



WEEKLY BULLETIN

November 29

Dear BCG community,

Welcome, once again, to the Friday newsletter. This week we are featuring Year 8 Mathematics, with Mrs Birkbeck bringing lessons to life with a creative approach to 3 dimensional modelling, volume and surface area. If you didn't know the world of klein bottles, impossible drawings, mobius strips and the work of the mathematical artist Escher, you will find video links where all is explained. As Educators, we believe it is part of our role to develop a love of learning in all subjects and to nurture the spark of curiosity and interest that will bring about a growth mindset and a culture of lifelong learning. We also feature our delightful kitchen staff. They really do an amazing job, and always with a smile on their faces, day after day. At BCG we are a community where all are valued I was particularly pleased to be able to invite them into a Primary and Secondary assembly earlier in the year in order to introduce the whole team to the pupils.

On the subject of community, we are also pleased to highlight some of our teaching staff who have children in the school. I am sure you will be surprised to see the composition of some of the family units in the photographs.

I would like to say a huge thank you to the parents who came to the parent representative meeting on Tuesday. The topics raised were diverse, including car parking, curriculum and food and all were extremely useful in helping us to move forwards and improve the school. We are still looking for parent representatives in Year 10, 11, 12 and 13 so please contact Maria Andrea if you are interested in finding out more about the role.

I would like to ask that we all pay attention and be careful where we are parking our cars for morning pickup and drop off and to pay particular attention in keeping pavements clear for pedestrians. Thanks in advance for your cooperation.

I can also announce that we will shortly be appointing a member of the teaching staff to run the Duke of Edinburgh Award Scheme from early in 2020. The scheme is available to students aged 14 and over and is centred on four key areas, namely:

Volunteering: undertaking service to individuals or the community.

Physical: improving in an area of sport, dance or fitness activities.

Skills: developing practical and social skills and personal interests.

Expedition: planning, training for, and completion of an adventurous journey.

It is an excellent program of personal growth and development, respected by Universities and employers. There will be more to come on this topic in future.

Please click **here** to see a presentation of the award.

Again, thank you for taking the time to participate in the parent survey. The responses have been collated and will be used in planning improvements to the school.

Finally, as we approach the Christmas season our first festive event is the Christmas Fair on Thursday 05 December. Please come along to see the Christmas tree, sing carols and join in the festivities.

As always, please don't hesitate to make contact if you have any issues,

With Kind Regards,
John Prince

BCG WONDERFUL WORLD OF MATHEMATICS

As part of their Shape & Space Unit recently, Year 8 have been learning how 3D shapes can be represented in 2D using isometric (dotted) paper.

This work extended onto the topic of drawing impossible objects and optical illusions. Here are photos of Year 8 with some of their work.

The extra-curricular question Year 8 also thought about was: 'Is it possible to make a two sided object one-sided?' The answer is yes, and they now know how to do it!

We made Mobius strips using rectangular pieces of paper and sellotape and students found out that their two-sided sheet of paper actually did become one-sided! Using pens, they were able to carry out a quick practical 'proof' to convince themselves that this was really true!

$$Q=U+A$$

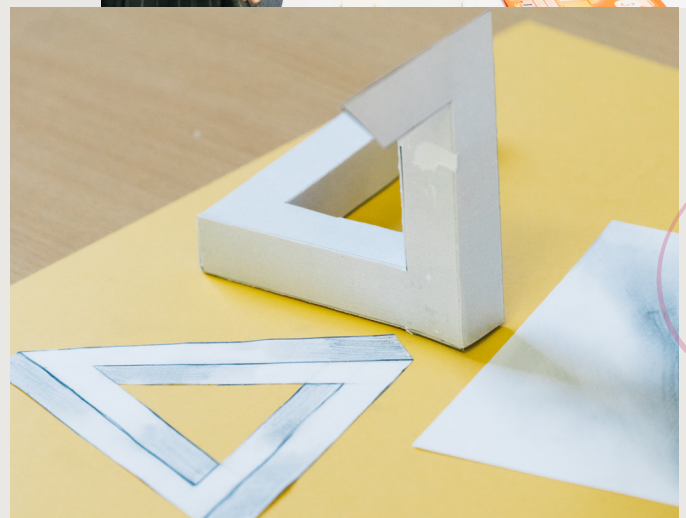


Students then asked themselves what would happen if they tried to cut their Mobius strips into pieces - and after experimenting, a few more surprising discoveries were made! They were also interested to know that Mobius strips have real-life applications. For example, the life of an engine fan belt can be extended by making it the equivalent of a Mobius strip.

One student carried out independent research and very accurately built a 3D model of what at first seemed to be a random object. But when he took a photo of his model from a carefully chosen angle, he was able to show us that the photo showed his model as an 'impossible' triangle!

Here is a video about Mobius strips that students watched in class: Please click [here](#).

Here is a video about Klein bottles from the excellent Numberphile YouTube channel. This shows how to make a Klein bottle out of a knitted hat or an old pair of jeans! It doesn't matter what material is used. The thing that matters is that they are topologically equivalent: Please click [here](#).



How to decide this? - think of a doughnut and a coffee cup. If they were made out of plasticine, could you stretch the cup into the shape of the doughnut without making any new holes or breaks, and vice versa? If so, they are topologically equivalent!

Hopefully, after the December assessment period students will find time to try to make a Klein bottle themselves.

$$P = P - (V - 100)k$$

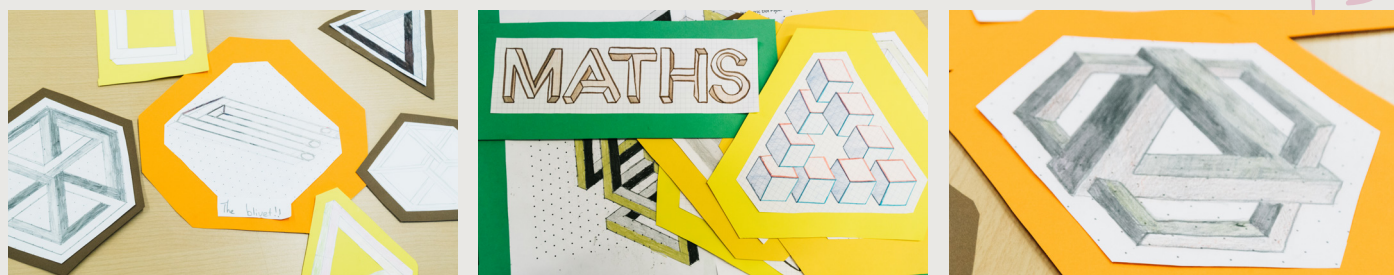
Finally, here is a link to the official website for MC Escher, a 20th century artist who created images of optical illusions and 'impossible' buildings and objects: Please click **here**.

$$T = 2\pi\sqrt{\frac{e}{g}}$$

We will work further with Shape & Space later in the year. This will give us an opportunity to look at the work of MC Escher in greater detail. Students will also look at being able to create tilings such as those in the Alhambra in Granada, Andalusia using translations, rotations and reflections, just like MC Escher did. Hopefully, we can make this cross-curricular by collaborating with the Art department. Further exciting topics are to come!

Next Tuesday lunchtime, the extra-curricular Mathematics club will begin. Although numbers are limited, in the course of the year students from Years 7, 8 and 9 will all have the chance to come along and to think, predict and experiment with unusual and exciting ideas from the wonderful world of Mathematics!


Stephanie Birkbeck - Mathematics teacher





IMPORTANT LOGISTIC INFORMATION - Christmas Fair this year


Many parents asked about times of the events. It is very difficult to satisfy everyone, so we try to keep a balance. Our Christmas Fair last year was on a Saturday morning, this year we decided to change it for an afternoon before the long weekend, so we can make sure all students can come. Usually there are many sports and family commitments on Saturdays, and this year we are glad that all of our students can enjoy this wonderful day. It will be a non-uniform day, we invite all students, staff and parents to wear Christmas theme clothes.



At 15:30 the event will commence with the lighting of the Christmas Tree at the reception area. You are all welcome. After that, all Primary classes will line up as usual and parents that are here can collect their children and enjoy the Christmas Fair together.

Primary students that are not collected will stay supervised during the fair.

Secondary students can join the fair and as usual, can leave the school by themselves.



The Christmas fair food sale and participation on all games and stalls, has a symbolic cost and we use BCG money. Please make sure all children have some BCG money for the event. BCG money will be 'on sale' at the reception from Monday. 1 BCG coin = 1€, and that is the general cost of each game/food/drink.

All the money raised this year will go to 'Make a Wish' Foundation. Please click [here](#) to learn more about their wonderful work they do to bring joy into the life of children in need.

Tickets for the tombola will also be on sale at the reception and they cost 2€. All prize donations are highly appreciated.



ECAP at the Christmas Fair

Due to our Christmas Fair taking place on Thursday 5th December there have been some small changes to our after school activities.

Multisport - will run as planned, parents are invited to attend and join in for Christmas activities.

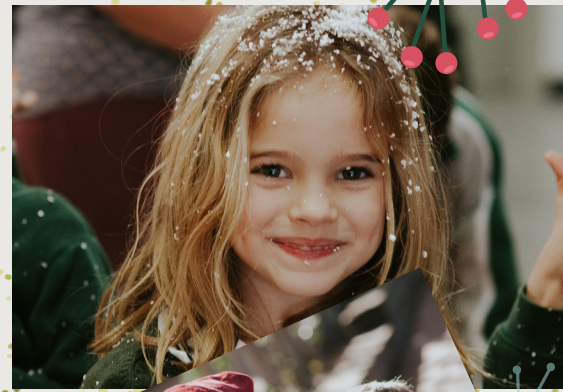

Football - will run as planned, Parents are invited to attend for a football match.

French - Cancelled. Session will be made up on Thursday 19th December with a two hour Christmas activity.

Tennis - will run as planned.

Musical Theatre - will run as planned.

In other news, new activities for January will be added to our schedule in the coming weeks and registration will be open from Monday December 9th.



WE ARE FAMILY!

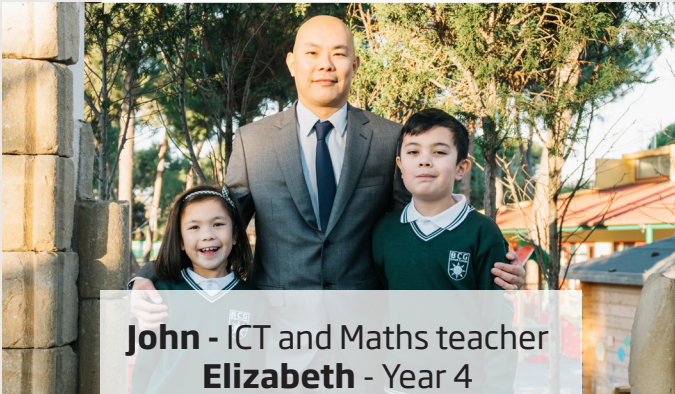
We are very proud of having family members within our school community. We aim to continue being a familiar school and we wanted to remind you that some teachers and non-teaching staff, have children at the school. Please see the pictures of our BCG families. We are working so hard to make BCG the best place for your children and ours!



Claire - Music & History
Aureli - Year 9
Nuria - Year 7



Rachel - Year 6 IB Coordinator
Zack - Year 5
Leia - Year 7
Adan - Year 9



John - ICT and Maths teacher
Elizabeth - Year 4
Daniel - Year 6



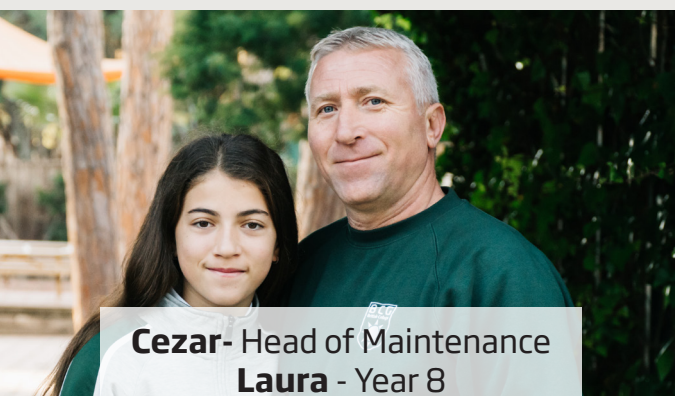
Maria Andrea - Head of Admissions
Tomas - Year 4
Santiago - Year 7



Jackie - Teaching Assistant
Rebecca - Year 6



Ester - Spanish & Catalan
Joel - Year 8



Cezar - Head of Maintenance
Laura - Year 8



Dan - e-Athletes Coordinator
Nina - Year 1 Teacher
Harry - Reception
Anna

Lunches at BCG

'As the school's canteen coordinator, managed by Saned company, I want first of all to thank you for the confidence, in trusting us on such an important issue as the nutrition of your children.



Saned highly values the quality of food to offer a balanced menu. The team strives every day to provide a very good service, performing an important educational task and above all, ensuring that children feel in a safe and quiet environment, where they can express their needs. We are always here to serve and support as best as possible, all the students and staff.



May I take the opportunity to let you know, that I remain at your disposal for any issue related to the dining room.'

Mariví Huertas





FOOD COMMITMENT

Our main commitment is to offer varied, balanced and healthy meals that are also very attractive, encouraging plenty of healthy habits that children will carry on into adulthood.

HEALTH COMMITMENT

We have our own Hazard Analysis and Critical Control Points (HACCP) system that assesses and monitors product traceability.

ENVIRONMENTAL COMMITMENT

We sort and recycle our waste, and organise environmental sustainability projects at schools.



SOCIAL COMMITMENT



We support a number of social causes such as Fundación Vicente Ferrer or Fundació Jaume Casademont, as well as local charities that help to minimise food waste.



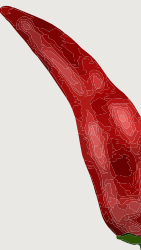
Ferrán
Chef



Alba
Chef Assistant



Mariví
Coordinator



Lourdes
Kitchen Assistant



Sheila
Monitor



Gerard
Monitor

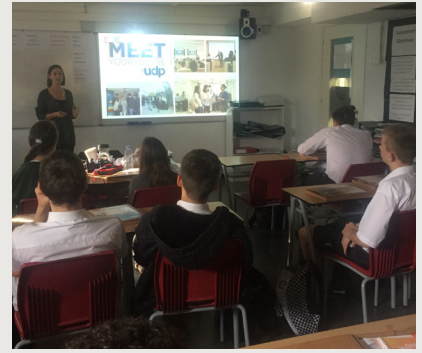


Esther
Kitchen Assistant



Visit of the ESIC business school

On Thursday, November 29th, Y11, Y12 and Y13 attended an information session provided by the ESIC university business center of Barcelona. They offer different university degrees, exclusively in Spanish or English, related to business, marketing, communication and advertising, and digital business.



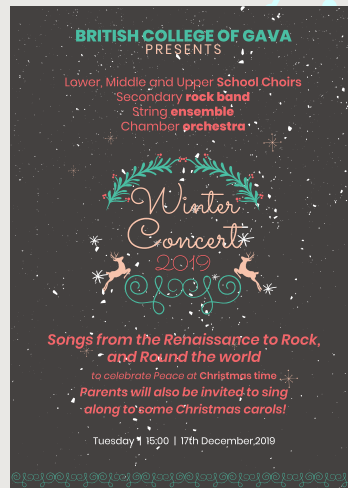
ROLE MODELS - Playground friends

"Year 4,5 and 6 students have been selected to lead the way as role models for the rest of primary. This week they began their new roles as Playground Friends. With their yellow bibs, they are visible for all primary children to offer a friendly chat, a game or some ideas to resolve playground conflicts. They also monitor our Friendship bench for anyone in need of company and collect ideas on how to improve the playtime from other students. They will also be decorating the bench with some of the messages we learnt in Friendship week. - Miss Osivwemu"



Quote of the week:

"It's ok to not know,
but it's not ok to not try."



UPCOMING EVENTS

Christmas Fair

This year, our traditional Christmas Family Fair will take place on **December 5th** from **15:30 to 17:30**

WINTER CONCERT

December 17 at 15:00

Whole school

Musical Junior Theatre performance

December 12 at 18:00

EYFS and Year 1 Christmas Performance

December 5 at 14:30

For parents and relatives of EYFS and Year 1 only.