

NEWSLETTER



19th November
2020

www.bexleygs.co.uk

Henrietta Lacks' contribution to Science

Henrietta Lacks was a 31 year-old poor black woman working as a tobacco farmer in Maryland, who was being treated for cervical cancer in 1951. The doctors at the time removed her tumour cells without her consent (which was typical at the time) and her cells were the first human cells that could grow outside of a human body, in a laboratory. This discovery was astonishing in the scientific world as her genetic material was a catalyst for many developments in areas such as vaccines, cancer and fertility treatments, which I believe is amazing! Lacks' tumour cells, which were originally affected due to her suffering from cervical cancer, also led to the development of the Human Papilloma Virus (HPV) vaccines used in many countries to protect young girls developing HPV infections leading to cervical cancer. Estimates even suggest that this vaccination will reduce the deaths from cervical cancer by 70%!



Her transformation of biomedicine was made famous in 2010 by a best-selling book named 'The Immortal Life of Henrietta Lacks', which highlights the ethical and medical aspects of her non-consensual cell extraction and is a story connected to the dark history of experimentation on African Americans at the time. It also sparked the legal battles over whether we control the things we are made of.

Her relatives were not informed about her cells being extracted and used for research until 22 years later in 1973, when a scientist called to request a blood sample. Her cells were a foundation for the now billion-dollar biotech industry and her relatives, who cannot afford health insurance, were not compensated for this major leap in scientific research. The book's author had said that the family had never asked for money; however, the family, still poor and at odds with racism and classism, possibly did not feel like they were able to ask, which is evidently a fault of the scientists at the time who did not even inform them about the cell extraction or the compensation they could earn.

Henrietta Lacks is someone who should be wholly recognised in the scientific world as a woman whose cells paved the way for groundbreaking discoveries such as the HPV and the polio vaccine. Her exploitation by the doctors and scientists treating her and the further exploitation of her relatives should also be recognised and as an eye-opener to society about the ill-treatment of a suffering African American woman and her family.

Damilola Hassan, ACS Vice-President

BLACK LIVES MATTER





DT News ~ Bio-Architecture at the MIT Labs

With the sudden growth of the human population in recent years, scientists and builders alike are struggling to create environmentally sustainable ways to house everyone. The materials we use to build houses (clay, wood, sand, etc.) are, while plentiful, essentially finite resources. One day, we will run out. Scientists in MIT believe they have found a solution - Bio Architecture.



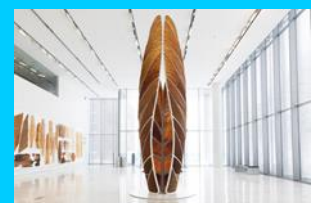
Bio Architecture is described as "The design and construction of buildings in an ecologically-friendly manner ... that reflect structures found in nature." At the top of this field is Neri Oxman, professor at the MIT Media Lab, and a famous architect leading the Mediated Matter Research group. She is known for her skill in integrating opposing subjects such as art, biology, computing, materials engineering and design into her works to create fantastic structures.



One of her biggest projects is studying how insects, such as silkworms and bees, build their structures and how we can synthesize this natural information and create sustainable materials that we, too, can use to build. Her art installation "The Silk Pavilion" was created to showcase how man and the natural world could work together to create buildings. It is made from three layers - the steel rods providing structure, some fabric upon which the silkworms are placed, and 17,532 silkworms to build the rest of the structure. This project showed the world that a sustainable future in architecture is possible, and that we could actively cultivate the lives of other animals while doing so.



Another major project she has created is known as 'Aguahoja I and II'. She and her team studied molecular compounds found in tree branches, insect exoskeletons and human bones to create a structure and support the completely biodegradable material of cellulose, chitosan and pectin. These materials are some of the most abundant on earth today, and yet are often overlooked and thrown out as waste. The organic matter was printed by a robot, shaped by water, and changes the future for building works forever. With this relatively sustainable material, huge strides can be made towards creating much needed resources.



Her work doesn't stop there. MIT's labs, under the guidance of Neri Oxman, have managed to create architectural marvels from studying the natural world. With projects such as Hybrid Living Fibres, 3D printable glass and houses, Water Based Additive Manufacturing and more, MIT is proving itself to be the forefront of Biological and Sustainable Architecture and are ready to take us into the future of sustainable living.



Sasha Waller, Year 12





Music News

On 11th November at 11am, three of our BGS trumpeters Katie Henderson (Year 13), Daniel Faulkner (Year 13) and Aaron Josland (Year 12) performed 'The Last Post', marking the two minute silence to remember those involved in conflicts. It was a moving tribute to mark the solemn occasion and our trumpeters performed wonderfully.

Mrs Goddard, Head of Music



'Virtual Visit'

On Thursday 22nd October, Year 12 music students were delighted to have a 'virtual visit' from TV, film and games composer, orchestrator and music copyist Tristan Noon. Tristan has been working in the industry for a number of years, and was more than happy to share with us his experiences and tips for succeeding in developing a music portfolio for the media industry.

We heard about Tristan's journey from GCSE music to present day, with importance placed upon developing a portfolio of music and making the most of networking opportunities. We also gained an insight into how to work in a studio, using Logic Pro, Pro Tools and Sibelius to create music as well as the importance of business skills and time management when working in the industry professionally.

Year 12 music students were able to ask Tristan questions about his work and the industry, and were impressed at Tristan's realistic approach to working in the music industry. They were also encouraged to keep portfolios, including work from their IB classes, for future use so that they have a variety of creative work available for the future.

Thank you Tristan for giving your time freely to talk to our students.

Mrs Goddard, Head of Music



Welcome to the



Andy Warhol - an icon whose work shook the world and revolutionised the face of popular art forever. (Part 2)



Although many knew Warhol for his pop art, few knew that he was shot in broad daylight in his very own studio. Following on from last week, the second half of the exhibition explores Warhol's life after this shooting; despite the toll that this had on his physical and mental health, he continued to create poignant artwork that carried profound meaning.

Walking through the next corridor of the exhibition, we learnt that Valerie Solanas, a radical feminist, shot Andy Warhol in the chest and abdomen, condemning him to wear a surgical corset for the rest of his life. He was momentarily declared dead, but (surprise!) he survived and continued to create art. Warhol developed a fear for hospitals, had trouble eating and became nervous around strangers; his trauma led him to create more controversial art that focussed on death and violence. Andy Warhol's ability to channel his suffering into his art is inspiring since it illustrates how you can translate pain into beauty.

His next artworks moved on to political iconography, wherein he created the Mao series: this included a screen-printed portrait of the leader of communist China, Mao (which was in response to Richard Nixon's visit to China in 1972). Andy Warhol's exploration of iconography progressed as he created the 'Hammer and Sickle' and 'Skull' series; these consisted of brightly coloured silk-screen paint, layered to create a sense of depth to the otherwise flat images. We really loved Warhol's screen prints as they had such a distinct appearance that drew the viewer's attention; the stark contrast between the vibrant paints used and sombre subject matters that they were communicating to us was unique and furthered our interest.



Contrariwise, in the next rooms we saw Warhol's use of rich, intense colours to dramatise and enhance the personalities of his portraits; in 1975 he created a series of screen-printed anonymous Black and Latinx drag queens and Trans women titled 'Ladies and Gentlemen' - this was his attempt to remedy the lack of representation of Trans people seen in art. He took over 500 photographs of a selection of models that were then enlarged onto silk screens; despite this seemingly virtuous deed of giving Trans people more exposure, there were

concerns with this series since Andy Warhol himself was not transgender and yet he had a monopoly over how their community was depicted in his work.

Although we can all agree that these paintings are eye-catching and present Warhol's iconic style clearly, we have differing opinions. Whilst I adore the use of





the almost lurid, dissonant colours to emphasize the characters in the portraits, my fellow art prefect Alice's initial reaction to the piece was that they were creepy, though still appealing.

Personally, I enjoyed looking at the unconventional colouring method that made the pieces look patchwork-like: this perhaps reflects the difficult and broken history of the trans community; it was not a straight-forward life to live, especially during Andy Warhol's time when people were far more discriminated against for their sexual identity. For me and Heather, we found that this was conveyed clearly through the violent streaks of clashing hues and distorted images.

It's clear that Andy Warhol's iconography and portraiture had the power to transform the face of modern art forever: we will explore the final chapter of his artistic journey next week!



Joy Hui, Art Prefect

PE News

We were delighted to add Luke (Year 10) and Vaibhav (Year 8) to our honours board for their selections for Kent in cross-country and cricket respectively. These impressive achievements will serve as inspiration for future BGS athletes. Well done boys.

Mr Lines, Head of PE





A Mindful Moment

DO YOU WANT TO KNOW HOW YOU CAN GET BETTER SLEEP?

We care about your sleep... And so should you! It helps you to concentrate, gives you energy and might even make you look and feel better! So here are some of our top tips to getting a better night's sleep.

ROUTINE, ROUTINE, ROUTINE

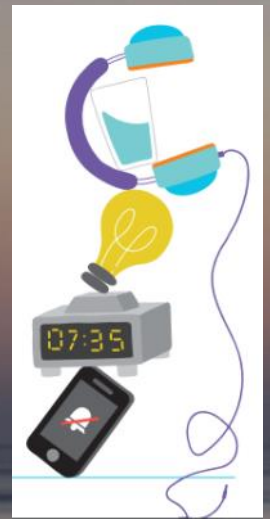
Bedtime routines aren't just for young kids! Everyone benefits from having a routine in the run up to bedtime – even your parents. Try and do the same things at around the same time each night – even at weekends – so that your body has time to prepare for relaxation and sleep.

TURN OFF THE TECH

In the hour before bed, screens should be a no go! We understand it can be hard to turn off your devices, especially if you've been revising all night and want to chat to friends or even unwind with a game. But remember, the blue light does suppress melatonin and you will feel less sleepy.

TIME FOR BED

The perfect sleep environment is cool, quiet, dark and clutter free (yes, it's time to tidy away the mess!). You need a comfortable bed, a supportive pillow and nice bedding. Think about the décor and where possible, keep electronic devices out of the bedroom.



WORK IT!

Grab your trainers. Go for a run, walk or cycle. Get your family or friends involved too. Exercise is really good for sleep (not too close to bedtime) and your mental health.

RELAXATION

Relaxation and mindfulness exercises can be really useful in looking after yourself when you're stressed and worried. Whether you do this during your bedtime routine, or once you're in bed, pick something that really helps you to feel calm and content.

Miss Brand, Mental Health Lead



FOR MORE INFORMATION
AND TO DOWNLOAD YOUR
**FREE COPY OF THE TEEN
SLEEP E-BOOK VISIT
TEENSLEEPHUB.ORG.UK**





STEM Summer Internships

Ages 15-18 OR Ages 12-14 | London 2021

Architecture | Computer Science | Engineering | Investment Banking |

Medicine | Psychology



Excellent
4.9 out of 5

Give your students the life-changing opportunity to work alongside top professionals in 6 STEM-related industries in London next summer. Some Internship highlights are set out later in this email.

We would particularly urge students interested in The Young Doctor Summer Internship to register now as we are seeing a huge demand for the in-hospital work experience we provide. The Young Engineer Summer Internship, which includes an experiential visit to the Airbus ExoMars facility, is also proving to be extremely popular.

Students can register before 31st December and use the code INTERN15 to receive 15% off.

[Register now \(Ages 15-18\)](#)[Register now \(Ages 12-14\)](#)

COVID-19 POLICY

Our Summer 2020 Internships in London went ahead with strict social distancing measures in place. The feedback averaged an outstanding 9.2/10! We are therefore very confident that 2021 will go ahead as planned. In the unlikely event the Internships are completely cancelled due to COVID-19, students will receive a refund. You can download a pdf of this email [here](#).



- **Medicine:** work experience in a top London teaching hospital. Experience emergency theatre; examine real patients; shadow doctors on a ward round.
- **Engineering:** enter the Airbus headquarters; tear down a supercar engine; build aerofoil with a Rolls Royce engineer
- **Computer Science:** visit some of the fastest-growing tech firms in Europe; design Artificial Intelligence; develop autonomous vehicles
- **Psychology:** meet patients in hospital; coach a professional sports team; forensically assess a suspected criminal
- **Investment Banking:** trade stocks live at the London Stock Exchange; visit hedge funds and private equity giants; work on a FTSE 100 M&A deal
- **Architecture:** conduct site visits with architects; design buildings and get feedback; use 3D visualisation software



BGS PA


Christmas ★ Raffle ★

The 12 Prizes of Christmas:

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1. £100 Bluewater voucher
 2. Family Christmas hamper
 3. £50 Amazon voucher
 4. Pamper hamper for her
 5. Pamper hamper for him
 6. Basket of beer
 7. Art sets
 8. Chocolate hamper
 9. Armani perfume & headphones
 10. Designer phone case & purse
 11. Magnum of Prosecco
 12. Cuddly toy

Tickets £1 each

To buy your tickets, visit:
bgspa.co.uk/raffle



The deadline for ticket sales is Monday 14th December.
The raffle will be drawn on Thursday 17th December
by PA trustees and winners notified.

Thank You & Merry Christmas!





News items you may have missed



Winter Festival of Music

14 - 17 December, 6pm on YouTube

A series of short concerts for your
Christmas entertainment by students of
the music department.

Details to be announced soon.

Please donate via ParentPay.





MUSIC LESSONS AT BEXLEY GRAMMAR

Thinking about taking up a new instrument? Apply for lessons with our music teachers!

We have vacancies for all our instrumental lessons at BGS. Lessons take place during the school day on rotation basis, with GCSE and IB students taking lessons outside of lessons.

Please click [HERE](#) for more information and the application form. We are looking forward to hearing from you.

NEW Jazz Piano and woodwind

Flute Clarinet and Saxophone

Piano Violin

Singing Music Theory

Cello Drum Kit

Electric & Bass Guitar

Trumpet, Trombone and Euphonium

Clarinet





Year 7 Club

Meets: Week B ~ Wednesday lunch in M16
(come at the start of lunch)

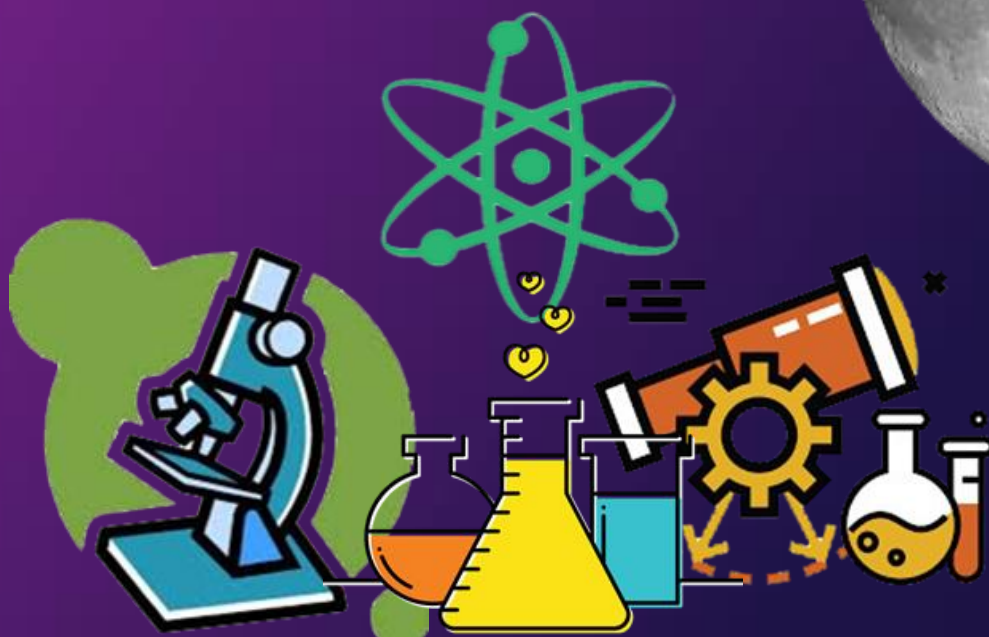
A science club with a difference!

Session 2 - Come along to find out the fortnightly challenge. Watch a cool science demo then try it at home!

Session 3 - Share your experiences of the last challenge and find out the next one!



Students see
Ms Lusted's
email to
take part





Year 9 House STEM competition

Are you creative? A problem solver? Someone who can think outside the box and work in a team?

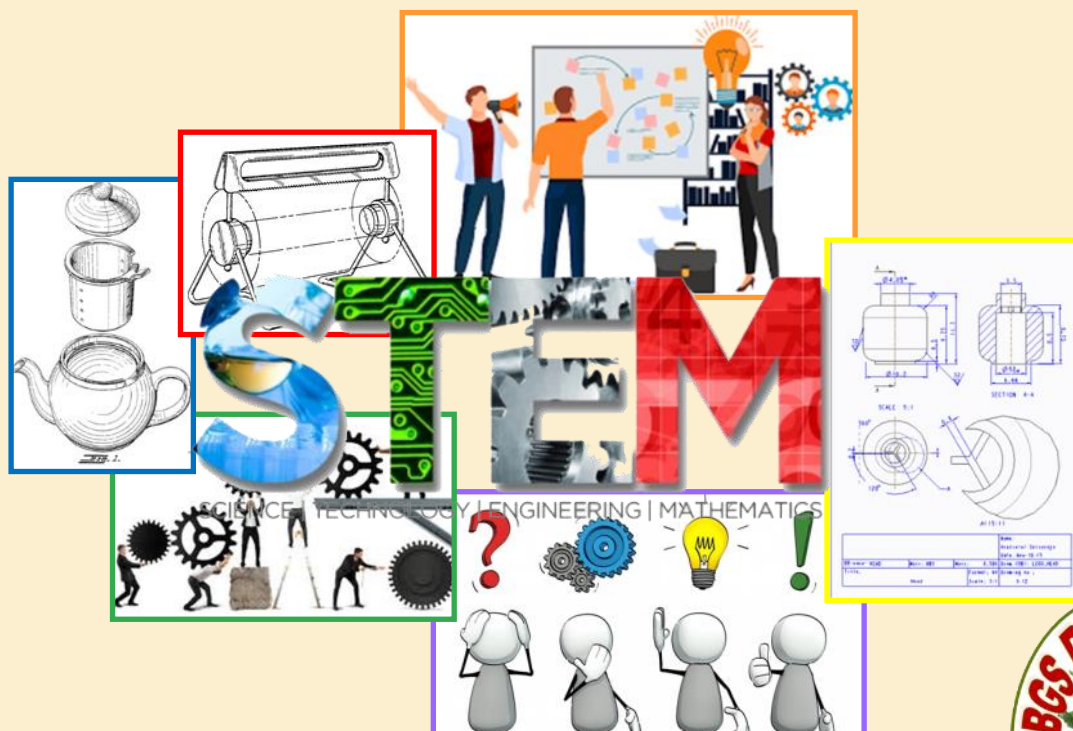
The Challenge

- In a team of three you will be given a few problems to choose from.
- You pick a problem and design a device to solve that problem.
- You make a poster and maybe a prototype of your design.
- Your team presents their design and model to the judges.
- The winning team gets glory and admiration... oh and house points!!

The Details

- Teams of three (make sure you have a mix of boys and girls).
- Meeting in **M16 on a Monday lunchtime** (you can bring lunch) for four weeks.
- Three sessions to design and create and one session to present.
- **Starts Monday 9th November.**
- Finishes Monday 30th November.

Ms Lusted, STEM Coordinator





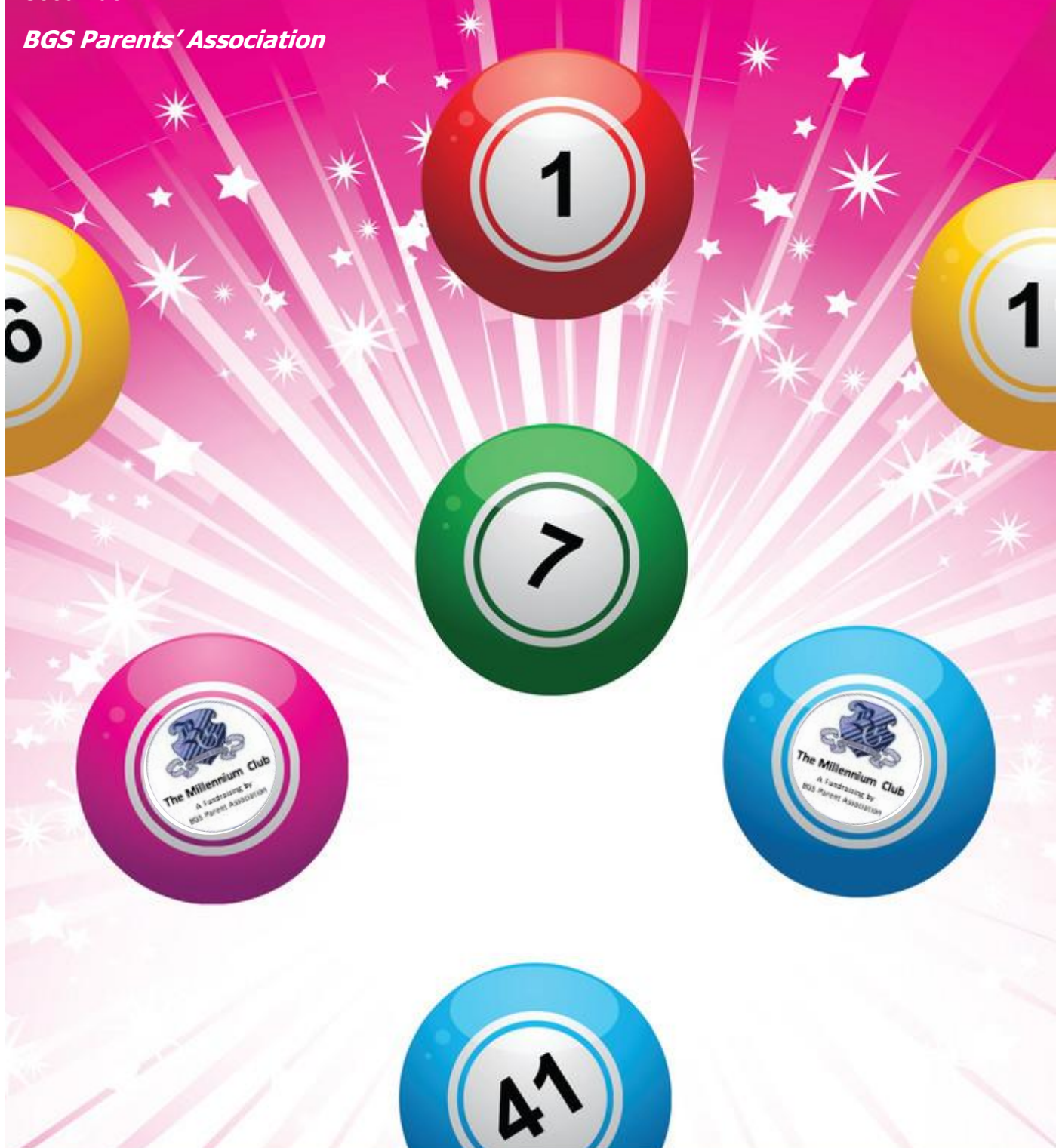
Have you heard about the PA Millennium Club?

Dear Parent/ Carer,

The Parents' Association runs a monthly Millennium Club draw to raise funds for the school. Each month there is a prize draw, with a first prize of £15 and a second prize of £10. Each share costs £5 and will be entered into monthly 12 draws plus an additional bonus Christmas draw in December. There is no limit to the number of shares you can buy; the more shares purchased the higher the funds raised for Bexley Grammar! You can join at any time, but must be over 18 to enter. To be in with a chance of winning, please click on the link [here](#) for details of how to enter.

Good Luck!

BGS Parents' Association





NORDMANN FIR CHRISTMAS TREES FOR SALE



- * The BGS Parent's Association is pleased to offer discounted Nordmann Fir Christmas trees to all BGS families, staff, friends and neighbours.
- * The trees come in a wide range of sizes available from £20 – £55. They have excellent needle retention and soft, deep green foliage.
- * All proceeds will go toward school resources and initiatives

To order your tree, visit: www.bgschristmastrees.co.uk

Orders are due by Thursday 26 November



Easyfundraising

Free money for the school when you shop online at absolutely no cost to you.

Congratulations to Miss Pui Yee Wong, parent, who remains at the top of the PA leaderboard on EasyFundRaising having raised £445.70 for the school through her online shopping.

Thank you to our 347 Easyfundraising supporters who have now raised a total of £5,601.97.

At the time of writing, £171.14 has been raised in the last 30 days - last year in December we raised over £800. Remember, the donation is made by the company you shop from - it has no effect on the price you pay; it really is a no-brainer. We could easily have another 1000 supporters from the parent body...

Please take 3 minutes to join us during lockdown 2.0 and then remember to do that extra click before you shop online.

Simply click [here](#) and then on the "Promote my cause" button at the top of the page and "Get Started". Follow the simple instructions, making sure you add the donation reminder after you have signed up.

Time for some Christmas shopping!

Thank you,

Mr Elphick and the Parents' Association

Sign up at:

[https://
www.easyfundraising.org.uk/
causes/bexleygrammar](https://www.easyfundraising.org.uk/causes/bexleygrammar)

click on the pink "Support this Cause" box.

Don't forget to set up

"Donation Reminder"!



easyfundraising
feel good shopping

Collect
FREE
funds
for

 **Bexley
Grammar
School**
Parents' Association

when you shop online
**the
easyfundraising
way**

amazon.co.uk **John Lewis**

 **Thomson** **ebay**

Viking **Argos**

Sainsbury's

1. Join 2. Shop 3. Collect



Blood and Transplant

We are holding a blood donation session

at **St Michael's Community Centre**, Wrotham Road,
Welling DA16 1LS on **Friday 27th November 2020**
and have appointments available between **13:45 – 20:00**

To book an appointment

visit us at **blood.co.uk**

download our app **NHSGIVE BLOOD**

call us on **0300 123 23 23**

We have social distancing measures in place for the safety of our donors and staff so ask that you come alone to session and, where possible, do not bring children at this time.





Report Lost Property

Please help us to help you by putting your child's name in all their belongings so that we can return them to their owners. Please report lost property by clicking on the link [here](#). Thank you for your cooperation.

Reception Team

Forthcoming events/ Important dates for your diary

November

Monday 23rd ~ Week B

Thursday 26th ~ Deadline to order Nordmann Fir Christmas Tree (see notice)



Monday 30^h ~ Year 9 House STEM Competition finishes (see notice)



December

Monday 14th to Thursday 17th ~ Youtube - Winter Festival of Music streamed concerts (see notice)



Monday 14^h ~ BGS PA Raffle - ticket sales deadline (see notice)



Thursday 17th ~ BGS PA Raffle - drawn (see notice)

