

Welcome to our Term 3 newsletter. This year started with a bang in January, when we held our annual Senior Prizegiving ceremony for the students who left in 2023. It was our pleasure to organise an event which celebrated their hard work and wonderful achievements. Thanks to our staff, who once again organised this prestigious event and of course a huge thank you to our special guest Josephine McCartney, the Chief Executive of the Kent Community Foundation, who had the pleasure of awarding the prizes to our well deserved students. I would also like to acknowledge and thank the generosity of the prize donors. It was wonderful to be reacquainted with last year's cohort and we were delighted to hear what they have been up to since leaving school and to learn about their plans for the future - we hope they continue to stay in touch.

Year 8 students have spent time thinking about their future, in particular their GCSE options and how this will influence their career pathways. As usual, our fantastic KS3 team organised a valuable Careers Carousel, which offered students guidance and support when thinking about their future plans. The workshops helped to generate lots of open dialogue and discussions amongst students and we hope this event has helped support them with their decisions about GCSE options.

Our Year 11 students have also been deciding their next steps when they embarked in the Sixth Form Taster Days where they attended taster A level lessons. Deciding which A Level subject combinations to study can leave students somewhat perplexed, therefore the taster days are incredibly beneficial in making that decision. A huge thanks to all those involved in organising this event.

Continuing with Sixth Form news, we also welcomed internal and external students to the school for a successful Sixth Form Open Evening. A massive thank you to the staff and students, in particular the Head Student Team, who supported the event and made it such a success. It was wonderful to see so many of our Year 11 students at the event and we look forward to welcoming them, as well as external students, in September.

As usual, our students have engaged in lots of activities outside of the classroom. Congratulations to the students who took part in the VEX robotics competition and came 5th with their robot Gilgamesh and also a huge congratulations to our under 14s girls' football team who are through to the Kent Cup Finals!!

This term it was Bysing Wood Primary School's turn to visit our technology department and participate in our F1 in Schools STEM day. Thank you to our Sixth Form students who assisted the pupils throughout the day and shined as STEM ambassadors. We plan to continue this valuable outreach programme and will be inviting other primary schools to take part in the future.

Our talented musicians showcased their talents at the Chamber Concert this week in a truly remarkable evening. St Mary's of Charity Church provided the perfect setting for the Chamber Orchestra and the Chamber Choir. The wonderful performances were enjoyed by every member of the audience - well done to the superb choir and musicians.

Next term the whole school community is invited to see the production of Matilda Jr and the annual Dance Show - tickets are now available to purchase for Matilda Jr and Dane Show tickets will be on sale after half term.

Our students have taken part in lots of enriching activities this term, too many to mention in my introduction, therefore I would like to invite you peruse the newsletter. Lastly, 48 students are currently on their way to Austria to enjoy their half term break skiing in the mountains. A huge thanks to the staff who have helped organise this mammoth trip and I hope the students all have a wonderful time.

We wish you an enjoyable break and look forward to the students returning on Monday 19th February, when we will, without a doubt, enjoy another busy and productive term.

D M Anderson

## **Friends of Queen Elizabeth's**



Raising funds for projects to benefit all students at Queen Elizabeth's.

Where: School Hall

Tickets - £6 per head and £3 for Sixth Form Students.

Bring your own nibbles and drinks

Saturday 9th March 2024 6pm



Book via the School Gateway.





A group of 6th Form linguists attended a Language Conference at the University of Kent in January. We were welcomed by representatives of the University of Kent, Simon Langton Girls' Grammar School, L'Institut Français, Consejería de Educación and the Goethe Institut. It was a great opportunity to meet other A level linguists and to attend lectures and workshops at the University. Sessions ranged from the German Netflix series "Dark" to a translation workshop, where pupils had the task of dubbing an extract of an English language film trailer into Spanish. We also experienced a taster session in Japanese, Mandarin or Arabic, which was a highlight. Meeting the undergraduate students and talking to them about their experiences of student life and a possible year abroad as part of a degree was also an interesting aspect of the day.

## **Humanities**



<u>Humanity Hub</u> A reminder to all Humanity students that every Tuesday lunchtime in H8, Humanity teachers will be present for any students who wish to ask for support or would like a space to complete tasks.

HUMANITIES HUB H8 - Tuesday Lunchtimes

A reminder to Year 10 RE GCSE students about the '100 day challenge' to support with improving their grade. There are 100 exam tasks to be completed with a range of 1 mark to 12 mark questions. Good luck!



*Humanity Heroes* This term we are celebrating the behaviour and achievement of the following students, well done.

KS4 KS3 Paloma Freva Patrick Beatrice Eve Zach Seb Katy Seth Nial Matilda Agnes Alexis Kayla



## **Debating Club**

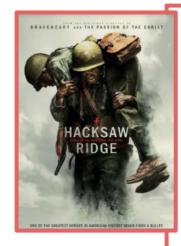
KS5

Angus

Cara

This term we have been bowled over by the quality of research, speech crafting and rhetoric in our weekly club. Debates on what was most culpable for Titanic's demise (Emma, Caycee, Lilliana and Lila-Rose), how much impact the Norman Conquest really made to England (Edward, Ava, Logan and Owen) and over the reputations of Lord Protector Cromwell (Gabe, Esme and Zoe) and Field Marshal Haig (Emmeline, Mary, Nia and Henry) have kept both judges and audiences hooked and eager to return to the following week's clash. We would like to put on record our gratitude to both the winners and the vanquished and look forward to seeing the former in Round Two of the knock out tournament and the latter in next year's contest.

Students in Year 7 are invited to create their own image of the last supper. For example, they could use playdough, teddy bears or lego to create the scene. More information about the competition and what to include can be found on Year 7 Google Classroom and their RE classroom.



### Hacksaw Ridge

Year 10 watched the film 'Hacksaw Ridge' on Monday 5th February which shines with religious themes and has many religious thoughts and teachings embedded throughout the movie. The overall theme of the film is tracing the story and life of Desmond Doss, a Medal of Honor recipient and Christian conscientious objector who chooses to be a pacifist in a combat role and saves the lives of 75 of his fellow Americans and some Japanese soldiers. This is a great example of active pactisim for the examination unit of 'Religion, Peace and Conflict'.

Term 3 2024



## Kent Cup Girls Football - U14 **U14 Girls reach the Kent Cup Final!**

After having to postpone the semi-final on the original date planned, due to a frozen pitch, we were finally able to welcome Westlands School on Friday 12th January. With a couple of players missing on the day, Mrs French was forced to draw some 'super subs' into the squad and Esmee C and Tiff H didn't hesitate in stepping up and chipping in.

After a delayed start due to the ref being late, the girls were ready and raring to go. The first few minutes saw a very fast break from their striker and the QE girls found themselves a goal behind and chasing victory. They all showed great resilience and determination to turn this around and responded with a goal very soon after. Adrianna and Zhana were the driving force in the mid-field, with Adrianna breaking through their defence and finishing in the back of the net 3 times. Maddie M also added to this total before half time, where the score was 4-1 going in to the break.

The second half saw a slight change in tempo with the Westlands team desperate to find the goal again. Both Elif D and Tiff H did a sterling job, playing out of her normal playing position, in centre defence of organising and keeping them out. Miou's pace in the midfield and Emma's silky skills up front proved to be no match for Westlands. The final score was 4-1 to Queen Elizabeth's and we venture on into the final - a very exciting prospect!

Sophie JM (and the other Year 9 girls; Adrianna, Miou & Elif) has ably led this team, both in example and leadership and they all deserve every moment of glory they will gain from playing in the highly prestigious Kent Cup Final. We are yet to find out details of this match - venue & timing - but do know we will be facing a very strong side from Newstead Wood, Orpington. We will publish the final details when we know and hope that lots of you from our school community may well be able to come along and cheer the girls to victory. Win, or lose that match,



I am extremely proud of every member of this squad and everything they have achieved so far - 'Go get them girls'!

## Kent Cup Boys Football - Yr 11 (JRC)

The Year 11s started their Kent Cup Quarter-Final positively against a very strong Norton Knatchbull team in very icy conditions. The usual rock solid defence led by captain Charlie O, offered a platform to unleash swift counter-attacks led by Gabriel C-S and Lucian T, the former being rewarded for his effort off the ball with a goal to take the lead after 20 minutes. However, the jubilation was short-lived as key defenders suffered two debilitating injuries that NKS took full advantage of five minutes later, with two goals in quick succession to make it 2-1. NKS scored another very early on in the second half. QE battled hard for the next 20 minutes and Tom S clawed one back to make it 3-2 with 15 minutes remaining. Unfortunately, due to avoidable mistakes and more injuries, QE suffered a major collapse and eventually lost 6-2. Man of the match Josh D, produced one of the performances of the season linking up play, winning the ball and executing perfect first time 40 yard passes all game- he really rose to the challenge against a team who would eventually reach the final. As for the rest of the squad, Mr Charlton couldn't be more proud of how the team has developed over the last few years. Every single player played an instrumental role in their success and we hope that they continue to represent the school for the 6th form teams next year.

Cont'd/.....

## **Boys Basketball**



Now that we have our brand new Sports Hall, we have been welcoming back Basketball into both the curriculum and as extra-curricular clubs.

The Year 8 basketball team have performed with great enthusiasm in their first season playing together and show promising signs of success in the future. They have a good mix of skillful players such as Oliver L and Edward L along with strong, powerful players in the form of Finn M and Luca G. Liam DV is the driving force of the team and blew Herne Bay High away in the first guarter alone. It seems that Liam can decide to score at

his own free will and he provides great confidence even when he is on the sideline supporting his teammates. QE went on to beat HBH 34-18 and they are looking forward to testing themselves against Barton Manor School and St Anselm's in a triangular competition in the final week of term. Good luck in the remaining fixtures!

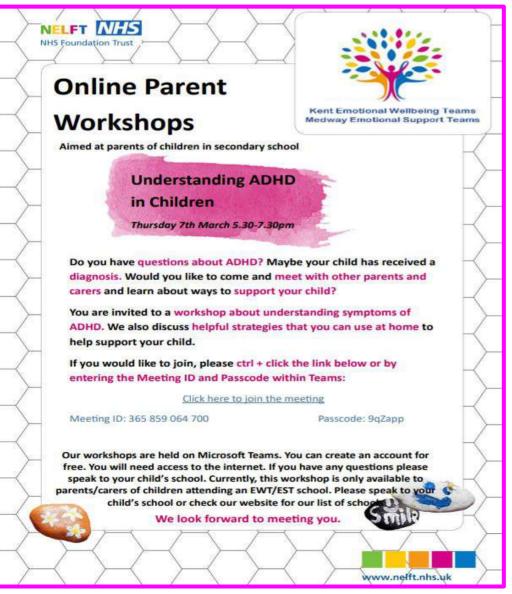
Year 10 have enjoyed a really good Basketball season this year. They have beaten The Whitstable School and Barton Court, but have come against



some very tough opposition from Archbishops and St Anselm's. Star players include Matt N, Jhairon C, Charles H and Dhylan S. Oscar I picks up the award for the most improved player. Well done to all those boys who have shown some great skill, character and commitment this term.

## UKC competition (KF)

Year 11 students last term participated in an academic research competition through the Sport & Exercise Sciences department at The University of Kent, Canterbury. I am delighted to announce that all of the work produced by the students from Queen Elizabeth's was of an exceptionally high standard and made up 4 out of the top 5 posters. The judging panel commented on the standard of work produced by our students.





The winning piece of work and poster was produced by Joe D & Oscar O whose work will now go forward into a national competition organised by The British Association of Sport & Exercise Sciences (BASES).

There is lots to look forward to next term...Boys Rugby fixtures, Girls district Football, Kent Schools Trampolining competition, our very own Dance showcase...all among the various clubs and practices on offer.





QE's Green Group is currently busy planning the school's first 'QE Bay.' This will take place next term on the 8th March and is open to Year 10 through to Year 13. Students are being encouraged to donate any of the



following items: books, revision books, text books, football boots, PE kits, clothes. Students will then have the opportunity to buy these items for a reasonable price. The purpose of this is to encourage a 'reuse, recycling' mindset within the school. Any proceeds from QE Bay will be reinvested back into Green Group so that students can plan and fund projects that they feel will benefit the wider school community.

We are asking for students to bring in any donations from the w/c 19th February. Volunteers from Green Group will collect the items from tutor rooms and the Sixth Form common rooms on a weekly basis.

Green Group are hugely enthusiastic about this event. They have organised, promoted and will lead this event. We are therefore asking for you to offer as much support as you can in ensuring this event is successful. We are hoping that it will become an annual event that we can open to all year groups going forward.

This event is also forming part of our 'More in 24 initiative' where we are encouraging students and their families to work together to reduce our individual carbon footprint and lead more sustainable lifestyles. We will be promoting this initiative more in school from next term but it is centred around three main categories where students can make a difference - 'awareness', 'action' and 'lifestyle'. We want to ensure that our students understand not only the consequences of climate change and global warming but also how they can take steps, however small it may be, in making a difference.

Thank you in advance for your support and if you have any questions about QE Bay or our Green Group, please contact Mrs Brunger on lab@queenelizabeths.kent.sch.uk

REDUCE

REUSE

RECYCLE

ENERGY SAVIN



## We can ALL do more in '24

We can do more to reduce our carbon footprint and lead a more sustainable lifestyle. Let's all commit to doing more in 2024. We have split our ideas into three categories. Action, Awareness and Lifestyle.



## Action.

- I Reduce > Reuse > Recycle whenever you can (in that order)
- 2 Turn off the lights when you leave a room and save money
- 3 Reduce food waste and save money
- 4 Switch to a green energy/gas provider
- **5** Calculate and reduce your personal carbon footprint
- https://www.carbonfootprint.com/calculator.aspx
- 6 Become or support your forms Green Ambassador
- 7 Support your local independent retailers
- 8 Use a refillable sports bottle in school
- 9 Support Earth Day (22nd April 2024)

https://www.earthday.org/campaign/act-on-climate-change/

**10** Follow Chooosetoday on Twitter or Instagram https://www.instagram.com/chooosetoday/?hl=en

## Awareness.

II Watch a documentary. Some suggestions..... https://youmatter.world/en/10-best-documentaries-climate-chang e/

https://www.bbc.co.uk/programmes/m000qwt3/episodes/player

**12** Listen to a podcast. Some suggestions.....

https://www.zerosmart.co.uk/post/best-sustainability-podcasts-20 22

https://www.bbc.co.uk/programmes/m000qwt3/episodes/player

13 Discuss with your family how you could become even greener. Some suggestions of this could be switching to an electric vehicle when you next change cars, draft proofing your house, composting, only use central heating when necessary etc.
14 Sign the ambitious emissions reduction petition, to help set lower emission targets and invest in renewable energy https://petition.parliament.uk/petitions/647923

## Lifestyle.

**15** Try to use lover CO2 form of transport such as walking or cycling

- 16 Use energy and water efficient appliances
- **17** Reduce your meat consumption and support meat free Mondays in the Canteen (every last Monday of each month)
- 18 Go Palm Oil Free
- 19 Look into upcycling/buying second hand clothes
- 20 Try to buy local and seasonal products
- 21 Install a water butt to collect water for your garden

**22** Invest in sustainable products for your everyday use (e.g. Ecover washing up liquid)

**23** Build a more sustainable garden with more plants, a living wall, bug hotels

## Last but not least:

**24** Do your own green thing! Now you are more environmentally aware, devise and follow your own action plan.



# Highlight on Mental Health



We welcomed a representative from Kooth into Assemblies this week to talk about Children's Mental Health Week and how they are able to support young people whatever they're feeling. You can find more information and access support by visiting www.kooth.com





This week, students have been talking about Children's Mental Health Week, whose theme this year is My Voice Matters. Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously. Empowering children and young people can have a positive impact on their health and wellbeing. For example, students who feel that their voices are heard and that what they say makes a difference - have higher levels of self-efficacy and self esteem.

As people become empowered, they can work together to create positive changes for themselves and for others.

This week, students have been investigating how they can look after their own mental health and use their own voice in school.

More information on this can be found at <u>https://www.childrensmentalhealthweek.org.uk/about/</u>.



## Improving the school gate congestion at drop-off and pick-up times

Abbey Street and Abbey Place can become highly congested at drop-off and pick-up times. We continue to work towards reducing congestion at the start and end of the school day but we need your cooperation for this to be successful and there are a number of key benefits:

- reduced traffic outside the school gates will be beneficial to pedestrians and cyclists
- creates a safer environment for students who are accessing and exiting the school site by foot or on bicycle
- creates a friendlier and calmer environment for everyone including our neighbours with whom we work hard to have a good relationship

From next term we are asking you not to drop off or pick up your children at the school gate. You do have the option of using the Institute Road car park near the Library or Tesco's allows parking for free for up to 30 minutes. However, this does not apply to those parents to whom the school has given dispensation.

Thank you very much for your understanding and cooperation. If you have any queries, please do not hesitate to email me <u>hzm@queenelizabeths.kent.sch.uk</u>.



Mr H Mudhar Facilities and Health & Safety Coordinator

# CREATIVE ARTS TECHNOLOGY

A variety performance of the cruellest evildoers of all time.



NATIONAL S



n Schoo

# Win the School £5000!!!!

Please take the time to complete one simple form to help the school potentially win £5000 to invest for STEM subjects. Please click here to nominate Queen Elizabeth's:

## https://rbt.org.uk/schoolsprize/

There is also an opportunity for A level students studying STEM subjects to win a scholarship too!

https://rbt.org.uk/scholarships/



The Rochester Bridge Trust

...providing passage over, under, or across the River Medway from medieval times to the modern day

The Rochester Bridge Trust is pleased to offer a donation of £5,000 to support STEM learning, to be granted to one school as voted for by members of the public.

All state schools, colleges and academies in Medway, Maidstone or Tonbridge and Malling are eligible and anyone can vote.

Caroline Chisholm, Education Manager at the Rochester Bridge Trust, explained: "We feel really strongly about the importance of inspiring and educating the next generation of civil engineers because today's young people will be the future custodians of Rochester Bridge.

"This competition is a way of getting people talking about STEM – science, technology, engineering and maths – and by making it a public vote we hope families, teachers and members of the community will get behind their school and show their support by voting for them on our website."

All state secondary schools, colleges and academies in Medway, Maidstone or Tonbridge and Malling are eligible for nomination at www.rbt.org.uk/schoolsprize

The closing date for voting is noon on 29 February 2024.

The £5,000 prize will go to the school with the most nominations. In the event of a tie between two or more schools, the winning school will be picked at random from those with the greatest number of nominations.

There's also another opportunity for schools to benefit from funding, with two different kinds of engineering scholarships for students which also grant a one-off cash payment to the school.

These scholarships are open for application now, for students planning to study A levels in maths and physics and/or design and technology. Students intending to study for the IB Diploma are also eligible, but must be taking a higher-level maths course. For more information visit www.rbt.org.uk/scholarships



## **Canterbury Heat**

## Students from Queen Elizabeth's competed in the

local heat of the Rotary Young Chef Competition

## 2023/2024, hosted at Archbishop's School in Canterbury.



Students from schools in and around Canterbury had been invited to take part in the Canterbury heat. Altogether there were six competitors that took part, representing Barton Court School, Queen Elizabeth's Grammar School and Archbishop's School. QE had 3 representatives taking part.

After a welcome by lead organiser Rob Ward, and a brief introduction to the judges, the competition kicked off at 10am. The students had the challenge of preparing and cooking a two-course meal within a budget of £18 in 2 hours.

After the two hours of cooking was over, the students delivered their dishes to the judges one-by-one for assessment. As well as tasting the dish the judges looked out for plate presentation and noted responses to questions; they were also able to give some feedback on how dishes may be improved.

Anjola's freshly-made pasta was described as "beautifully presented" and better than the judges could make; Darcy was praised for her technical skills and told she had made something so "beautiful and simple" to look at but "difficult to make"; Cissy's apple rose tartlets were described as "a work of art."

The judges, together, then announced the winner: Darcy!

Darcy collected her certificate and special embroidered Rotary Young Chef apron from our the Club's President Rosemary Doyle.

Congratulations to all that took part - especially to winner Darcy. We wish her well in representing Canterbury in the District Finals.



## **Drama and Theatre Department**

Year 11 Drama students went to The Marlowe Theatre to see the matinee performance of 'Peter Pan Goes Wrong' on Thursday 30th January. They will be using this experience for their live theatre evaluation in their exam. Created by the practitioners Mischief Theatre, the production included hilarious moments of slapstick, audience interaction and running gags of elements of the show 'going wrong'.















## Friday 15th March 7pm Saturday 16th March 2pm & 7pm Tickets: £6.50

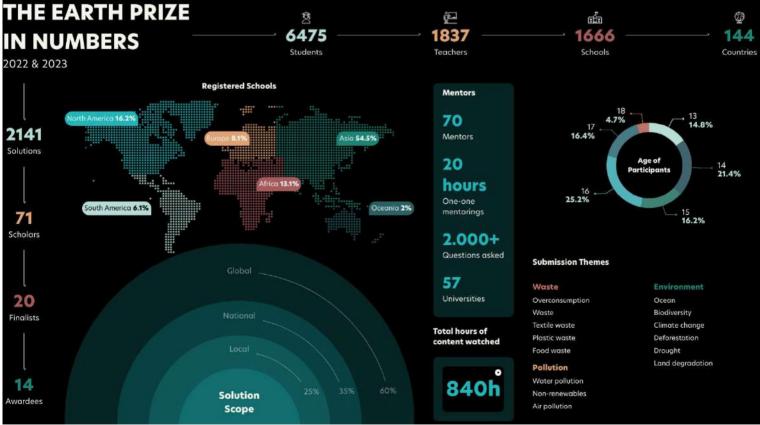
Theatre opens 30 minutes before the performance, no reserved seating. Tickets can be purchased via the School Gateway Please note this production uses flashing lights





Four Year 12 students have entered 'the earth prize' a \$200000 environmental sustainability competition for teenage students everywhere around the globe. Students need to present a proposal that will make a difference to the planet. Ideas will be shortlisted and students given the chance to present to a panel of experts. Dolly, Sasha, Sophia and Orla have proposed that the school invests in a aerobic digestion system, making use of the school's food waste. The idea is to promote this system and its environmental benefit to encourage councils and governments to roll out the scheme on National and global levels A message from the team: "Globally, 2.5 billion tonnes of food is wasted each year- a shameful third of all food produced. English schools produce 80,382 tonnes of food waste per year, which is collected and transported to already overcrowded landfill sites. Here, it decomposes anaerobically, producing methane which has 28 times the warming power of carbon dioxide, 58% of methane worldwide comes from decomposing food. We must reduce food waste worldwide, but until strategies are implemented to achieve this, we must improve the way we manage the waste we generate as it leads to unnecessary emissions which contribute to enhanced areenhouse effect."

## THE ENVIRONMENTAL COMPETITION FOR STUDENTS



## Good Luck QE!!!

## CHAMBER CONCERT

# Performances by Queen Elizabeth's chamber choir, string orchestra and selected solo performances.

On Tuesday 6th February we saw the annual Queen Elizabeth's Grammar School Chamber Concert held in St Mary of Charity Church. This was a fantastic occasion for our chamber ensembles, smaller groups and soloists to perform in a public concert.

The Chamber Choir performed Gabriel Faure's Requiem, a piece of work described as a "calm, serene and peaceful choral masterpiece". The evening saw exceptional performances and to the highest level.

Our thanks goes to the church for allowing us to host the event in such a great venue, and to Mrs Thorpe and Mrs Saul for all their help in organising such a great event!







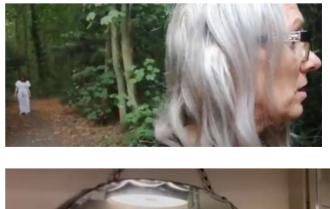


The school's Film Studies department has once again achieved the "Commended Centre" accolade from the Eduqas exam board in recognition of the exceptional standard of coursework submissions received in 2023. This centre of excellence recognition highlights the hard work, creative flair and commitment of the students.

It's an exciting time for Film Studies at QE, with more industry insiders booked to come in this academic year to talk to the students about career paths, as well as the QE Film Crew starting the first steps in creating next year's school promo film.



From top left, clockwise: Lucas T, Ava A, Z P, Ashton T, Sun B, Romi C







Our Year 7 Art Club recently took part in a community arts project, Flock Together, Lucy Stockton-Smith, a local artist from Animate Arts, created a printing project inspired by nature nd the local environment of Swale.

Schools were invited to explore printmaking to create an A3 poster of bird migrations and murmurations, symbolically representing young people in Swale flocking together to build their creativity.

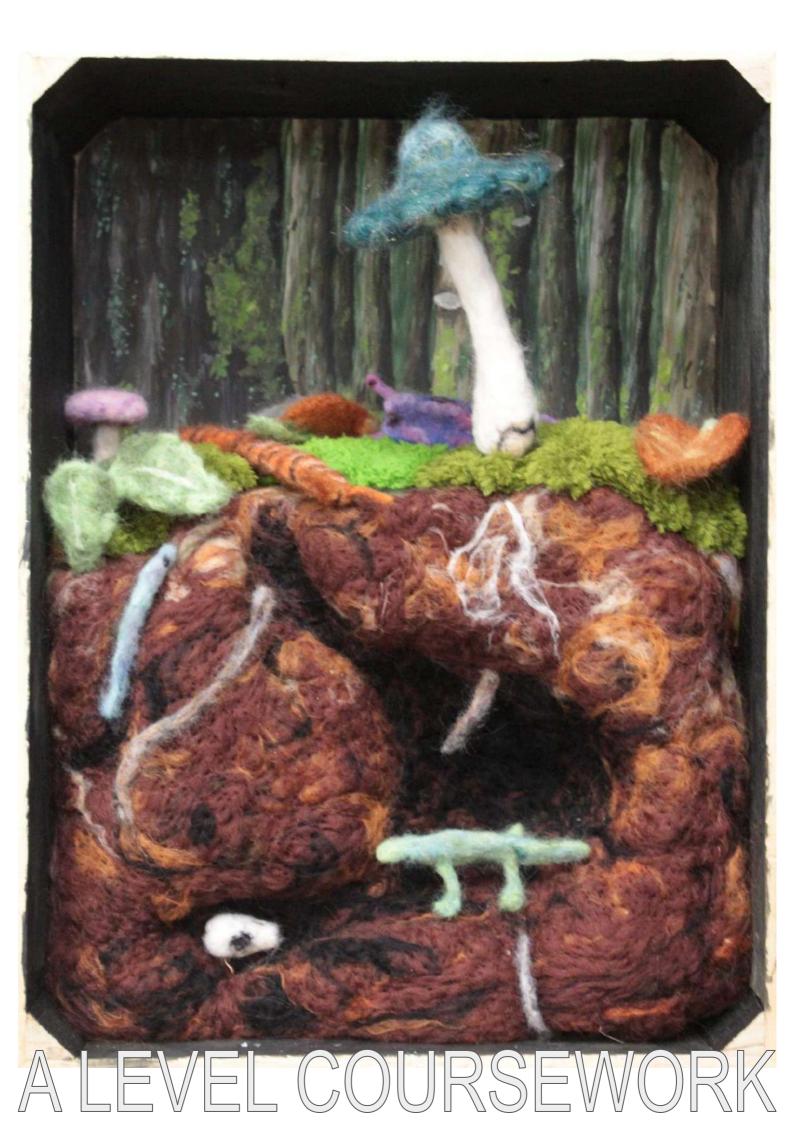
Follow the link below and click on any of the markers to locate an artwork that is on display as part of the

trail. There are 13 artworks in total to find; ours is on display at Creek Creative.

https://swalecep.org.uk/resources/culture\_map/

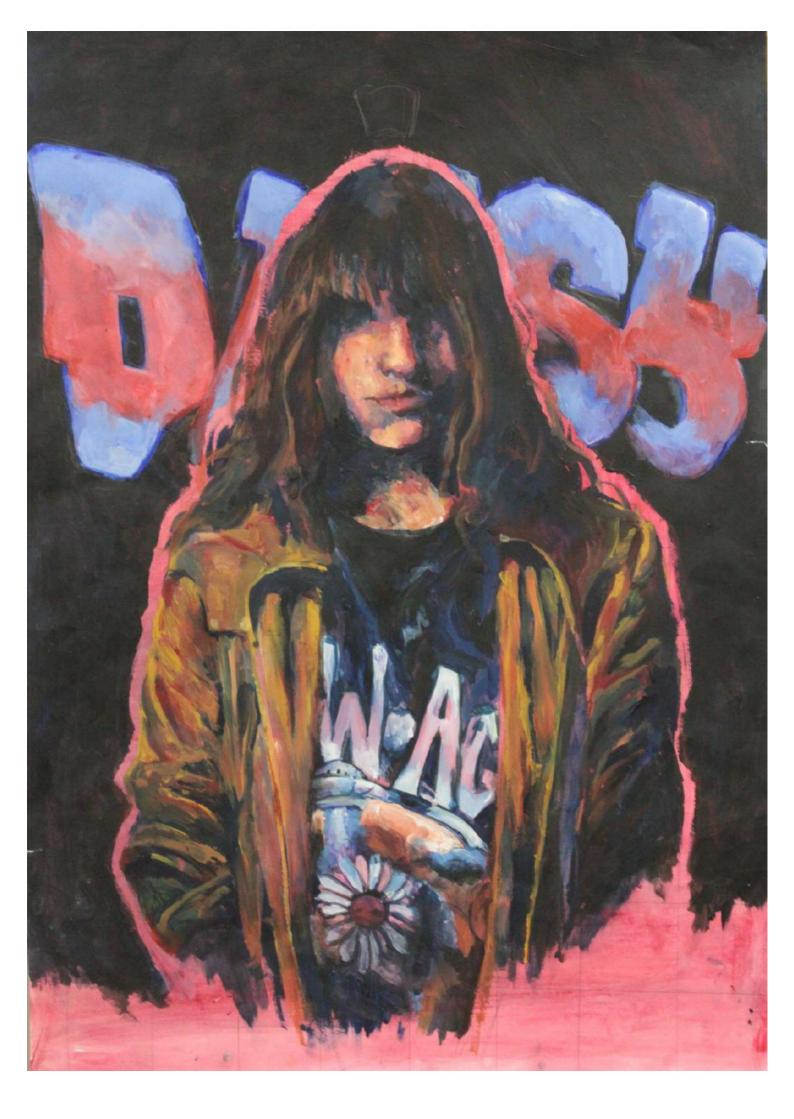


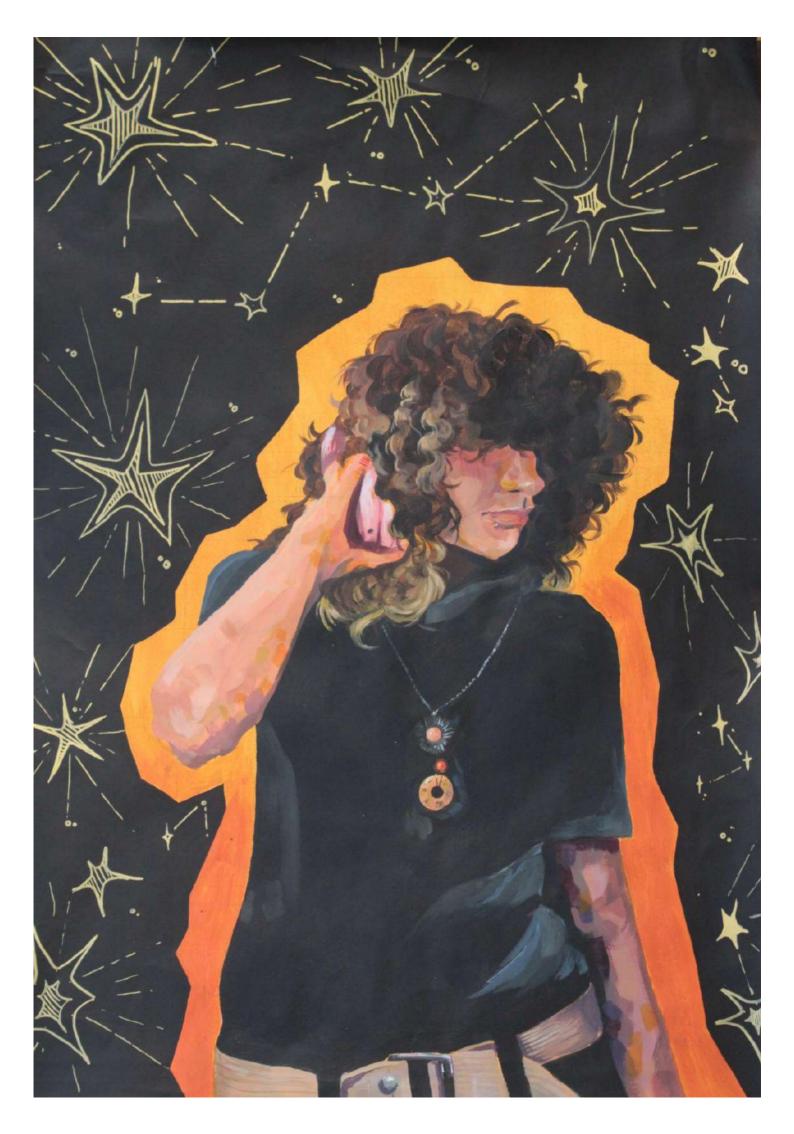
# YEAR 9 STILLIFE











# Showcasing Year 9 Design and Technology Students

The Design and Technology department thought they would use the newsletter this term to praise the outstanding work being produced by the Year 9 students. Having just started their GCSE in the subject, they have been developing their CAD and making skills. They were set a design and produce an alien task, utilising the wood lathe, as well as producing some CAD items and vehicles after developing their skills in Onshape. Well done Year 9, keep up the great work!











## What's been happening in QuEST?

The beginning of this term saw the QuEST dinner and the QuEST committee handover! The dinner was a great success, thanks to the previous committee's fantastic organisation, with many Alumni coming back to make connections, and vote on the new QuEST President...

The QuEST committee, the past year, has been amazing at keeping QuEST going, and making it such a positive experience for us Year 12s, allowing us now to step up and take on new roles as heads of QuESTs, Vice President and QuEST President.

I'm Sophia and I am the new QuEST president, making this the first of many newsletters I will write. I am so grateful to have been elected president and I am so excited to work alongside the new committee, to bring many exciting things to QuEST this year!

Here is the new QuEST committee: QuEST president: Sophia F Vice President: Helena H Head of EcoQuEST: Emma S and Elizabeth G Head of BioQuEST: Jemima E Head of RoboQuEST: Wynn H Head of SpaceQuEST: Bailey H Head of Junior STEM: Sophia F Head of F24QuEST: Adam O

Thank you to everyone who has supported QuEST and helped organise and deliver the QuEST dinner!

- Sophia F, QuEST President



EcoQuEST has currently got several projects in the works. We're very excited to soon be finishing a project, to get the school's composter back in use for food tech's biodegradable waste, which will stop it from entering landfill. As for our other plans, we have plotted an area

to cover in wildflower seeds, increasing the biodiversity of the field. would hopefully encourage bees and butterflies when the weather is warmer. We're also taking care of a number of plants, to reduce the CO2 in the room. This idea, when proven effective, will be integrated across the schools and could also be beneficial to the mental health of students.





- Emma S, CoHead of EcoQuEST

QuEST NEWS

SpaceQuES1

F24QuEST

SpaceQuEST, majorly focusing on the current ASGARD project, is very busy. Our project involves testing how light intensity from the sun varies with altitude, temperature, humidity, and air pressure, as it ascends in a stratospheric balloon. After just receiving our first set of purchases, we have been able to start coding and setting up our experiment for initial testing, after a long process of planning and getting the project approved. In addition, we have been working on getting sponsors and funding, as well as looking to apply for various grants, which will make all of this possible for us, including the eventual trip to Belgium, to launch our project to the edge of space!

- Helena H, Vice President

F24, a new addition to the ever growing set of QuESTs, has started this year and is up to an exciting start, our overall aim being entered into the Greenpower competition this year. This involves building a car from a generic 'kit-car', which we can modify as we wish. So far, we have been designing the main body and shape of the car, as well as conducting experiments to decide which materials would be most beneficial and suitable for our design. Furthermore, we have been trying to test tyres for our car, and trying to gain funding and sponsors, in order to be able to afford materials (and the whopping £3,000 kit-car!). Furthermore, the F24QuEST's existence has been set in stone with the creation of our logo and debut at the open evening last Thursday! Overall, a very busy and exciting start!

- Helena H, Vice President

This term in Junior STEM has seen the Year 8s start working on their Bronze Crest Awards! These awards allow them to plan and conduct their own experiments, and follow up with a write up of their findings. We've got many interesting projects going on, from bath bombs to fizzy drinks, there really is a wide range of creative experiments ongoing.

- Sophia F, Head of Junior STEM

The Year 7s this term have been involved in many different activities surrounding the field of STEM. We started off with some mathematical games and puzzles, followed by a game involving them making a product, that will be able to reach and grab a ping pong ball. Year 7 had a lot of fun with this competition, as it meant they were able to put their creativity and ideas of engineering to the test and work together in a team whilst doing so. Coming up, we have our annual pizza box challenge with both Year 7 and Year 8, which will be a great way to end term 3!



- Libby C







## **QuEST NEWS**





RoboQuEST's Automated Boccia Ramp project is currently underway.

Boccia is a game played primarily by the disabled community, with our goal being to give them independence in this aspect of their lives. We are currently working with a charity, named Accessible Coders, to make this project a reality.

In the past term, we've been busy constructing a prototype ramp, with an omni-directional base and ramp mount already built, and the pulley system for a retractable slit to hold the ball is currently in the works. We are also developing code using a GeeekPi arduino (which was gifted to us by Accessible Coders), to cause our ramp to move in any direction the user requires. This term, we have made huge leaps towards the end of our project, and towards helping the Boccia community.

Jesse-K J





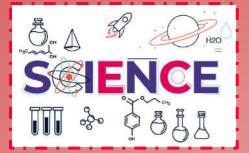
This term in BioQuEST has been very research based. We have been finding out information on how to genetically engineer bacteria to decompose plastic. We completed our first research poster, ready for the Sixth Form open evening, which hopefully encouraged some eager biologists to join our QuEST next year! Our aim is to continue working on this project ready for the IRIS conference.

Last term we attempted to do art with glow in the dark bacteria on agar plates for lower school students. This was unfortunately unsuccessful. However, we are now working on using a different growth medium so we can hold our agar art competition again in the next few months - so keep a lookout! This year we are also looking forward to setting up a 'plastics research' group' with a group of sixth formers we have communicated with at Mountain View Los Altos High School in California and potentially setting up some virtual meetings!

This is my first newsletter as the BioQuEST Head and both the new team and I are really excited to see what BioQuEST will achieve this year and where it will take us!

QuEST

Jemima E. Head of BioQuEST





Six Year 8 students showcased their skills in STEM as they represented Queen Elizabeth's in an International Institution of Engineering and Technology (IET) challenge. This prestigious competition brings together young minds from around the globe to tackle complex engineering problems. Our students demonstrated their technical prowess as they designed and prototyped solutions to a real-world challenge. Our students showed excellent creativity, critical thinking, and collaboration and came home with the winning trophy!

'Three teams, composed of students across Years 9-11, entered the national Chemistry Top of the Bench competition by creating informative posters on a specific transition metal of their choosing. Whilst we did not take one of the top three prizes. Team Gamma (consisting of Gigi Y, Niall P, Ava B and Zephyr D-S) were awarded a special mention for creativity for their poster on Vanadium (see below) and have been invited to take part in the Regional Chemistry Challenge Day on Thursday 25 April at the Medway campus. Well done to all three teams.'



#### Vanadiu ттеат Gamm 1

hyr Deacon-Slater (Year 9), Ava Brunger (Year 9), Miall Perry (Year 10), Gigi Yeung (Year 11)



#### **History of Vanadium:**

One interesting fact about vanadium is that it was technically discovered twice! Andrés Manuel del Rio was the first person to discover vanadium in 1801, but when he sent the vanadite to Paris, his letter describing his discovery was lost in a shipwredic. This meant the french chemists believed as a chromium metal.

After it's 'discovery', several prominent scientists tried to replicate del Rio's experiments but they vere successful and therefore, the discovery was dism

The second person to discover vi adium was Nil Gabriel Selfström in 1831 who successfully isolated on from a cast iron ore. This verified the existence of the transi

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#### Vanadium and Batteries:

madium's unique properties mean it can be used for a new type of hattery that could potentially revolutionise the way we store energy. Traditional batteries store, and later produce electricity by reacting two different materials (usually solid sine and

However, in redox flow batteries (diagram on the right), both of these materials are liquids, both of which having different charges. A membrane is used to keep the two floatis separate, but still allow them to react. Vanadium is uniquely useful for this purpose as it can exist in several states which all carry different charges.

The reason why these batteries could be so game-changing is because they are: Safer

- More flexible in terms of design
- Could potentially have an in

#### Vanadium and Sustainability:

Vanadium could also be used to improve anatainability as redox flow batteries are able to store energy long terms, which would reduce our reliance on fossil fuel based power generation. This is because renewable methods of electricity generation, such as wind and solar power, are often time-dependent, and effective storage of this energy means it is possi to maintain a c at supply of renewable energy without having to rely on rapidly accessible fossil fuel power.

#### **Key Information:**

- Type of metal: Transition Metal
- Group: 5 Period: 4
- Morrie munder: 23
- Atomic number 23 State at most temperature: Solid Meding Point: 200°C/ 3639°F Builing point: 340°C/ 6363°F Appearance: Silvery metal that n
- Vanadium Properties Variadium is it can he galvanized with other metals to act as sacrificial
- It also has im king it useful in nuclear reactors for na
- teston Once it has been extracted and dissolved into water, different variadium forms turn into brig bold colourn (Figure 3)

#### Vanadium uses:

- an is used in **alloying** with steel to anadium alloys are also used in noclean eactors as it has low neutron - absorbing
- properties ses than 2% is combined with cheo
- Less than 1% is contained with chromonum make steel shock and vibration renistant Variatium oride ( $V_{D_{i}}$ ) is used: as a pigment for certain chemical practice as a catalyst in certain chemical reaction in the production of superconducting a when mixed with delian ed with galli

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#### Vanadium and Waste:

Vanadium production is currently dominated by the US, South Africa, Russia, and China However, Vanadium is not only present as an ore, un estimated 70% of Vanadium above ground remains to industrial waste left by other forms of mining. While there is not yet a arge scale operation to extract this unused Vanadium, new techniques, such as the use of hacteria and fungi in bioleaching, are currently being developed in order to extract the metal. Furthermore, this process is also far more sustainable than conventional mining as it ng as It es far less energy, and doesn't irreparably harm the landscape

#### Reference List:

- Vanadium the 'beautiful metal' that stores energy?
- (Brew up Interest in redox with this quick reduction I Es TY I RSC Ed
- Vanadiam Element information, properties and uses | Periodic Table
- ht's Elemental The Element Vanadium https://www.minihit.org/Alement/Vanadium



## QE PTFA School Uniform Recycling Project

The PTFA at QE run a school uniform recycling project where used clothes are donated, sorted and stored.

If parents need uniform for their children, they can

- make an email request to <u>QEGS-UNIFORM@outlook.com</u>
- get in touch through the Facebook page QE Faversham PTFA-Uniform Recycling Project
- Contact the school office, leave your contact details and we will get back to you.
- We have a stall at the summer fete, year 7 open days and transition events.

Suggested Price List for September 2022

Item	Suggested Donation
Blazer	£10
Jumper	£5
Tie	£3
Sports top*	£6
Shorts*	£5
Rugby top	£10
Hoodie *	£8
Old logo hoodie	£4
Training trousers*	£8
Girls leggings*	£8
Holdall	£3
Skirt	£5
Skort	£8
Shirts	f1
*New style kit	

When you get in touch, we aim to have your items with you within a week. If you qualify for PUPIL PREMIUM, the uniform will be supplied free of charge. If you would like to donate items, please leave them at the main school office

The uniform store is well stocked, so please get in touch.

**REMINDER - All Chromebooks must be kept in their** protective case for insurance purposes. Please also ensure the device is fully charged each day.

## 2023-2024

## Term 1 Staff Development Day – Monday 4th September

Tuesday 5th September (Year 7) Wednesday 6th September (all Years) to Friday 20<sup>th</sup> October

Term 2 Monday 30<sup>th</sup> October to Friday 15<sup>th</sup> December

Term 3 Tuesday 2<sup>nd</sup> January to Friday 9<sup>th</sup> February

**Term 4** Monday 19<sup>th</sup> February to Thursday 28<sup>th</sup> March

Term 5 Monday 15<sup>th</sup> April to Friday 24<sup>th</sup> May Bank Holiday – Monday 6<sup>th</sup> May

**Term 6** Monday 3<sup>rd</sup> June to Friday 19<sup>th</sup> July



In the spirit of fellowship and spiritual growth, QE's Christian Union continues to meet weekly, fostering a community of believers. This term we have enjoyed the opportunity to have two external visitors adding diverse perspectives and enriching discussions on faith. Amidst the aroma of freshly baked biscuits, members have explored God's word, delving deeper into its profound teachings whilst also enjoying team games and activities.



### 2024-2025

**Term 1 Staff Development Day – Monday 2<sup>nd</sup> September**  *Tuesday 3<sup>rd</sup> September (Year 7) Wednesday 4<sup>th</sup> September (all Years) to Friday 25<sup>th</sup> October* 

Term 2 Monday 4<sup>th</sup> November to Friday 20<sup>th</sup> December

**Term 3** Monday 6<sup>th</sup> January to Thursday 13<sup>th</sup> February

Term 4 Monday 24<sup>th</sup> February to Friday 4<sup>th</sup> April

Term 5 Tuesday 22<sup>nd</sup> April to Friday 23<sup>rd</sup> May Bank Holiday – Monday 5<sup>th</sup> May

**Term 6** Monday 2<sup>nd</sup> June to Friday 18<sup>th</sup> July