

FRIDAY FEBRUARY 12, 2021



SION HILL POST



WELCOME

As we approach the end of our assessment week, we congratulate everyone in our school community for their dedication to remote learning since 11th January. We wish everyone a safe and peaceful mid-term break.

6TH YEAR POLITICS AND SOCIETY

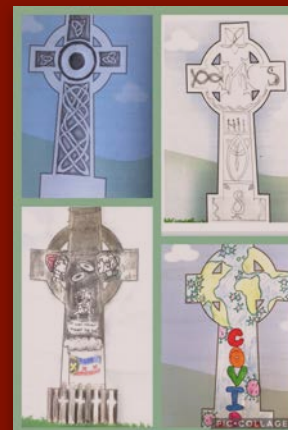
The 6th Year Politics and Society class enjoyed having a guest speaker visit their online class. Paul Mc Keon spoke to them about his experiences growing up in the inner city of Dublin and about his role in activism. He, alongside the people of the inner city, are pushing for Discrimination on the Grounds of Socio-Economic background to be recognised as the tenth ground for discrimination. The bill is now in its second stage and as a class we are following its progress. The talk was very informative and the class learned a lot about Discrimination, Human Rights and Equality laws, activism and also the formation of legislation in the Oireachtas.



1ST YEAR HISTORY

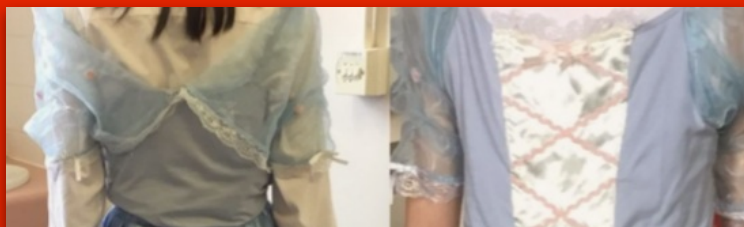
High crosses were used to teach bible stories in early Christian Ireland.

1st year history classes had fun designing their own high crosses to depict a story from their life, a story they had read or a film they had seen.



TY UPDATE

Well done to Orla Byrne & Saoirse Cannon in 4th year who demonstrated great creativity crafting their entry for the DLR Relove up-cycle competition. Their submission secured a Fast Fashion workshop for our school which we look forward to participating in next term.



BOOK CLUB

The Junior and Senior Book Clubs have had a very successful term with a lot of interest from students. However, there's always room for anyone else who would like to join!

Juniors have chosen "The Maze Runner" by James Dashner as their reading for the next couple of weeks and members will have an opportunity to discuss their thoughts on the novel at the next meeting on Friday, 26/2/2021. Seniors will read "All the Bright Places" by Jennifer Niven, "Saving June" by Hannah Harrington and "Looking for Alaska" by John Green over the coming weeks and their next meeting will be on Thursday, 25/2/2021.

The Library Committee hopes to have their first Intermediate Book Club meeting as soon as possible too! So there really is something for everyone. Make sure to get in touch with your Library Committee Representatives for more information! Happy Reading!

SHROVE TUESDAY (16TH FEBRUARY)

Mary Berry's recipe for Pancakes - Makes 12 Thin Pancakes (18-20cm each)

Ingredients

- 125g plain flour
- 1 egg and 1 yolk.
- 300ml milk



Method

1. Sift 125g plain flour into a bowl and make a well in the middle.
2. Whisk together one egg, one yolk and a little milk taken from the 300ml, in a separate bowl.
3. Pour into the well. Whisk with a little of the flour.
4. Gradually whisk in half of the remaining milk, drawing in the rest of the flour with a little at a time, to make a smooth batter.
5. Stir in the remaining milk. Cover and leave to stand for about 30 minutes.
6. Heat the frying pan and brush with a little oil.
7. Ladle two or three tablespoons of batter into the pan and tilt the pan so that the batter spreads out evenly over the bottom.
8. Cook the pancake over a medium-high heat for 45-60 seconds until small holes appear on the surface, the underside is lightly browned and the edge has started to curl. Loosen the pancake and turn it over by tossing or flipping it with a palette knife. Cook the other side for about 30 seconds until golden. Slide the pancake out of the pan.

STUDENT ARTWORK



Sophie (5 Sapphire)



Beth (2 Sapphire)

AIPO COMPETITION



Do you want to compete in European Girls' Olympiad in Informatics? (EGOI)

First you must compete in the **All Ireland Programming Olympiad (AIPO)** competition to earn your place

Open to all **second-level students** in Ireland who are under 20 on the 1st of July 2021

Deadline: 22 Feb 2021

Register to the AIPO competition:
<https://aiपो.ohci.ie/register/>

For more details:
<http://aiपो.ucc.ie/competition.php>

For any queries:
dol4real@cs.ucc.ie



School of Computer Science and Information Technology

RIDDLES (SOLUTIONS)



The solutions to the riddles from January 29th:

1. I have no doors but I have keys, I have no room but I do have a space, you can enter but you can never leave. What am I? (A keyboard)
2. What is next in this sequence? JFMAMJJASOND (D for December)
3. What is made of water but if you put it into water it will die? (Ice)

GREEN SCHOOLS

Our 3rd yr students being involved with the international Globe project. Our nitrogen dioxide levels tested low on campus which is great news in terms of air quality and pollution levels.



The unearthing of NO₂ in Dominican College Sion Hill



Introduction

At Sion Hill, we have been fastidiously monitoring the NO₂ (nitrogen dioxide) in our school premises. Black rock is a suburban, tranquil area with a pleasant green environment. However, in the morning our school experiences heavy traffic, due to students trying to get to school. This causes an increase of NO₂ in the atmosphere, causing pollution.

As our school is very intent on keeping green and eco-friendly, we have banned parents in cars from entering the school grounds, as this was commonly done before our new rule. This has slowly decreased the Nitrogen Dioxide in the air, but this is not enough. Our school hopes to eliminate as much NO₂ as possible, to help us change our pollution rates. In order to start on this goal of ours, we decided to enter into GLOBE, this project has helped us observe the levels of NO₂, and we found our results are much better than expected! We were given tubes to track the NO₂, we placed them in three areas; adjacent to our school entrance, facing a busy road, near our school pond and in close quarters to our tennis courts!

Research Question(s)

How does nitrogen dioxide affect human health? Scientific evidence links short-term NO₂ exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Studies also show a connection between short-term exposure and increased emergency room visits hospital admissions for respiratory illnesses.

In what way is NO₂ harmful to the environment? NO₂ is also known as Nitrogen dioxide is part of a group of gaseous air pollutants produced as a result of road traffic and other fossil fuel combustion processes. NO₂ does not affect the environment if it is in small amounts but it can be fatal in large amounts.

Where is the largest NO₂ hotspot in the world? EcoWatch Greenpeace has revealed the world's largest NO₂ hotspots across six continents, it identified Mpumalanga, South Africa as the biggest NO₂ hotspot, even outranking areas in China, India and the U.S.

Research Methods

Our process was fairly straightforward and concise. We positioned the 3 tubes in the 3 different locations on the school grounds. Three weeks later we detached the tubes and sent them in for testing. We followed the instructions and ensured that the task was carried out as fairly as possible.



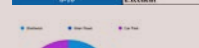
Results

Our most recent data was as follows: the tube facing a busy road showed the volume of Nitrogen dioxide present in the atmosphere was 17.078µg/m³. Alongside our school pond, the volume of Nitrogen dioxide present in the atmosphere was 13.122 µg/m³. At our school entrance on the right-hand side, the volume of Nitrogen dioxide present in the atmosphere was 17.305 µg/m³. The chart shows these levels are good.

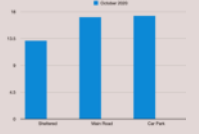
Our October NO₂ levels have overall decreased compared to October results 2019.

What the colour coded results mean:

NO ₂ concentration (µg/m ³)	Description
0-50	Extremely bad
50 to 65	Very bad
65 to 85	Bad
85 to 100	Substandard
100 to 125	Moderate
125 to 150	Average
150 to 200	Pretty good
200 to 300	Good
300 to 450	Very good
450 to 600	Excellent



This shows that 36% of the Nitrogen Dioxide was coming from near the main road, 36% from the car park and 28% was from the sheltered area.



This chart shows our NO₂ levels.

Discussion

Nitrogen dioxide is a harmful gas. In small amounts the gas is unharmed, but since so many people use and rely on cars and fossil fuels, the gas emissions are becoming dangerous and are slowly destroying the ozone. Carbon dioxide and methane, are also two common gases that tear apart the ozone.

If we continue producing and consuming this amount of gas our ozone will collapse leaving no protection between us and the sun.

The sun is a star that produces a lot of radiation, if humans have no protection against the sun, then people will contract many illnesses such as skin cancer. Although it may not seem like it's affecting us now, it will soon. This is why we are glad to have studied the levels of NO₂ in our atmosphere.

To our surprise our results were good, as NO₂ levels were low. We believed the high amount of cars being used instead of public transport, due to covid, would lead to very bad conditions of Nitrogen dioxide.

We hope to keep up this great effort at saving our planet, little by little.

Conclusions

We all know by now the effect we are having on our planet, and still, we haven't taken action. We are just leaving our mistakes for future generations to fix. We must all act together if we want to actually reduce this problem before it is too late. Even if you just conserve energy by switching off the lights when someone leaves a room, if everybody did small things like that it would make a huge impact. Try walking to school, recycling and using public transport. We can't keep ignoring the problem. We need to act now.

Bibliography

ecowatch.com
greenpeace.org
<https://www.airnow.gov/index.cfm?action=pubs.aqguidenox>



Air Quality Campaign Ireland 2020



An Taisce
The National Trust for Ireland