



The Reefline - An underwater sculpture park and a beautiful warning about what climate change may bring.

By the end of 2021, architecture firm OMA will bring a 7-mile long underwater sculpture park on the Miami shoreline that will form an artificial coral reef. This unique project is being created to raise awareness about the critical effects of climate change on rising sea levels and help reduce coral reef damage in Miami. Not only this, but the installations will add to the cultural and artistic value of the area.

The first permanent installation will be opened in December 2021, although only the first mile will be completed then. The experience will mirror Manhattan's high line park, only with snorkels. The project was first created when the project's founder and art director, Ximena Caminos of BlueLab Preservation Society, had the idea of combining art and science with the new artificial reefs that could be deposited in the waters of South beach to aid the dwindling coral population. Caminos thought "What if we created a coral reef designed by artists?", as she'd "always been interested in how we can combine art and science



The Reefline masterplan and Erlich's work.

to address issues of sustainability." Ximena had said that "the secret ingredient here is the arts, but it's crucial that this is artist-designed and scientist-informed. We need the city *and* the scientists *and* the philanthropists." She said "The team has to be cross-disciplinary. Artists, architects, scientists, preservationists and city officials are coming together to create this underwater sculpture garden that will form the artificial reef, helping to foster the regrowth of the area's destroyed coral and enhance coastal resilience."

The Reefline 'Masterplan' is being led by OMA partner Shohei Shigematsu, but also has a team

of different people from different occupations working on the project, such as marine biologists, researchers, architects and coastal engineers. The Masterplan consists of geometric concrete modules, which will be stacked approximately 6 metres underwater and about 247 metres offshore. These modules will run the whole 7 miles from the southern end of the city all the way to the north. These sculptures are planned to enhance the coastal resilience of the Miami Beach shoreline and act as an artificial reef where endangered marine life can live, especially with future climate change warms the ocean and bringing damage to coral. To do this safely, the structures will be constructed with materials that have been approved by the State of Florida for artificial reef deployment. Ximena Caminos has said that "the Reefline will provide structure for corals and sponges to naturally colonize, adding biodiversity to an area that is currently an underwater desert of sand." In the future, they "are looking into the feasibility of transplanting nursery-grown corals to the structure from the University of Miami's Rescue-a-Reef programme."

Once the project is complete, the Reefline will be a unique place for snorkelers to experience artworks by Leandro Erlich, Ernesto Neto, and Agustina Woodgate, as artworks by these artists will be installed in between the concrete framework. The artworks will also be made of similar materials as they are intended to be an extension of the artificial reef. The artists who are contributing have access to a 3D printer which is able to replicate artificial reef modules from cement. Caminos explained how "this series of artist-designed and scientist-informed artificial reefs will demonstrate to the world how tourism, artistic expression, and the creation of critical habitat can be aligned." She said: "the Reefline is a singular investment in civic infrastructure, public art and environmental protection that will pay dividends over the coming decades and attract ecologically-minded tourists and art lovers to Miami Beach." The underwater aspect of the Reefline has created huge opportunities for artists who get to play with gravity. Caminos hopes the swimmers will find the experience to be magical: "[it's] a totally different way of experiencing art. The water will also provide a change in perspective and gravity. Architects and designers are very excited by those opportunities that shift perspectives."

One very interesting planned artwork is Erlich's project, named '*Concrete Coral*, which is a direct commentary on the causes of climate change. Erlich will place sculptures of cars on the ocean floor, creating structures that will mitigate the effects of global warming on the coastal city. Cars are one of the worst culprits of global warming, and Caminos said that part of what her appeal for this project was how "his works have the depth of a beautiful metaphor", and work on many different levels. "If we don't solve this, the cities will end up underwater. Cars on the ocean floor become



Leandro Erlich, Concrete Coral

a vision of what the future could look like if we don't work together."

The Reefline is a project which embodies a message of how we must all work together to mitigate the effects of climate change on our oceans, while simultaneously being active in delivering its own promise, creating habitable structures to replenish the Diminishing coral population and producing safe habitats for endangered marine life to live.

Alice Partington, Art Prefect

Credit to sources:

CNN - https://edition.cnn.com/style/article/reefline-miami-underwater-sculpture-park/index.html Artnet News - https://news.artnet.com/art-world/underwater-sculpture-park-miami-beach-1925582 Dezeen Showroom - https://www.dezeen.com/2020/11/19/oma-designs-underwater-sculpture-park-thereefline-for-miami-beach/



I'm an Engineer, Get Me Out of Here!

On two consecutive Wednesdays M16 was bustling with the enthusiasm for the live chats with Space Engineers! Year 7 paved the way asking insightful and interesting questions. This was followed the next week by Year 12. In both



sessions I was very proud of how well our students engaged with the activity and managed to dig deep into the working lives of the engineers. It was a chance to find out about what it is really like to be an engineer working in the field of space exploration and investigation, and our students made excellent use of this opportunity.

On Wednesday 18th November, a group of Year 12 physics students and I had the fantastic opportunity to do a live chat with some space engineers and find out more about their careers. It was organised on the website 'I'm an engineer, get me out of here' where current engineers can sign up to volunteer for a text based chat with students who are interested in their field. We were very lucky to speak to four engineers: Marina, who studies landslides by using AI and satellite imagery, Tris, who builds science instruments for space missions, John, who works for the Airbus Space Engineering Academy and Yannick, who works on specialised sensors that detect radioactive material. The questions asked ranged from which subjects to take at school, to what the engineers like doing in their free time.* One thing that I learned from this session is just how diverse the field of engineering is, as well as how integral it is to our daily lives e.g. Marina is currently working on predicting landslides near a road in Spain that could save many lives in the future! It was also very interesting to find out about the amazing experiences that these engineers' careers have led to - during his career, John has broken a world record whilst carrying out a flight test of a new solar powered aircraft in the USA, as well as having visited schools with the astronaut Tim Peake's parents, while Tim was in space! This made me realise how exciting a career in engineering can be (who wouldn't want to meet Tim Peake!), and helped me to confirm that it is something I want to do in the future. I think everyone who came can agree that it was a very enjoyable and informative session, and that it was great to talk to real life engineers currently in the field. Thank you to them for this opportunity!

If you're interested in engineering as a career or want to find out more, check out the website https://imanengineer.org.uk. It is very easy to register and it will let you post questions to the engineers, vote for your favourites and even join the open live chat that takes place on Thursday's 7-8pm!

* In case you're wondering, taking Physics and Maths is probably not a bad idea. And as for hobbies, Lego and building robots definitely came up!

Ugne Stanzyte, Year 12

I thoroughly enjoyed the chat with the engineers. We were warmly welcomed by the host of the room and then all of the engineers sent an introduction of themselves and their jobs into the chat. We asked an abundance of questions which were all thoughtfully answered. This experience was truly memorable as we were able to make contact with real engineers which had and are still working for recognisable companies such as NASA and the ESA (the European Space Association)! This was a once in a lifetime opportunity and I am extremely happy that I was part of this inspiring experience and I cannot wait to take part in future Science Club sessions!



Louis Luckman, Year 7



Jack Petchey Award Winners for September - November 2020



September Award MABBS Eleanor Creevy



Eleanor is a positive, caring person who has often helped in activities in school since Year 7. She recently shaved off her hair for charity and raised lots of money. Eleanor has participated in House activities with enthusiasm for the past 6 years and is currently a House Captain.

🎉 www.bexleygs.co.uk



October Award PROTHERO Emily Ross



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Emily is the founder of the 7 Seconds club in school. She ran two face to face meetings last year and got students from all year groups interacting. She is also collaborating on the BGS Wellbeing Wall where she has a column for 7 Seconds. She is currently working on another project called 'Plant Positivity'.

November Award WELLMAN Tega Owede





Tega is a part of the student voice committee and he has actively changed the structure of the day by contributing to the changing of the school break times. He is always helpful and supportive of his peers and tries to solve problems for them to ease their school day. He is always cheerful and happy andhe is generally a good person to have in the class.

MASK MAKING IN HOUSE COLOURS



BEXLEY GRAMMAR SCHOOL

UPDATE

A message for students who signed up to take part in the House Mask Making sessions earlier this term. Apologies for the delay; we are hoping to run this activity when we return in January.

A reminder that masks will cost 50p each.

Thank you Mrs Snelling, House Coordinator



😹 www.bexleygs.co.uk

BGS Students Participate in the 2020 Bebras Challenge

The Computer Science department has once more run the Bebras challenge for all our KS3 pupils and those in Year 10 and 12 Computer Science, and once again we have had spectacular success. There are three levels of award for this challenge: participation, merit and distinction. Overall 689 pupils took the challenge and I am pleased to report that 26% received the highest award distinction.

Special congratulations should be given to: Lev Griffin, Ashton Seager and Andy Yu, all three of whom got 200 marks out of the possible 200 on offer and Naima Mendjeli who achieved 189 marks.

Those who were awarded the distinction will now be invited to take the next set of national challenges and thus be given the opportunity, if successful there, to go to the national finals.

Mr Leaman Head of Computer Science



PE News

It is important that you stay active and healthy during this time so here are some ideas for those students who have been self-isolating at home. To match up with the PE curriculum, there are a few activities to try at home... Good Luck!

Mrs Kemp, PE Department

Dance	HRE	OAA
Just Dance	25 min Joe Wicks	OAA Bottle Flip Cha
Dance for All Key	<u>Workout</u>	lenge
<u>Stages</u>	30 min HIIT Workout	Challenge 6 – Problem solving 😲
DUST -	Fidget Spinner Board Yoga Workouts 6 min Abs Workout	26 in a line! You will need chalk if you can draw on a patio or a pen and paper if not. Draw Z triangles (see diagram below). Using the numbers 1-12 only once, try to make each line add up to 26. You can only have 4 numbers on each line. Complete a triangle, using the numbers 1-9
PANGE	A ONE HOUR WORKOUT IS 4% of your day No excuses	

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Christmas Raffle Ticket sales deadline Monday 14th December

🎉 www.bexleygs.co.uk

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IELL DO



Year 9 Netball Stars!

It's been lovely to finally have sporting clubs back in action! The Year 9 girls are keen and ready to go 7.45am every Tuesday morning. The sporting stars over the past few weeks have been Elizaveta Newton and Zoe Handscombe for their fantastic defensive work at training. Well done ladies!

Mrs Kemp

Year 8 are taking part in some team challenges as part of their fitness unit of work to round off this term. Here are Mrs Howard's girls at the end of their team 5k challenge. Teams of 3 run a relay to cover 5k in the quickest time, carefully managing the levels of fatigue and energy within their group. In an incredibly

close competition Malou, Anna and Grace came first with a winning time of 20:18, closely followed by Soahasina, Eloise and Edie with 20:21. Only 3 seconds in it! All did brilliantly in pretty perfect running conditions on Wednesday. Well done to all of the girls for working incredibly hard, not just the winners.

Mr Lines, Head of PE



We're delighted to take part in a fixture (of sorts)! Some of our Year 8 groups are competing in a borough wide sports hall athletics competition organised by our local School Games Organiser. Students are collecting scores for vertical jumps, speed bounces and shuttle sprints, amongst other events. Good luck Year 8!

Mr Lines



💐 www.bexleygs.co.uk

Christmas Has Arrived On the Geography Corridor

This year, to celebrate Christmas why not come and see the advent calendar outside the Geography office.

Made by some of our amazing Year 12 prefects the calendar has a juicy fact for each day of the month and 4 student prize winners who have been selected by each of the teachers in the department. These students have been awarded best Geography student of the term! Will it be you?

Mrs Belton Owen, Geography Department

ristmas Kaffle 🛪 Ticket sales deadline Monday 14th December Y



YOUR SCHOOL PHOTOS MAKE GREAT CHRISTMAS GIFTS



or DIGITAL FILES

from £12.00

ACRYLIC FRAMES

BESPOKE FRAMES

CANVASES



KS3 Diploma

<u>WHEN?</u> Spring Term Year 7 to Summer Term Year 8

WHAT IS IT?

Pupils take ownership of learning

- Assessed in a variety of areas:
 - Academic
 - Pastoral
 - CAS (Creativity Action Service)
- Grade: Pass / Merit / Distinction
- Great preparation for the Sixth Form and the IB!

Celebration Evening at the end of Year 8

KS3 Diploma booklet will soon to be available on the school website

INTELLECT EMPATHY COURAGE



💥 www.bexleygs.co.uk

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BGS PA Christmas Tree Decorating Contest!

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Prizes: 1st place: Chocolate Hamper

2nd place: Festive Goodies

3rd place: Gingerbread House Kit

Contest open to BGS families & staff.

All trees welcome!

Judging is based on creativity, theme and overall visual impact.

To enter:

Take a picture of your Christmas tree and email it with your family name, child's name & class to: <u>contest@bgspa.co.uk</u>

Deadline for entry: 14 December

Winners announced: 17 December

💥 www.bexleygs.co.uk

Since the introduction of mandatory face masks while navigating around the school, disposable face masks have been available at reception for those who have forgotten or lost their masks. By doing this, there is not only a cost to the school but also an environmental cost.

Can you sew?

To help reduce the amount of face masks issued the **PA would like to** help by making reusable masks and donating them to the school. These masks would be given to students to keep, wash and reuse.

For homemade face masks – you will need:

- paper for template
- scissors
- needle & cotton or sewing machine
- breathable cotton fabric
- elastic

Please find below a link to an easy sew face mask https://www.youtube.com/watch?v=lwFHklUfVvU&feature=youtu.be

If you would like to get involved by making masks, donating fabric or even if you have time to help cut out the templates, please contact:

Deann Peetoom by email deannpeetoom@googlemail.com

Thank you, BGS Parents' Association



2020

BEXLEY GRAMMAR

Sam, ex-Army and Geoffrey, ex-Army.



THERE'S A NEW GENERATION OF VETERANS THAT NEED YOUR SUPPORT

Your Royal British Legion poppy helps us support thousands of modern veterans, Service men, women and their families. rbl.org.uk/remember

LIVE ON 🜉

THANK YOU FOR SUPPORTING THE POPPY APPEAL



The YoungMinds Wellbeing Advent Calendar

Looking after your wellbeing as you countdown to the holidays

The Wellbeing Advent Calendar is back!

Christmas is a fun and exciting time, but for some, it can leave them feeling anxious, lonely or stressed. The lead up to this year's festivities will be different to usual. For some pupils and their families, this time of year will be very difficult, especially for those who have experienced trauma or bereavement.

you, your pupils and your colleagues throughout December. Each day, try

Each activity can be adapted to be virtual and can be something you do as a class in tutor time, separately after lunch or your pupils can do it themselves at home with their families.

We love seeing how you use your Wellbeing Advent Calendar! So don't forget to send us any pictures or feedback to 360schools@youngminds.org.uk or use the hashtag #360Advent and tag @YoungMindsUK on Facebook, Twitter or Instagram.



THURSDAY

Draw a Christmas tree that has five or more lights on it. Brighten up each Christmas light with the name of friends.

Tip: If a pupil is struggling. suggest someone in the class who is supportive, friendly or reliable.

10 And breathe

breathing. Ask your class to close their eyes and listen to four and exhale for four.

Tip: Get everyone out of their seats to sit or lie flat in a comfortable position anywhere in the classroom.

17 Rainforest orchestra

Pick a pupil to start a clapping rhythm. One by one, ask each pupil to join in, until everyone is clapping. Direct them to clap louder, quieter, or stomp their Tip: Punch two holes and add : feet to sound like a rainstorm.

> Tip: Add in different animal sounds. End with shhh sounds as the animals go to sleep.

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BGS PA

Christmas

We've created another Wellbeing Advent Calendar to help support a different 5 minute activity to help boost wellbeing and look after our mental health in the lead up to the holidays.

TUESDAY

30 Christmas wish list

MONDAY

Get ready for December with a Christmas wish list for the world. Write down all the things that would make the world a better place for everyone.

Tip: Each pupil can write their list first, then this can be added to an ultimate

7 Snowman of gratitude

a cara cara se

Draw three circles to make the shape of a snowman. In each 'snowball' write the things you are grateful for.

Tip: You could extend this by asking pupils to carefully cut them out and stick them up around the classroom.

14 Superheroes unite!

Ask your class if they know a keyworker and draw them as an ultimate 2020 superhero. This could be teachers nurses, bus drivers or shop workers

Tip: Create the ultimate superhero individually or together on the whiteboard.

1 Knock, Knock? Ask each pupil to write down and share their favourite jokes to brighten up everyone's day.

Tip: To help them get started, here are some of our favourite jokes from Beano youngminds.org.uk/ beano-jokes

8 Have a giggle

Have a go at laughter yoga. Sit in a circle and laugh at everything and anything. What may start as a fake laugh will soon turn into a genuine free-flow of class happiness.

Tip: Warm up by clapping your hands and other playful exercises.

15 Christmas boogie

Ask the class to pick a tune and have a sing and dance together.

Tip: Keep it festive and play music from films like Polar Express, Frozen or Home Alone.

WEDNESDAY

2 The gift of giving

Share an act of kindness with someone in your school. It could be a kind word, a compliment, a smile. Think about how this made you feel and how this made them feel.

Tip: Take the gift of giving outside the classroom and show others that you're thinking of them.

9 Letter from Santa

Write a letter that Santa could : give to another pupil who is having a tough time.

Tip: Collect all the letters and each day spend 5 minutes reading one out to the class.

16 Festive hats!

the day.

Have different coloured

paper across each table and

ask pupils to design or create

a showstopping festive hat.

some string to hold the hats

on their heads for the rest of

3 Light up the Christmas Tree

you can count on.

Tip: Ask your pupils to think about how it makes them feel and why.

Start the day focusing on your their breath as they inhale for

18 Have a restful day

Set aside time to relax. Christmas can be a stressful period so it's important that we look after ourselves.

Tip: Make time for your own self-care too. Ask your pupils and colleagues what they will be doing for self-care





down.

RINAV

4 Share something special

Ask your students to share

that has really cheered them

up when they were feeling

11 Positive paper chains

Give each pupil a strip of

paper for them to write a

and display around the

positive message. Connect

Tip: Instead of connecting

them put them, in a basket

for pupils to take when they

need a dose of positivity.

all the strips in a paper chain

with the class something

News items you may have missed

14 - 17 December, 6pm on YouTube

isic

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

Details to be announced soon.

Please donate via ParentPay.

deadline londay 14th Decembe

🏽 www.bexleygs.co.uk

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BGS PA Christmas + Raffle +

The 12 Prizes of Christmas:

£100 Bluewater voucher
 Family Christmas hamper
 £50 Amazon voucher
 Pamper hamper for her
 Pamper hamper for him
 Basket of beer
 Art sets
 Chocolate hamper
 Armani perfume & headphones
 Designer phone case & purse
 Magnum of Prosecco
 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!



Easyfundraising ~ Join Today!

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

Congratulations to Mrs Haslam (SEND), who has regained her position at the top of the PA leaderboard on EasyFundRaising having raised £457.86 for the school through her online shopping.

Thank you to our 371 supporters (up 9 on last week) Easyfundraising supporters who have now raised a total of \pounds 5,882.22.

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 <u>here</u> 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 click on the pink "Support this Cause" box.

Don't forget to set up
"Donation Reminder"!



1. Join

2. Shop

3. Collect

😹 www.bexleygs.co.uk

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



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

A science club with a difference!

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

Students see Ms Lusted's email to take part



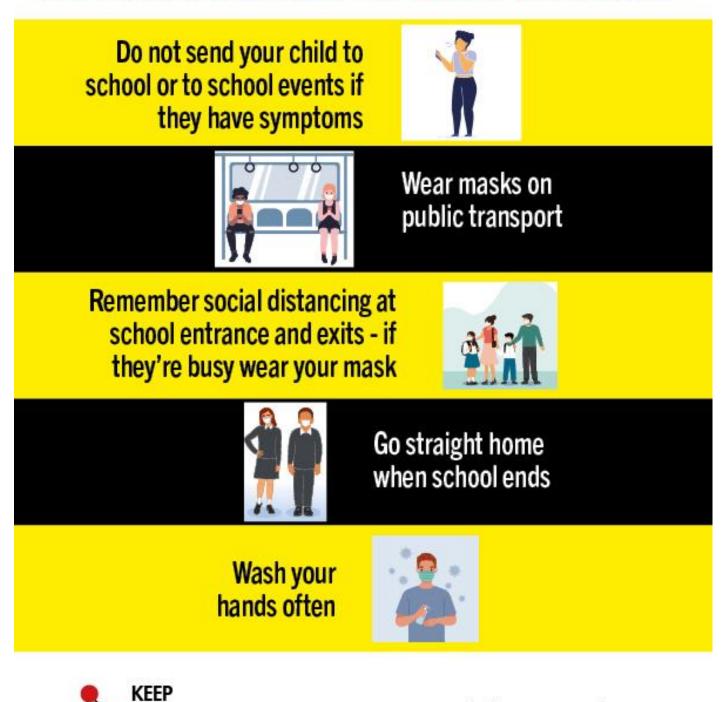
WELLING

SAFF

COVID-19 CASES ARE RISING IN WELLING

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Parents, carers and students - help keep your community safe



www.gov.uk/coronavirus

🎉 www.bexleygs.co.uk



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 <u>here</u>. Thank you for your cooperation.

Reception Team

Forthcoming events/ Important dates for your diary

December

Monday $1^{st} \sim Week B$

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) ~ PA Christmas Tree Decorating Contest - deadline for entry (see notice)

Thursday 17th ~ BGS PA Raffle - drawn (see notice) ~ PA Christmas Tree Decorating Contest ~ winner announced (see notice)

Friday 18th ~ Last school day before the Christmas Holiday

- It is anticipated that Years 11 and 13 will be dismissed at approximately 12.00pm
- Years 9, 10 and 12 will be dismissed at approximately 12.20pm
- Years 7 and 8 will be dismissed at approximately 12.40pm

January 2021

Monday $4^{\text{th}} \sim \text{First}$ day of the spring term all students return to school

Same arrangements as previously through separate gates:

- Years 11 and 13 ~ 8.30am
- Years 9, 10 and 12 ~ 8.40am
- Years **7 & 8** ~ 8.50am



Christma

Raffle

Christmas Raffle