polly Brown, Libby Sweeney, Natalie Kanyimo, Ella Lister, Ava Higgins, Beth Waterfield, Summer Jarvis.

Cashless Catering Accounts

If all parents could kindly ensure their child has sufficient funds on their account when they start the new term on 17 April 2023 that would be appreciated. Funds can be added to catering accounts through ParentPay. This is an easy system to use and anyone having difficulty should contact finance@heckgrammar.co.uk, staffing will be limited over the Easter break but will we endeavour to respond to queries.

As always, any suggestions and feedback can be left on the catering webpage https://www.heckgrammar.co.uk/students/daily-life/catering/

Regards The Business Office

Subject Focus - Design & Technology

Our Year 13 Design & Technology students are putting the finishing touches on their coursework projects, which are set to be completed next month. This year has seen some outstanding projects, showcasing the high-level of creativity, ingenuity and technical skills of our students. Back in October, we shared the initial ideas of our cohort. After six months of hard work and dedication, we're proud to be able to share some of the results with you.



Kerim Pudic has explored ways in which plant life can be better cared for in the busy office environment. Studies have shown that plants can reduce stress, boost productivity and creativity, and contribute to a calming workspace. Kerim's self-watering plant pot system allows workers to enjoy the benefits of plant life without the need to water them. The digital system uses capillary action to water plants at timed intervals.





Another impressive project is by Lauren Fellows, who has produced a kit for schools that allows students to recycle waste paper into new material. Lauren has designed a mechanical system that shreds paper within a sealed container. Students simply add water and waste paper before mixing it into pulp, without electricity. The kit also includes a draining screen that allows the pulp to dry out to make new paper that can be used for a variety of purposes in school.

Caitlyn Hodgson aspires to study Biology at higher education. She has dedicated her Design & Technology project to learning through play by creating a game that encourages students to revise topics on the GCSE Biology specification. Caitlyn has made learning fun through her creative question and answer, board game, which has been meticulously and expertly crafted.



Subject Focus - Design & Technology continued

Similarly, Leigh Blanchard has used her design studies to promote her career ambitions working within the performing arts. Leigha has used her knowledge of design and engineering to produce a range of props and set designs that were used to dress the stage for A Level drama performances over the last fortnight, Leigha designed and built a range of theatre design pieces that were used as part of A Level Drama performances. Leigh worked closely with the Drama department to design a range of scenery and props and she will go on to study set design at University in September.



Ben Maxey's sustainable lunchbox is made almost entirely of renewable materials. Inspired by mid-century roll-top desks, Ben's product opens and closes using magnetism and the lid doubles as an eating surface.

Other Mentions

Sumeed Saleem has produced a lighting system that makes use of renewable energy and adopts the style of the De Stijl movement (1917-1931); Ismaeel Karolia has fabricated a vertical plant system for urban areas to improve city aesthetics and lower air born emissions; Haaris Tofique has designed a modular stationery organiser for university students living in small spaces; and Ali Musa has fashioned a workstation that encourages children to learn the skills and techniques required in the kitchen to promote cooking from a young age.

This year's cohort of Design & Technology students has demonstrated exceptional creativity and technical proficiency, producing projects that are both aesthetically pleasing and highly functional. The future looks bright for these talented students, and we look forward to celebrating their achievements when the non-exam assessment comes to close after the Easter break.



Diary Dates

Monday 3 April - Friday 14 April School Closed - Easter Break

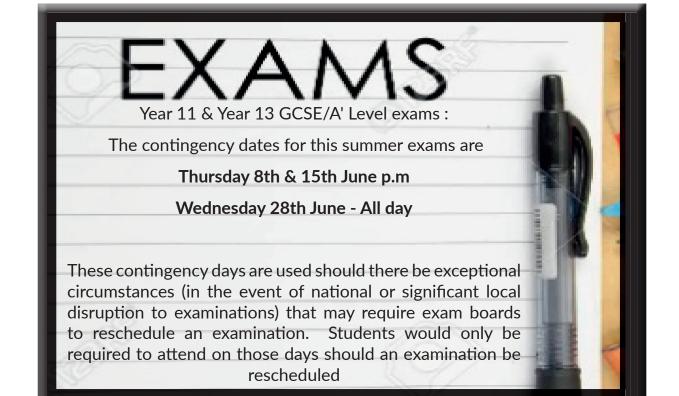
> Monday 17 April School Re-opens 8.40 am

Monday 24 March Rescheduled Staff Bake-Off

Tuesday 25 April Year 8 HPV Vaccinations

Thursday 27 April Year 12 Remote Parents' Evening details to follow shortly

Monday 1 May School Closed - May-Day Bank Holiday



Year 12 Maths Inspiration Trip



On Monday 27th March, I left third period twenty minutes early to join a coachload of fellow A-Level Mathletes (45 students plus Mr Mullaney, Mrs Harker and Mrs Hepworth) on a visit to Leeds. Excitingly titled "Maths Inspiration", the event was at the West Yorkshire Playhouse. Luckily, we arrived in good time, in contrast to my last school visit to the Playhouse, in which we entered the theatre at the end of the first scene of Macbeth. After a rather clever introduction –



a montage of Maths-related popular songs - the audience, which by then had packed the theatre to its rafters, met the host, Jen Rogers. We were then given a short outline of planned proceedings, before meeting the first speaker – Tom Crawford.

Billed as a University of Oxford Maths tutor, it is safe to say that he did not match the typical stereotype of an academic. Nevertheless, his talk (about how we can use Maths to save the planet) was highly engaging and probably the one I found the most interesting. The second speaker was Zoe Griffiths, who, despite being faced with technical difficulties at times, debunked various examples of statistics being used to spread 'fake news', including a couple of demonstrations involving audience

interaction. We then had a five-minute break – I would have preferred longer to stretch my legs – followed by the final talk from Ben Sparks of the University of Bath, who had (like the other two speakers) previously appeared on the popular YouTube channel Numberphile. He introduced us to three quite fascinating and, at times, mind-bending examples of spirals in Mathematics, ending with a rendition of the song that inspired his presentation: "Windmills of Your Mind".

Year 12 Maths Inspiration Trip continued

Overall, I really enjoyed the trip and, like many, found the talks very interesting. They were easily understandable and yet often covered areas even our Further Mathematicians knew little about. The trip will doubtless have been good "super-curricular" preparation for those students going on to apply to study Maths-related courses at university. Presuming the event goes ahead next year, I would definitely recommend it to future Year 12 Maths students.

By Sam Walshaw (A level Mathematics Student)





For me, the maths inspiration trip was a great experience and an amazing opportunity for me to delve deeper into maths and get an insight to some interesting topics that I have never encountered before. I really enjoyed how the different speakers engaged with the audience and made their whole talks interactive and fun. My favourite talk was by Ben Sparks in which he showed us how spirals can be formed using the nuances of maths however I also really enjoyed the one by Tom Crawford where he explained his own experience of using maths to clean the ocean of plastic pollution. As a whole it was a 10/10 afternoon out!

By Patrick Sam (A level Mathematics and Further Mathematics

I very much enjoyed the maths trip to Leeds Playhouse. It was a very fun experience, even for someone who is not very excited about maths outside of their school life, showing the ways in which maths is applied to the real world, whether it comes from finding the most efficient ways of tackling pollution, to more personal matters, like who you vote for, or misinformation spread on the media. My favorite part was probably learning about imaginary numbers and how maths can be seen as 2D, as well as the uses of irrational numbers in real life.

By Mohammed Uwais (Core Mathematics Student)





A huge congratulations to Anish Srikanth in Year 11 who has entered a competition run through the organisation: Young Writers and has been chosen for publication in a collection of poems The Power of Poetry - Time To Have Our Say. Being chosen for publication is a great achievement and expression through poetry and writing is such a fundamental part of expressing creativity. We're keeping our fingers crossed for a win also as the winners have not yet been announced! More competitions are running both as part of the KS3 Creative Writing Club and for anyone that wants to take part.

YoungWriters

House Report Spring

It's been another fantastic and busy half term for the Houses.

The two big sporting events for the term have come to an end.

The boys' rugby has seen the lads playing in all weathers, with some muddy legs on return from Cawley fields. Congratulations to the winners from each year group:

- Year 11 Joint 1st Bronte and Clarke
- Year 10 1st Priestley
- Year 9 1st Clarke
- Year 8 1st Bronte
- Year 7 1st Priestley

The girls' have been competing against each other in Hockey up at the MUGA. We play this in Junior, Inter and Senior categories which gives our students chance to collaborate with other year groups. Well done to the following winning teams:

- Seniors 1st Houldsworth
- Inters 1st Clarke
- Juniors 1st Clarke



House Report Spring continued

We have also held some academic competitions this half term. It was Maths-central last week with two simultaneous House Maths competitions happening afterschool for the Seniors. 14 competitors from each house took part in different Maths activities.

Congratulations to Priestley House on their win.

After two weeks of battles, the House Spelling Bee Competition has now come to an end. All houses and their representative spellers did a fantastic job - I think we easily underestimate the bravery and courage it takes to get up on the stage, no matter what the capacity, but to do it under the intense glare of the spotlights, with an entire hall packed full of students and teachers, is no mean feat! It was an incredible effort and performance all round, so to the Heckmondwike students who took part, congratulations - you did your houses and the school proud. Last week

saw the junior competition come to a close as Bronte spelled their way to victory, beating Priestley in the final. On Tuesday of this week, the intense senior final took place, however Bronte could not maintain their streak; Houldsworth clinched the title with 13 words spelled correctly to Bronte's 12. What a final! I hope the contestants, the house leaders (who all did a fantastic job in supporting their spellers), the audience, and the staff enjoyed themselves and look forward to the return of the House Spelling Bee Competition next year.

Next term is always a really exciting one with lots of big House events. It is all still to play for! In the first half term, we have the following events:



House Chess

Junior House Maths Senior E-Sports launch Staff House Bake Off House Art deadline & Showcase Senior Girls Rounders Junior Boys Cricket Inters Girls Rounders



Finally, here is the current standing for the Lees Cup.

Bronte	Clarke	Houldsworth	Priestley
95	78.5	84.5	97



Did you go to Heckmondwike Grammar School? Did you go on a school trip? When and where was it? We would love to see your photos or hear your stories. If you would like to share them please get in touch: <u>125photos@heckgrammar.co.uk</u>

