



# Eureka



## The Great Conjunction

It has been nearly 800 years since the alignment occurred at night...

.....

## Earth In 2050

Brace yourself up for some great and life-changing technological innovations!!!...

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## Wall Of Glory

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Submit your entries here:-  
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# 2020- A Year to Remember

- Sunny Arora (Physics Faculty)

On March 23rd, our world came to a standstill as our honorable prime minister Narendra Modi, announced a nationwide lockdown. Almost 11 months have passed, and the skills acquired by the teaching community in these few months, seemed rather paradoxical once upon a time. It's astonishing how one can be tireless and selfless. I understand, appreciate, and applaud the efforts of all this enthusiastic and compassionate workers who ensured that there is no break in education for the learners. From attending several technology related webinars to installing various software in their systems, all teachers passionately rose to the occasion and learnt something new everyday. Making their classes as effective as ever. Notebook corrections, assignment evaluations, power point presentations, virtual labs, PTMs, you name it and they tried to master it in the virtual world. Teachers certainly missed their learners, however the pace at which the adaptation from offline to online took place deserves a standing ovation.



Teachers have been demonstrating scientific concepts and principles on camera by using materials available at home. This indeed is big leap towards self-reliance as some of us never thought that kitchen utensils could teach us so many intriguing concepts of Science in a subtle way. From short presentations to movie making, our learners have also been our teachers in this ever-evolving journey and have helped us realize that things could be accessed at a click of a button.

The four walls did not stop us from connecting with the finest speakers across the world. As life is limping back to normal and with 3 million

people already vaccinated in the country, there is hope that we will soon return to where we belong – our classrooms, our corridors, our school – the inseparable part of us. Nature has taught us a very important lesson and it is up to us to understand it. As the world celebrates “Earth Day” on 22nd April 2021 with the theme “Restore our Earth”, it is indeed time to realize, stop and undo the damage that we have been causing to Mother Earth or else many more pandemics might hit us.

In the end I wish to express my gratitude towards all my colleagues and friends in the education sector who took all of this with a smile. Each one of us faced something or the other at home but when on screen, we tried to give our best to the ones we love the most – our children.





# Detective Work

- Anwita Kumar (8B)

Did you ever think that science could be used for solving crimes?

Well guess what? It is possible.

Even with the new technology when we have to analyse a crime scene, one of the most important pieces of evidence is still a person's fingerprint. We leave behind fingerprints almost every time we touch something. Since every set of fingerprints are unique, they are a great tool for identification.

Some fingerprints are left on a surface by dirty or oily fingers these are visible and the scientific way of recognizing a fingerprint left by this cause is called dusting.

Some fingerprints are latent that means you cannot see them, they are the marks left by sweat, amino acids and other organic residue from fingers. Fuming is the process used to recognize these kinds of fingerprints.



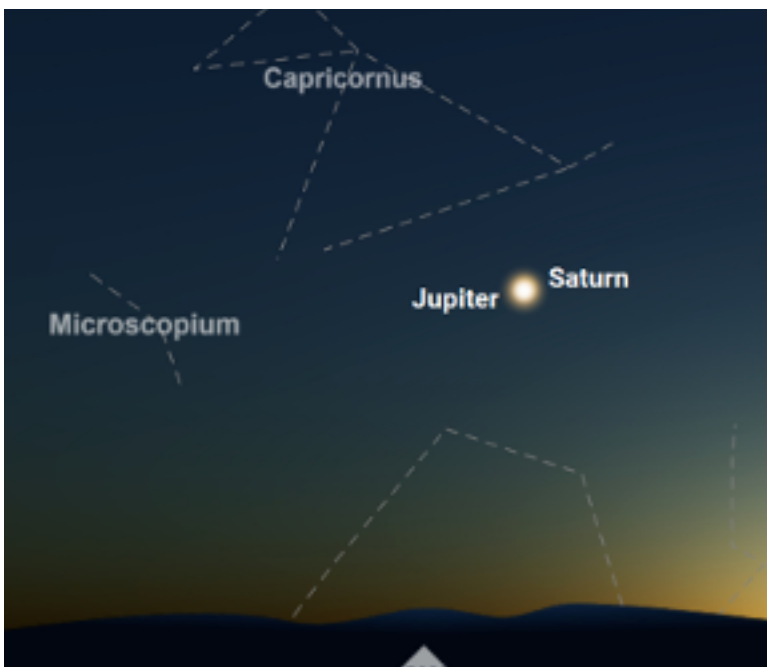


# The Great Conjunction

- Ananya Bajaj (9A)

Astronomers use the word conjunction to describe meetings of planets and other objects, as seen from Earth. The 'great conjunction' is the term used to describe the meetings of Jupiter and Saturn. This takes place every 20 years. What made the 'great conjunction' of 2020 so rare is that the planets haven't come so close to each other since 400 years and it has been nearly 800 years since the alignment occurred at night, as it happened in 2020 which allowed everyone in the world to witness it with unaided eyes.

After the sunset, towards the southwest the alignment could be easily seen and the closest alignment was just a tenth of a degree apart. On the 21st, they will just appear at a distance of a pinkie finger when they will still be millions of kilometres away from each other. The date of conjunction was also coincidentally the date of the winter solstice which provided with a much greater and clear visibility of the solar system due to it being the longest night.





# Earth In 2050

- Vivaan Mathur (MYP 1B)

I think the world will change a lot in 2050, in terms of technology. Yes, we should all feel fortunate to be living in a time where technology and science are there to assist us, make our lives seamless, and rethink the ways we go about in our daily lives.

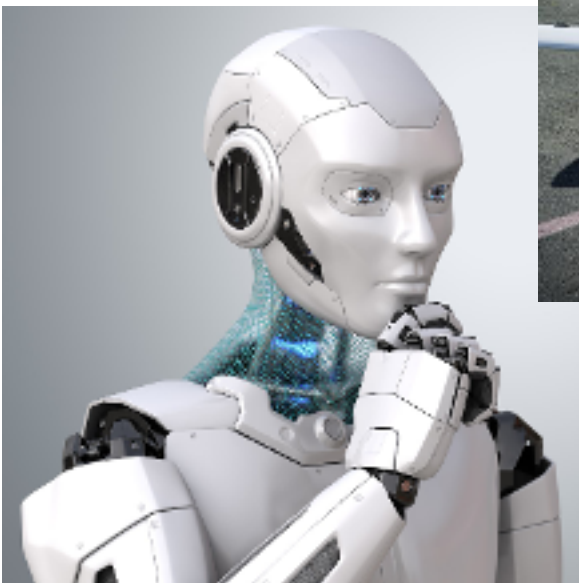
This technology which we experience daily and are accustomed to has paved the way for us to innovate further, that is why in 2050 I wish to see the following technological innovations.

Underground skyscrapers: We have already seen them above the ground but how about seeing these huge beauties below the ground and that too resistant to earthquakes. The below the ground skyscrapers would have homes, offices, markets, gyms. So no more overcrowded Earth!

Self-cleaning homes: Nobody wants a dirty home with a messy kitchen or living room, but do we have the time to keep it squeaky clean. We'll worry no more because 2050 might bring you a technology where while sleeping or at the gym with just a press of a button you can clean your house.

3D organs: We may never see organ failure in the future with 3D organs that will be produced to change organs or even make them function in a better way.

So brace yourself up for some great and life-changing technological innovations!!!





# Applications of Science

Science is based on facts and experiments, it always remains same. Science is very essential in our daily life, we use science everywhere. We wake up, use toothpaste for brushing our teeth, which is made up of science , the vehicles , to the electric machines are all made from science and have science in them, baking , cooking food , the oven and microwave , the stove and more have science involved in them. There are different ways where science is being used like in communication the phones, social media apps, they are invented by science. In agriculture machines are made by inventors by science, medicines they include science also the transportation like cars, buses etc work with the help of science. Science is very vast and important for us in life and very helpful

- Aneesha Sehgal (7A)

Science is used at many places in real life for detective work, to get knowledge of something, to test whether something is safe to be used etc. It is even useful to the police for justice. Criminals who have done some crime often leave identities of their own for example hair follicles, blood or skin cells that is very useful for police because they can use genetic information to know whether the number of criminals is one or many forget they can use fingerprints to catch criminals. We can also use kitchen stuff to get relief from insects, when an insect sting it releases formic acid and to neutralize the effect of it, we apply baking soda which is a base and when baking soda is applied it creates salt and releases water.

- Aaditya Verma (7B)



# A Short Conversation

- Prapti Samanta (8A)

I'm a metal who's one of the most reactive metals. You must've heard about me as I'm so important metal!



Na

Oh wow! I'm also a metal but not like you I'm the "noble metal"



Au

What's that? Oh I get it. You don't react. So sad you can't even make friends.



Na

Yeah! you're right! But I don't wanna have friends. I help human and they fancy me! I'm so valuable!



Au

I'm so reactive that people can't even extract me in free state. If I come in contact with air I react causing a fire and so with water, I'm so dangerous everyone is scared of me. I can make literally everyone my friend except those nerds in the 18th group. I'm the most popular guy in the school (periodic table)



Na

Wow that's awesome but don't call them nerds. Helium is used in balloons and Argon is used in incandescent light bulbs to stop oxygen from corroding the filament.



Au

Yeah but they are not as important as me. Anyway how are you important?



Na

Well I am also a very important metal. I'm one of the least reactive metals and hence I'm used in making jewelry and my cost is very high. Humans earn profit by selling me.



Au

1.

Oh wow! That's amazing now I realize that every element is unique in different ways. I must be really reactive but I'm not as valuable as you're. And you're not as reactive as I am but you're highly valuable



Na

2.

Sure! why not. Hey let's go back to our school! We're gonna be late!

I'm glad that you realized your mistake. It's okay we can be friends can't we?



Au



# Facts About DNA

- Vani Sethi (IGCSE 9I)

1. We all are 99.9% alike. It's just the tiny difference that allows us to be different individuals.
2. We share 50% of our genes with bananas.
3. Your DNA could link you with mind blowing information about you.  
With an ancestry DNA test, you can find out in which part of the world your ancestors lived, what bonded them over the generations and why and where did they migrated.
4. Your DNA could stretch from Earth to Sun and back- 600 times.
5. Scientists have recently discovered another form of DNA in living cells. It's called i-motif and has been described as "a four-stranded knot of DNA".
6. Throughout evolution, humans have lost over 500 DNA codes.
7. Paternity DNA tests compare DNA between a father and child.
8. It would take you 50 years to type the entire human genome and that if you typed at a speed of 60 wpm and worked 8 hours a day, every day.
9. DNA is found in every human cell and each of its strand is nearly 2 metres long. It is amazing that it can fit into 0.09 micrometre of space!
10. Apparently, DNA has a half-life of 521 years. In simple terms, this means that the oldest organism that could be cloned could not be more than 2 million years old. So, we could never clone a dinosaur!
11. The DNA in human cells gets damaged nearly 100 times a day but, fortunately are bodies have very clever repairing mechanism.

# ART and Gallery



Ivana Sajjanhar (6B)



Aarush Dhar (MYP 2A)



Noyon Datta Banik (MYP 2C)



# d Video lery







Aarush Dhar (MYP 2A)



Ahem Sadh (8B)



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# The Wall Of Glory





Siddharth Sahay (11C)  
1st Position in NAEST  
(National Anveshika Experimental Skills  
Test)

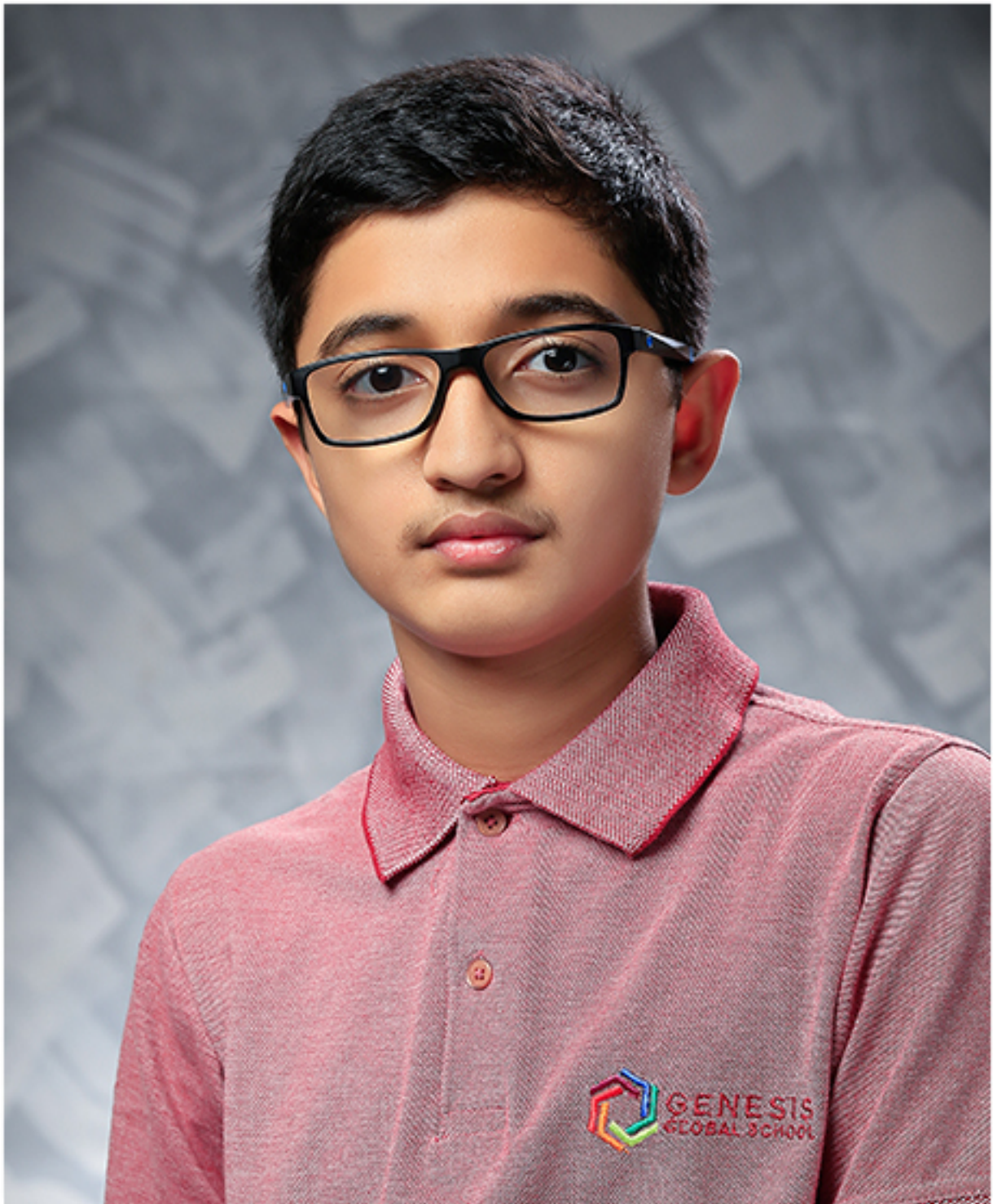




Krish Agrawal (10A)

2nd Position in IFSO

(International Foundation Science  
Olympiad)







Arpit Bansal (11C)  
Participation in Bazinga



Neel Akhaury (10A)  
Participation in NTSE  
(National Talent Search Examination)







Vani Sethi (IGCSE 9I)  
Participation in CERN Workshop



Suryaansh Gupta (MYP 1A)

Participation in Sci- $\pi$







Myra Maheshwari (MYP 2A)  
Participation in Sci- $\pi$





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