

VOLUME 4 • DECEMBER 2021-MARCH 2022

THE FIRST FORUM

NATIONAL PUBLIC SCHOOL, HOSUR ROAD



TAKE A PEEK!

ACCOLADES
EVENTS
SPECIAL DAYS
SCIENCE & TECHNOLOGY
FAVOURITE SCIENTISTS
GREAT CONTRIBUTIONS
ROBOTICS
SCIENTOONS
VROOM...TO THE SPACE
EMINENT WOMEN
MY THOUGHTS
SPACE TRASH
PRECIOUS MOMENTS
KINDERGARTEN UPDATES
MONTESSORI SCOOP
RE-SET..RE-ADJUST..
RE-START

FROM THE EDITOR'S DESK

"Imagination is more important than knowledge"
Albert Einstein.

In today's world, it is creativity and ideas which are more important than knowledge. In this newsletter we bring you snippets of creative imagination and curious enquiry of the pupils of NPS Hosur Road. It contains fascinating ideas which are trending in the world of science and space, inspiring concepts that will challenge us beyond our usual reality and make us ponder deep into the mysteries of the universe. Many of the articles of this newsletter may not be as elaborative as you want them to be, but they are our sincere attempts to create a spark of imagination in you....

We thank our teachers at NPS Hosur Road for inspiring us to showcase the creative enquiry of the budding talents of NPS and for encouraging us to challenge ourselves to spread the spark of originality and uniqueness.

Grade I -V students

OUR EDITORS

Advaith Srinivasan
Aishani Satheesh Rai
Aryan Gupta
Avanthika Namboothiri
Deepika Bejoy Nambiar
Kiash Gangineni



ACCOLADES

“DO SOMETHING NOW; YOUR FUTURE SELF WILL THANK YOU LATER.”

INSPIRE AWARDS



inspire awards - manak



inspire awards - manak

The INSPIRE Awards - MANAK (Million Minds Augmenting National Aspirations and Knowledge), being executed by DST with National Innovation Foundation – India (NIF), an autonomous body of DST, aims to motivate students in the age group of 10-15 years and studying in classes 6 to 10. Two of our students, Aditi Thakur and Nihar Dave of Grade 6A were selected in the first round. Here are their projects. Way to go Young Talents!! Let this be an inspiration to all of us.

DRAINAGE CLEANING DRONE

1. PROJECT SYNOPSIS:

There are various cases where the drainage lines are left unnoticed. This may lead to various diseases and viruses, which alternatively harm the living organisms.

This drone identifies every littered drainage in the society and places a mini-camera. These cameras have water-proof chips, which hold liquid chlorine, so that the liquid chlorine present in it, can disinfect the water in the drain. The mini-camera records the actions taken in the drainage, which is directly sent to the head office of these drones. The head office will then, send a few skilled-labour to clean the drains. With the help of the camera, the concerned head will also get to know, if the drainage was cleaned properly or not. If a particular person is caught littering garbage in the drain, then specific fines can be imposed on them, by the government of the state/ the head manager of the drones. Then the skilled labour, can also refill the chip (present in the mini cameras) with liquid chlorine.

A few advantages of these drones are that their mini-cameras clean the drains until the labourers come to the place. The fines can increase consciousness of people, who litter garbage regularly. These drones can be implemented in places like; a society, apartment, roads, villas etc. Thus, these drones can increase awareness in the specific society and make it clean.

NON – NEWTONIAN SPEED BREAKER

2. PROJECT SYNOPSIS-

Nowadays, with more than 295 million registered vehicles in India (as of 2019) and more than 5 lakh large intersections (estimated) in India, there is no doubt that the large intersections in cities are efficient, but also are fatal in some cases, with speed breaker being one of the main causes. Speed breakers also cause a lot of issue at the intersections for the ambulances as many intersections have medical facilities nearby. This can cause serious medical conditions or death for the civilian in a vehicle or ambulance. The traditional concrete or plastic speed breaker also damages the citizen's vehicle to a large extent hence causing many visits to the garage.

This can be avoided by implementing a speed breaker which is filled with a non-Newtonian fluid such as rice flour and water mixed in a fixed proportion. This fluid has the properties of a liquid when put light pressure on but acts as a solid when the pressure on the liquid is high. This can be changed with the proportion of chemicals. The substance can be contained in a rubber container that is strong but also flexible enough so that the speed breaker can function properly. This rubber bag can be fixed with bolts and concrete or steel placeholders to the road. This is meant ONLY FOR PRIMARY INTERSECTIONS WITH MEDICAL FACILITIES IN THE VICINITY. Example – Silk-Board Junction with Columbia-Asia hospital nearby. (located in Bangalore)

The advantage of this is that the accidents caused by speed breakers are significantly reduced and also the ambulance response time. Many lives can be saved because of this small change

Congratulations!!

Your hard work has paid off!

Let us give a big round of applause to the SOF and Pi AMC winners of our school for the academic year 2021-22.



Sl no	Name of the student	Class & Sec	Olympiad	Awards-Won
1	Gauri Sunil Gurav	1A	SOF - IGK	Gold medal of Excellence+ Participation Certificate.
2	Adwita Gupta	2B	SOF - IGK	Gold medal of Excellence+ Participation Certificate.
3	Samarpratap Raut	3B	SOF - IGK	Gold medal of Excellence+ Participation Certificate.
4	Anamika Namboothiri	1A	SOF- IEO	Gold medal of Excellence+ Participation Certificate.
5	Avaneesh Akshay Malkapurkar	1C	SOF- IEO	Gifts worth Rs.1000/- + Zonal Bronze Medal +Certificate of Zonal Excellence
6	Shanaya Garg	1B	SOF- IEO	Gold medal of Excellence+ Participation Certificate
7	Kashvii Arora	1B	SOF- IEO	Gold medal of Excellence+ Participation Certificate
8	Adwita Gupta	2B	SOF- IEO	Gold medal of Excellence+ Participation Certificate
9	Samarpratap Raut	3B	SOF- IEO	Gift worth Rs.500/- + Medal of Distinction + Certificate of Distinction
10	Hrishik Neelaalohit Veldurthi	3B	SOF- IEO	Gift worth Rs.500/- + Medal of Distinction + Certificate of Distinction
11	Anuska Bhattacharjee	3B	SOF- IEO	Gold medal of Excellence+ Participation Certificate
12	Jevardhini.B	4B	SOF- IEO	Gift Rs.1000/- + International Bronze Medal+ Certificate of Outstanding Performance.
13	Avanthika Namboothiri	5A	SOF- IEO	Gold medal of Excellence+ Participation Certificate
14	Samarpratap Raut	3B	Clash of Pi (Pi AMC)	Rank 1 in School
15	Kiash Gangineni	4B	Clash of Pi (Pi AMC)	Rank 1 in school





From our family to yours

MERRY CHRISTMAS

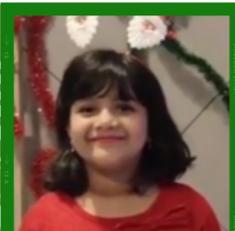
“FEED THE HUNGRY, CLOTHE THE NAKED, FORGIVE THE GUILTY, WELCOME THE UNWANTED, CARE FOR THE ILL, LOVE YOUR ENEMIES, AND DO UNTO OTHERS AS YOU WOULD HAVE DONE UNTO YOU.”

We the staff and students at NPS, Hosur Road had a wonderful virtual Christmas celebration on 24th December 2021. This Christmas celebration included various entertainment performances exhibited by the students across the grades 1-8. Marvellous events revolving around the theme of Christmas such as the angelic dances, joyous carols, melodious instrumental performance, amazing fancy dress, crib making, puppet show, Santa story and display of creative crafts etc. set the tone for the entire day. The special assembly left the audience spellbound. Everyone got drowned in the joyful festive vibes.

MERRY christmas

Christmas is a time to be around friends and family. It's the time to reflect on the memories you made during the year. Christmas is a time for love, laughter and happiness. Christmas is celebrated to remember the birth of Jesus Christ, the son of God. The word "Christmas" came from the mass of Christ. On this day people give their loved ones gifts to use in the new year. On this day people give gifts and decorate their trees. They also keep cookies for the well known Santa Claus!

AADYA.TUMMALA
GRADE-5A



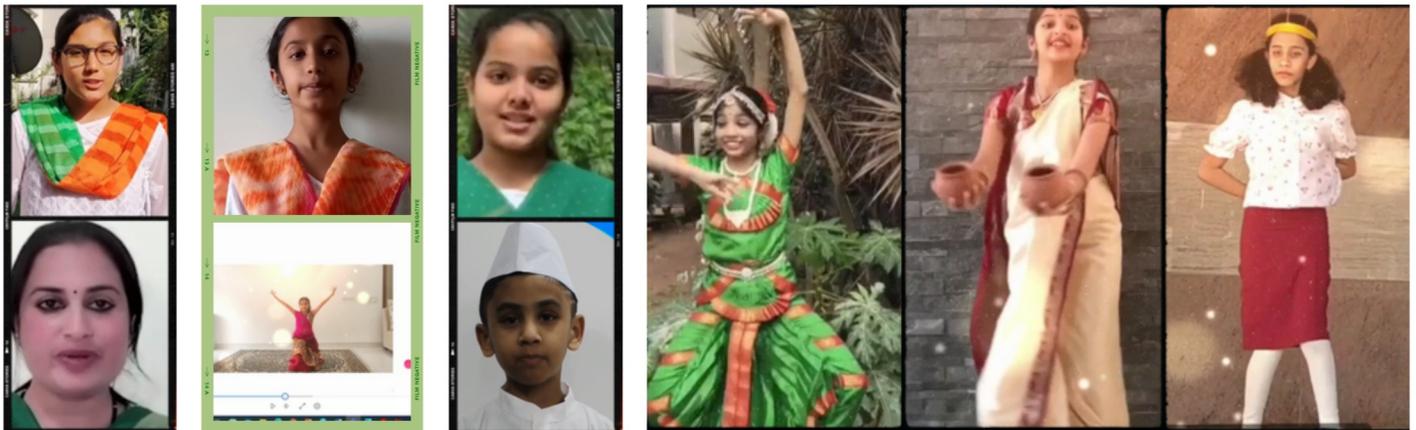
"A COUNTRY'S GREATNESS LIES IN ITS UNDYING IDEALS OF LOVE AND SACRIFICE THAT INSPIRE THE MOTHERS OF THE RACE" - SAROJINI NAIDU

HAPPY *Republic Day*

NPS Hosur Road celebrated our 73rd Republic Day special assembly on 26.01.22 at 8:30am through Teams.

The assembly was started with the school prayer. Ms.Ashwini Manjunath welcomed the Principal, Vice-Principal, and students. The anchors Gaurav Rathi and Sara Gupta took the audience through the sequence of the program. Arohini Suman from grade-6 spoke about the significance of the Day. Glimpses of first Republic Day parade and 73rd Republic Day parade videos were played. Preamble of India was well explained by Grade V students Avni Bagla and Aditya Panda. The patriotic dance –Desh Rangila was performed by our students. The roleplay of our national leaders were presented by grade-1 students. The respect and the love for our nation was best conveyed through the patriotic song “Desh mere..”

The activities by the students of grade 1 to 5 based on the concept 'Republic Day', displayed their excellence in art and craft. The Assembly ended with the vote of thanks by Shreyan Sai Panda.



Republic Day in India is celebrated every year on 26th January. India obtained its freedom from British on 15th August 1947, however at that time, our country didn't have its own constitution due to which government couldn't be formed. It was only on 26th January 1950 when India implemented its own constitution for the first time and Poorna Swaraj was declared. Hence this day marks the celebration of the empowerment of Indian citizens to select their own government. Bhimrao Ramji Ambedkar chaired the committee which was responsible for drafting and implementing Indian Constitution (establishing laws). After 166 days of relentless efforts by the committee, the Constitution of India was finally made. The Indian Constitution ensured a democratic government formation process and equal fundamental rights to all citizens.



**NAVYA DIXIT
GRADE-5A**

VOTERS' DAY

“VOTING IS THE EXPRESSION OF OUR COMMITMENT TO OURSELVES, ONE ANOTHER, THIS COUNTRY, AND THIS WORLD.”

PROUD TO BE A VOTER...READY TO VOTE

Greater Participation for a Stronger Democracy

NPS Hosur Road celebrated National Voters' Day to spread awareness about the importance of voting in a democracy and to educate students about their voting rights. The students of Grade 6-8 conducted the assembly.



National Voters' Day is celebrated all over the country on January 25th every year since 2011 to mark the Foundation Day of Election Commission of India, which was established on this day in the year 1950. The significance of celebrating the day was explained. The role of political parties, the importance of voters in the democracy and the roles and responsibilities of Election Commission represented with the videos, created awareness among young voters to know the importance of taking part in the polling process.

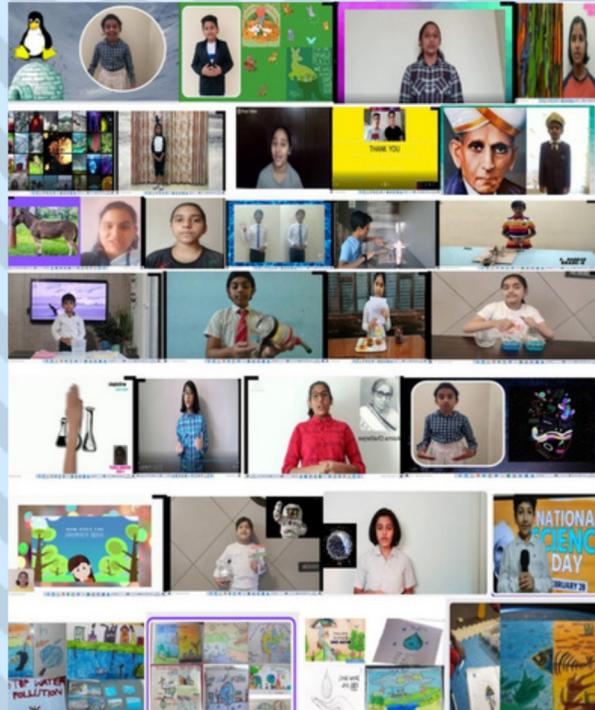


NATIONAL SCIENCE DAY

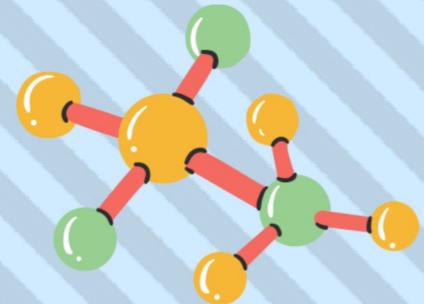
"THE REAL GROWTH OF A COUNTRY WAS IN THE HEARTH, MINDS, BODIES, AND SOULS OF YOUNG MEN AND WOMEN OF THE COUNTRY". -C.V RAMAN



National Science Day was first celebrated on 28th of February 1982. This day is celebrated in the honour of a famous Indian physicist- Sir C. V. Raman. It marks the discovery of the Raman effect by him. As a result, he was awarded the Nobel Prize in Physics in 1930. Every year a new theme is decided by the government to celebrate. This year Dr. Jitendra Singh announced the theme as "Integrated Approach in Science & Technology for Sustainable Future".



AVNI BAGLA
GRADE-5A



The main objective of National Science Day is to bring awareness to people about the importance of science in our daily lives and to encourage people by popularizing science and technology. Every year, the day is celebrated with a particular theme. This year's theme is "Integrated Approach in Science & Technology for Sustainable Future".

We the staff and students of National Public School, Hosur Road celebrated the National Science Day virtually with a lot of eagerness and enthusiasm. Many students exhibited their talents by doing various experiments which were truly amazing. The audience was truly dumbstruck watching the little ones performing great experiments. The students shared the information about la la penguin, the youngest scientist, multiverse, rainbow eucalyptus and Markondalli Dam which instilled in us a deep desire to explore new things.

The event also heightened the idea as how to develop scientific temper and scientific attitude. This special assembly was a great success as it conveyed the strong message to save animals and environment. Go Green was emphasized through posters and videos.



NATIONAL BIRD DAY.

"DEDICATED TO THE SWEET VOICE OF BIRDS AND BEAUTIFUL COLOURS THEY EXHIBIT"



National Bird Day

National Bird Day is celebrated on January 5th every year and has been dedicated to raising awareness about birds that have been held in captivity. The goal of the day is to educate people on the destructive tendencies of the bird trade, the cruelty of bird breeding mills, and ideas for helping and improving the lives of birds already living in captivity. Common activities include birdwatching, helping in conservation, feeding birds, and building birdhouses.

In 2002, Born Free USA, along with the Avian Welfare Coalition, launched the first annual National Bird Day to promote awareness about birds. January 5th was chosen as the date because it would coincide with the annual Christmas Bird Count. The count lasts for three weeks and is a science survey run by citizens who control the health of native bird populations of the United States.

According to *Born Free USA*, 12% of almost 10,000 different bird species are in the danger of extinction. We have already wiped out many bird species. Examples of over 150 birds which are wiped out because of human activity are dodos, ivory-billed woodpeckers, great auks, etc. We cannot let it happen again.

ADVAITH SRINIVASAN
GRADE- 5A



MIGRATORY BIRDS

Migratory birds are the birds that travel from one place to the other at regular intervals over long distances. They do this to escape the harsh winter weather in search of food and shelter.

Some examples of migratory birds are:

Siberian Cranes
Asiatic Sparrow-Hawk
Bar Headed Goose
Amur Falcon

There are 3 types of migratory birds.

Short Distant Migrants

As the name suggests these birds move only a short distance from lower elevations to mountain side. One example of short distant migrants is Robins Cuckoos

Medium Distant Migrants

These birds travel distances that cover several states. They do not travel a lot but not that they travel less. One example of medium distant migrants is Blue Jay

Long Distant Migrants

These birds can travel very long distances like from Siberia to India or from the USA to South America. One example of long distant migrant is Arctic Tern.

How do birds know their migration path?

Migratory birds can sense the Earth's Magnetic Field. They use this inbuilt compass along with the celestial clues from the Sun, the stars to help them fly in the right direction. But for many years, there is a decline in the migration of birds. One of the main reasons for this decline in bird migration is the radiation from mobile communication towers.

In a long and careful experiment, German scientists found that migrating Robins became disoriented when exposed to electromagnetic radiations.

The radiation from cell phone towers damages the bird's natural sense of direction. The brain cells in the migratory birds help them track the route between North and South Pole. But, due to electromagnetic radiations, the birds lose this sense of direction and are lost on the way.

While the cellular phones cannot be completely removed out of our lives, it is important to find an alternate solution that does not pose any risk to the lives of these little creatures around us and thus maintaining the ecological balance.

KIASH.G
GRADE- 4B

ANUSHREE TRIVEDI
GRADE- 2A

INDIAN ARMY DAY 15TH JANUARY

LET US CELEBRATE INDIAN ARMY DAY BY SALUTING ALL THE ARMY MEN FOR THEIR BRAVERY, DEDICATION, AND PATRIOTISM.



BRAVE HEARTS

Army Day is celebrated to salute the brave Indian soldiers who have protected our country. Indian army is always ready to fight at all times for our country. They bravely face all difficulties to save the nation and the people. The day was decided to be celebrated as the Army Day in India to pay a tribute to the Indian army soldiers who have sacrificed their lives for the country. In Hindi, Army Day is called Sena Diwas. Param Vir Chakra and Ashok Chakra awardees participate in the Army Day parade every year. Here are some of the famous army officers of India:

Field Marshal Kodandera Madappa Cariappa

Born on 28th January 1899, in Madikeri, Kodagu, Cariappa joined the British Indian Army shortly after the end of World War I. He was the first Indian Commander-in-Chief (C-in-C) of the Indian Army. He is one of the two Indian Army officers to hold the Five-star rank of Field Marshal.



Field Marshal Sam Manekshaw

Field Marshal Sam Hormusji Framji Jamshedji Manekshaw is widely known as Sam Manekshaw and Sam Bahadur ("Sam the Brave"). He was the Chief of the Army Staff of the Indian Army during the Indo-Pakistani War of 1971. He was the first Indian Army officer to be promoted to the rank of field marshal.



General Bipin Rawat

General Bipin Rawat was a military officer who was a four-star general of the Indian Army. He had served as the first Chief of Defence Staff of the Indian Armed Forces from January 2020 until his death in a helicopter crash in December 2021.



THISHYA ALVA
GRADE-2B

INFLUENCE OF TECHNOLOGY IN DEFENCE

In army agencies, the most powerful, important, and modern means of defence is technology. In India, technology is mostly used for defence not for offence. Emerging modern technologies which are finding their uses in defence industry and have a huge influence on the outcome of any conflict in the coming days are:

Wearable, low power electronics and sensors:

Wearables have always been ideal for defence. They are mostly used in secret operations or for general purposes like the head commando can track health of the soldiers in the border with a click in his watch. Low power electronics which can harness power from surrounding environment (heat, vibration etc.) are extensively used for monitoring borders and surveillances.

Cyber warfare:

Cyber warfare is a method of defence or offence where a country can be disrupted by shutting down any important technical system (like hacking) Eg: water, electrical or food production.

Surveillance System:

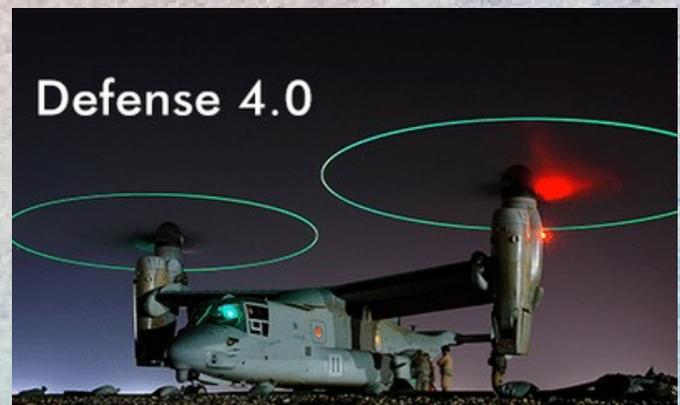
Surveillance system is mostly used for tracking and watching things. It can be used in defence for tracking enemy's aircrafts, tanks, or ships so that we can knock them down before they enter a country's terrain. It is also used in the intelligence agencies.

Artificial intelligence:

Artificial intelligence is a branch of technology and science and is especially important to defence forces. It helps in collecting important and precious information, creating robots and controlling tanks and ships without a human help (auto-pilot).

“WITH ALL THESE NEW DEVELOPMENTS, THE DEFENCE INDUSTRY IS WELL GROUNDED.”

UTSAVI.S
GRADE-5A





The BrahMos has been developed as a joint venture between the Defence Research and Development Organisation (DRDO) of India and the Federal State Unitary Enterprise NPO Mashinostroyenia (NPOM) of Russia as BrahMos Aerospace via an inter-government agreement. The company was established on 12th February 1998.

The aim of the partnership was to design, develop, manufacture and market world's only supersonic cruise missile system – BRAHMOS.

Do you know how the BRAHMOS name was formed?

The name BrahMos was formed from the names of two rivers, the Brahmaputra of India and the Moskva of Russia. BRAHMOS is a two-stage missile with a solid propellant booster engine as its first stage which brings it to supersonic speed and then gets separated.

The liquid ramjet or the second stage then takes the missile closer to 3 Mach speed in cruise phase.

Various existing variants of BRAHMOS Missile Systems are:

1. Ship Based System
2. Land Based System
3. Air Launched System
4. Submarine System



**AVNI BAGLA
GRADE-5A**



EMPOWERED GIRLS.. EMPOWERED INDIA !

24th January

Celebrating National Girl Child Day

EDUCATIONAL RIGHTS OF GIRLS IN THE 21ST CENTURY

“IF YOU EDUCATE A MAN, YOU EDUCATE AN INDIVIDUAL, IF YOU EDUCATE A WOMAN, YOU EDUCATE A GENERATION.”



Education is central to the empowerment of women and provides the key foundation for a productive life. Education is not a privilege. It is a human right. The right to education should be guaranteed for all, regardless of their gender. Investing in girls' education transforms communities, countries and the entire world, as girls who receive education are more likely to lead healthy, and productive lives. They earn higher income, participate in the decisions that affect them, and most importantly, build better future for themselves and their families.

But education for girls is more than just accessing schools. It's also about girls' safety in classrooms and support in the career they choose to pursue – including those in which they are often under-represented.

To tackle these issues, various measures have been suggested by the 'National Commission on Women's Education for the improvement of girls' education like providing school facilities, the opening of new schools, bringing schools within easy reach of the children, starting co education schools, etc.

Our country India, has taken effective measures to solve these problems like Beti Bachao Beti Padhao, Sukanya Samridhi Yojana and Balika Samridhi Yojana. India also has aimed to be a sustainably developed nation by 2050. One of the main goals to have a developed nation is establishing girls' rights, of which education is a huge part.

Though these methods are tedious and time-consuming they will be worth the effort and will surely have a positive impact on the problems girl children are facing with their education.

**AVANTHIKA NAMBOOTHIRI
GRADE-5A**

SCIENCE AND TECHNOLOGY

"THE SCIENCE OF TODAY IS THE TECHNOLOGY OF TOMORROW"-EDWARD TELLER



Automobiles Technology Electric Vehicle

Kia EV6 EX Rear Wheel Drive – 480 Kilometers (300 miles)

The first one will have the longest range since it will be equipped with a single engine as standard, unlike the other versions which will be equipped with two engines and all-wheel drive. A base model will be available in the US and it will pair the single motor of the EX with a smaller 58kwh battery. As it is based on the same platform as the Ioniq 5 and incorporates its mechanical elements, the Kia EV6 should offer the same range as Hyundai. The EV6 will be offered in three versions in Canada- EX, GT line and GT.

Audi Q4 e- tron

Built on the same platform as the ID.4, the new Audi Q4 e-tron will be offered as an SUV and Sportback, with a lower roofline. Its arrival is scheduled for the first quarter of 2022.

Ford Mustang Mach-E California Route 1–491 kilometers (305 miles)

This is an electric crossover that intends to compete with Tesla, both in performance and range. While it can match the acceleration time of the Model Y Performance, it has less range of 491 kilometers. The Mach-E is offered in several trims that range from 370 km for the base model to 491 km for the California Route 1 edition.



TEJAS.R.MATHAD
SHRAVAN.S
GRADE-5A



विज्ञान और तकनीक

सभी इस बात से परिचित हैं कि आज का युग वैज्ञानिक चमत्कारों का युग है। हमारा जीवन वैज्ञानिकों के अविष्कारों और आधुनिक तकनीकों पर निर्भर करता है। तरह-तरह की आधुनिक खोजों ने मनुष्य के जीवन में एक आश्चर्यजनक क्रांति ला दी है। मानव समाज की आज सारी गतिविधियाँ विज्ञान से परिचालित हैं। इनकी मदद से जीवन अधिक सरल, सुखी और तीव्र बन गया है। चमत्कारों के इस युग में विज्ञान ने सृष्टि की काया पलट ही कर दी है। और इसने मनुष्य की हर छोटी-बड़ी कल्पना को साकार कर दिया है तकनीक के प्रयोग ने बैलगाड़ी के जमाने को हवाई जहाज और रॉकेट के जमाने में लाकर खड़ा कर दिया है।



एक युग था जब मनुष्य प्रकृति से भय खाता था पहाड़ों के दुर्गम शिखर उसे डराते थे, नदियों का प्रवाह उसके साहस को चुनौती देता था, सागर की लहरें उसके मन में भय उत्पन्न करती थीं। पर आज जिधर देखिए उधर विज्ञान का साम्राज्य है

। विज्ञान ने मानव को अनेक उपहार दिए हैं, जो आज के जीवन की नितांत आवश्यकता बन गए हैं। अज्ञात रहस्यों की खोज में उसने आकाश की ऊँचाइयों से लेकर पाताल की गहराइयों तक नाप दी हैं। आज मानव चँद तक ही नहीं पहुँचा बल्कि उसने दूसरे ग्रहों तक भी खोज कर ली है। विज्ञान ने मनुष्य को प्रगति के चरम शिखर पर लाकर खड़ा कर दिया है। चाहे चिकित्सा का क्षेत्र हो या इंजीनियरिंग का, वात भौतिक विज्ञान की हो या रसायन विज्ञान की, जितने भी क्षेत्र चुन लो शिक्षा, व्यवसाय, कृषि, यातायात सभी क्षेत्रों में तकनीक ने अपना प्रभुत्व स्थापित कर दिखाया है। एक तरह से कहा जा सकता है कि हमारे जीवन में सुधारों और नवीन विचारों की देन विज्ञान व तकनीक है। तकनीक के चलते न सिर्फ भौतिक सुख के साधन बढ़े हैं बल्कि राष्ट्रीय सुरक्षा के लिए भी नए हथियार व तकनीक हमारे जीवन को सुरक्षित बनाने में अपना योगदान दे रही हैं।

पिछले दस सालों में कारों में सबसे बड़ा बदलाव विजली की गाड़ी है। इलोन मस्क ने अपनी कंपनी टेस्ला में टेस्ला कार मॉडल एस 100 डी बनाया है। इस गाड़ी में ऑटो पायलट है जिससे यह गाड़ी अपने आप से चलती है। यह कार एक बार फुल चार्जिंग के बाद 495 किमी की दूरी तय कर सकती है। इस कार की स्पीड 294 किमी प्रति घंटा है। यह कार सिर्फ 4.3 सेकेंड में 100 किमी प्रति घंटा की रफ्तार पकड़ सकती है। भविष्य में हम गाड़ी का सॉफ्ट वेअर अपने फोन की तरह वॉय फ़ाय से बदल सकते हैं।



आने वाले सालों में गाड़ियाँ विजली या हाइड्रोजन से चलेगीं। इससे हम पर्यावरण को भी बचा सकते हैं।

SAMAR PRATAP
GRADE- 3B



HOW CAN WE BRING IN GREEN TECHNOLOGY FOR OUR HOMES?

What is Green Technology?

Green technology implies to a system that uses innovative methods to create environment friendly products. The three main goals of this technology are :

- 1) **Protect our environment**
- 2) **Conserve natural resources**
- 3) **Repair or reverse environmental damage.**

The focus is to minimize the degradation of the environment by reducing global warming and the greenhouse effect. It encourages the development of technologies that don't damage the natural resources, people, species or the planet Earth.

We can implement green technology in nearly any part of our homes. By switching to green tech, we can save money, energy and help the environment. Here are some of the types of green technology we can incorporate into our home for a more eco-friendly lifestyle.

1. **Recycling Bin**

One of the most basic and inexpensive green technologies is the recycling bin. While the bin itself isn't really "technology," what happens after we send our bin of paper, aluminum cans or glass to the recycling center is green technology. This technology sorts them to ensure they are properly recycled. A good portion of our daily waste can likely be recycled. If we commit to recycling, we'll be part of the change to improve the environment.

2. **Solar Panels**

Solar panel is probably the foremost thing that comes to our mind when we think about green technology. They can be placed almost anywhere in the world as long as the sun shines. Once it is installed in our homes, we'll be able to get energy from the sun to power anything we need to at our homes. Plus, we'll save money on energy bills in the long run.

3. **Rain Barrels**

Rain barrels collect and store rainwater. Water can then be used whenever needed and accessed through a faucet at the bottom of the barrel. This is especially useful if we have a large garden, as using rainwater to irrigate will reduce a home's overall water usage and we can save money. Moreover as the water does not have to be transported, it is good for the environment also.

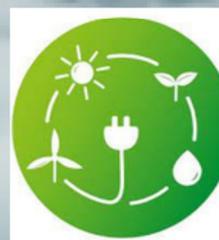
4. **Smart Power Strips**

Think about how many chargers and adaptors are plugged into the power sockets in our home. Many people keep electronics and appliances plugged in always for their convenience. However, they still suck energy even when they're off. Smart power strips use a controlling device to stop such energy usage. It completely turns off the device and doesn't allow extra energy to be used, saving money and helping the environment!

5. **Smart Thermostat**

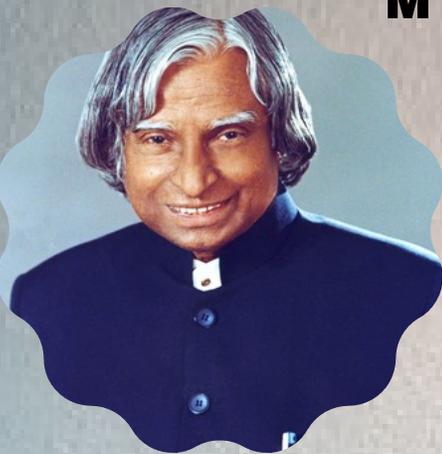
Another great green technological investment for our home is the smart thermostat. Smart thermostats control the temperature at our homes, ensuring we're not wasting energy. We set up a program for our thermostats so we're not heating or cooling an empty house during the day, and it kicks on right before we return from our job or errands.

Make Your Home Greener with Green Technology!!



**ARYAN GUPTA
GRADE-4B**

MY FAVOURITE SCIENTIST



Full name: Avul Pakir Jainulabdeen Abdul Kalam

Born: 15th October 1931, Rameswaram

Education: Madras Institute of Technology,
Anna University.

Awards: Bharat Ratna, Veer Savarkar Award,
Hoover Medal, Padma Vibhushan, Padma Bhushan,
Indira Gandhi Award for National Integration,
SASTRA Ramanujan Prize, Von Braun Award etc.

Parents: Jainulabiddin Marakayar, Ashiamma
Jainulavidin

Top Seven Inventions by APJ Abdul Kalam:

- Nandini: Made a double engine powered hovercraft (first invention)
- Pokhran-2: Consists of five detonations, the first was a fusion bomb and the remaining four were fusion bombs
- Indigenous Guided Missiles: Development and operation of AGNI and PRITHVI missiles
- Kalam Raju Stent: Development of a low-cost coronary stent
- Kalam Raju Tablet: Development of a tablet Lightweight Calipers for polio patients
- Project Devil and Project Valiant: Directed these two projects to develop ballistic missiles from the technology of the successful SLV Program.

MISHTI SUVARNA
GRADE-1D

EMERGING SCIENTIST IN INDIA

Prof. Imran Ali ranked No.1 scientist of Analytical Chemistry in India.



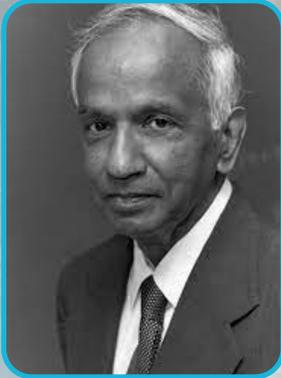
Prof. Imran Ali obtained B.Sc. (1st. Div.) in 1983 from Meerut University, obtained his master's and Ph.D. degrees from the Indian Institute of Technology, Roorkee in 1986 and 1990, respectively. He is a world-recognized academician and researcher. He is a highly cited researcher Clarivate, USA, . Dr. Imran Ali is known globally due to his great contribution to environmental chemistry and medicinal chemistry. He is the leading scientist in the chiral resolution of pesticides. The book written by him in 2004 on this topic is still a single source of reference for academicians, scientists and Government authorities. He has also contributed a lot to developing various water treatment technologies. His research in Nature and Chemical Reviews made him a high-ranked scientist. Prof. Ali also obtained many awards and honours like the Highly Cited Research Award, Khosla award and Brand Ambassador of Bethom Publisher.

JEVARDHINI.B
GRADE-4B

GREAT CONTRIBUTIONS

"THE GOOD THING ABOUT SCIENCE IS THAT IT'S TRUE WHETHER OR NOT YOU BELIEVE IN IT."

Subrahmanyan Chandrasekhar



Sri Chandrasekhar was born on 19th October 1910 in Lahore. He is a famous astrophysicist. He is the son of Nobel prize winning physicist CV Raman's brother. He started his education in Hindu School in Madras (Currently called Chennai). He discovered that massive stars can collapse under their own gravity to reach enormous or even infinite densities. Today we call these collapsed stars neutron stars and black holes.

Kanakanahalli Ramachandra



K Ramachandra was born on 18th August 1933 in Mandya, Mysore region. He is a famous Indian mathematician working in both analytic number theory and algebraic number theory. He has received many awards and published books related to number theory. Apart from prime number theory, he made substantial contributions to the Transcendental number theory, in which he is known for his proof of the six exponentials theorem.

HANSINI.B.RAJ
GRADE- 1A

Homi J Bhabha

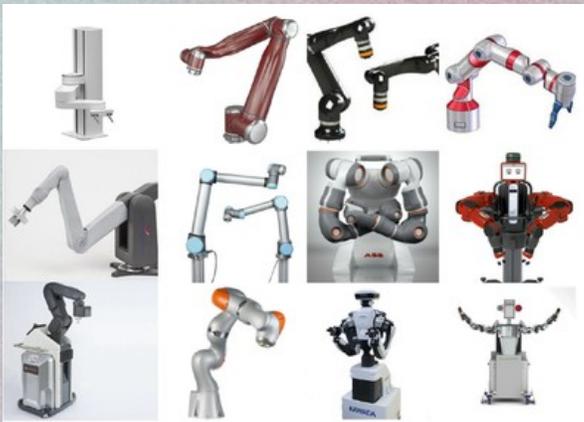


Homi J Bhabha was an Indian physicist known for his work on Cosmic Radiation. He is the "father of Indian nuclear programme". Bhabha was the founding director of the Atomic Energy Establishment, Trombay (AEET) which is now named the Bhabha Atomic Research Centre in his honour. TIFR and AEET were the cornerstones of Indian development of nuclear weapons which Bhabha also supervised as director. Homi Bhabha was awarded the Adams Prize (1942) and Padma Bhushan (1954). He was also nominated for the Nobel Prize for Physics in 1951 and 1953-1956.

KALAPINI ALAKNANDA MEGHA
GRADE-1 A



ROBOTICS



A collaborative robot or cobot is a robot that can safely and effectively interact with human workers while performing simple industrial tasks.

However, end-effectors and other environmental conditions may create hazards, and as such risk assessments should be done before using any industrial motion-control application. The collaborative robots most widely used in industries today are manufactured by Universal Robots in Denmark.

Military robots become more complex. There should be greater attention to implications of their ability to make autonomous decisions. One researcher states that autonomous robots might be more humane, as they could make decisions more effectively.

"Smart missiles" and autonomous bombs equipped with artificial perception can be considered robots, as they make some of their decisions autonomously. He believes this represents an important and dangerous trend in which humans are handing over important decisions to machines.



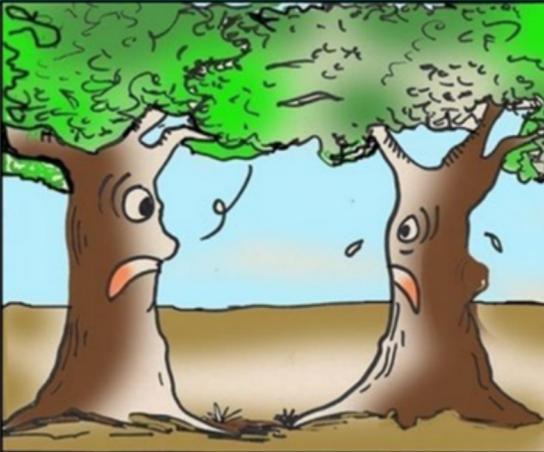
SCIENTOONS

SCIENCE COMMUNICATION BY USING A NOVEL CLASS OF SCIENCE CARTOONS

Indian scientist and science communicator Pradeep Srivastava has created cartoons embedding new research, ideas, data or scientific facts within the caricatures, satirical comments.

“SCIENTOONICS IS A NEW BRANCH OF SCIENCE THAT DEALS WITH EFFECTIVE SCIENCE COMMUNICATION BY USING A NOVEL CLASS OF SCIENCE CARTOONS CALLED SCIENTOONS.”

NEEM is a wonderful tree on the earth. Pesticides obtained from Neem are highly effective and totally safe. Its bark is used for treating skin diseases.



Neem oil is used in curing diabetes.

“Do you have any contacts with the MEDIA? The only hope for our survival is, to convince America about our relevance and importance?”



Say no to "panic" and "yes" to prevention

“Take home message is say NO to panic and YES to prevention.”

APARTHEID say NO to it.



Dr. Nelson Mandela

“So what if he is black! Go and play with him. Don't behave like humanbeings”

Around 2 million people in the world are affected by Insecticides and around 40,000 people die every year.

Bhopal Gas disaster is the worst of its kind in the world in which MIC gas killed 4000 people, 30,000 paralyzed and 40,000 people and their families were affected.

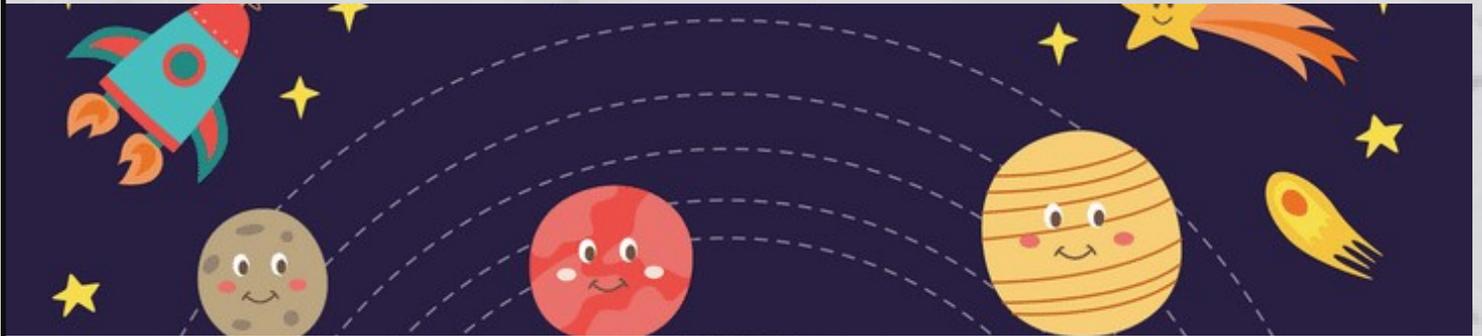


“Dear Insects! Be careful, Don't eat anything till we study the harmful effect of these new insecticides on human beings.”

EKANSH SHARMA
GRADE- 3 A

VROOMMM...TO SPACE

"THAT'S ONE SMALL STEP FOR A MAN..ONE GIANT LEAP FOR MANKIND"- NEIL ARMSTRONG



Let us Find it Out.....

1. _____ is the moon of Saturn. (ATNIT)
2. _____ star suddenly increases in brightness. (AOVN)
3. _____ is the unit of distance in space. (ECRSAP)
4. _____ is band of colours as in rainbow. (MURTECPS)
5. Do _____ holes connect universes? (MROW)
6. _____ is gas giant in solar system. (NEUPTEN)
7. _____ is a stellar explosion. (AOVN ERPSU)
8. A giant glowing ball in space _____. (RTAS)
9. _____ is the name of Earth's moon. (UALN)
10. A person who travels to space is called an _____. (AUTNORSTA)

THE UNICORN: THE NEAREST BLACK HOLE TO OUR PLANET EARTH

Black holes are the celestial entities with a gravitational pull so strong that not even light can escape through them. Black holes are difficult to identify. Usually identified by the gravitational distortion they create in their surroundings. One such blackhole was recently discovered by The scientists at Ohio State University. The scientists at Ohio State University, on April 21st, 2021 published the data that discovered what may be the smallest-known black hole in the Milky Way galaxy and the closest to our solar system an object so curious that they nicknamed it as 'the Unicorn.'

The Unicorn is about three times the mass of our sun –tiny for a black hole. Very few black holes of this mass have been found in the universe. This black hole is 1,500 light years away from Earth(9.5 trillion km from Earth). While it may be the closest to one to us, it is still far away.

KARTHIK.U.KULKARNI
GRADE-4B



"WE HAVE GONE BEYOND...."

"We have gone beyond the boundaries of imagination" said Prime Minister Narendra Modi on the success of Mangalyaan mission. Mission Mangalyaan is commended for being the cheapest ever mission to Mars, which costed less than the budget of movie based on the event, "Mission Mangal". The mars orbiter mission was achieved on a budget of \$ 74 Million nearly a tenth of the amount the US space agency NASA spent on sending the Maveen spacecraft to Mars. But its limited budget meant that it was only a demonstration mission for the Indian Space Research Organisation (ISRO). By placing Mangalyaan in the Mars Orbit, India not only became the "only" country that managed to succeed on their first attempt, but also joined the elite club of Martian explorers (US, Europe and Russia). The movie "Mission Mangal" encapsulated India's space journey into Mars, by maintaining a balance between science and entertainment. The one scene that will stay in everyone's memory is the simplification of scientific argon "Hohmann transfer orbit" with a "Poori Research"

AISHANI SATHEESH RAI
GRADE-4A



EMINENT WOMEN-SPACE CONTRIBUTION

In the last half-century, just over 60 women have flown into space. In contrast, more than 500 men have made the trip during the same period. With a variety of background and talent, these women have helped push the boundaries of spaceflight.

Valentina Tereshkova

Valentina Tereshkova was the first female astronaut to venture to space. She was born in Bolshoye Maslennikovo, USSR, in 1937, and she worked in a factory when she was young. Over time, she fell in love with skydiving. And in 1963, at just 26 years old, she piloted the Vostok 6 spacecraft around Earth alone, orbiting our planet for 48 hours.



Kalpana Chawla

Kalpana Chawla was the first astronaut of Indian descent. She was born in Karnal, India, in 1962. Chawla's father helped foster her passion for flying by taking her to local flying clubs when she was young. Eventually, she left India and moved to the U.S. to pursue advanced degrees in engineering. After earning two Master's degrees, she earned a Ph.D. in Aerospace Engineering from the University of Colorado, Boulder.

In 1988, just after graduating, she became a NASA researcher. Her research focused on vertical take-off and landing concepts, which are now being pioneered by major new spaceflight companies like SpaceX and Blue Origin. In 1994, Chawla was selected as an astronaut candidate. She flew into space two different times aboard Space Shuttle Columbia. But during her second flight, Columbia exploded as it returned to Earth. Chawla and six fellow astronauts were killed on February 1, 2003.



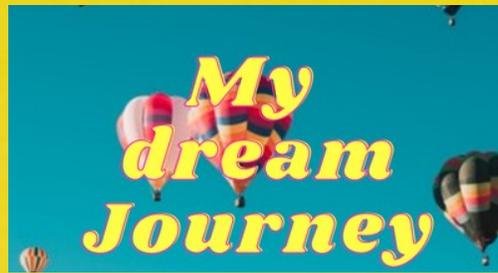
Christina Koch

Christina Koch holds the record for the longest extended stay in space by any woman. She was born in Grand Rapids, Michigan, in 1979 and later went on to pursue degrees in electrical engineering and physics at North Carolina State University. NASA selected Koch to be an astronaut candidate in 2013. And in October 2019, she launched to the International Space Station on Expedition 59. It was the start of a 328-day stay that would involve six spacewalks — including the first all-female spacewalk. Her teammate on the pioneering spacewalk was fellow NASA astronaut, Jessica Meir, who also happens to be her good friend.



V. SMAYAN ADITYAN
GRADE-3A

MY THOUGHTS



It was a holiday and I read about outer space the whole day and imagined myself thrusting through space. I felt really great thinking of myself becoming an astronaut and propelling through space. That night as I fell asleep I had the most wonderful chance ever- travelling through space as an astronaut!!!

I received a surprise phone call from Mr. Elon Musk, CEO of the Space X company. He invited me to have a special journey to space along with him....I was overwhelmed with joy and accepted the invitation....Next day, I found myself at the space research centre. I was asked to go for a training session by an officer where I was dressed as an astronaut and had to listen to a whole lot of instructions. The officer then led me to a place where there was a huge rocket. I was amazed at its gigantic size. I was then asked to enter the cockpit along with the rest of the crew. I soon realized that I was the captain of the spaceship. In a moment the final countdown began and soon the rocket flew into the air towards outer space. I was on an expedition to the Mars. Soon the rocket left the earth's atmosphere and I was feeling light as ever. I realized that there was less gravity than on the earth. It was a great experience to find myself floating in the air. But the conditions inside the shuttle were so adjusted that we could ground ourselves at will. It was a magnificent sight to view our planet earth from space.

The earth looked blue because of its three-fourth being under water. As we moved on we could see the moon that looked like a planet itself, but reflected the light of the sun. We kept moving ahead and could see many stars located far from us. As we moved on I could see several other galaxies at a distance. I wondered if life existed on those planets. I also saw some meteors pass by. The Asteroid belt could be seen from a distance as well. Soon I saw our shuttle reaching the planet Mars. It was 'red' just as I had studied in the books and it was beyond description. I did not have the words to express it. The space shuttle was about to land and my attention focussed on the surface of the Mars. There was some kind of a storm on the planet. I was wondering whether I would meet the first signs of life on Mars. Soon I got out of the spaceship and was planning to collect some rocks and soil from the exciting red planet. After a short discussion with the other astronauts, we set off to collect some rocks and soil. Once we collected them we got back to the spaceship and set off on our journey back to Earth.

We were getting closer.. and closer to Earth. Eventually we reached back to the Earth's Research Lab when suddenly I heard someone reminding me - It's time to wake up, time to get ready for school!

Well! That was the end of my exciting dream journey. For a moment I thought I had already become an astronaut flying into space. That dream of journey into space will always be memorable for me.

SHREYAN SAI PANDA
GRADE- 3B

MY THOUGHTS

VIRTUAL TRAVEL EXPERIENCE ON ZOO

During the pandemic I had stayed at home. When my grandparents had travelled to Tirupati they visited a zoo park Sri Venkateswara Zoological Park. My grandpa called me on video call and showed me the zoo park and he was explaining about the zoo. I felt that it was an amazing virtual travel experience and he shared some pictures.

Sri Venkateswara Zoological Park has been established on modern concepts of Zoo Management wherein the animals are placed in wider natural enclosures resembling to their natural habitat. The Park is named after "Sri Venkateswara" the Lord of Seven Hills in Tirupati.

Sri Venkateswara Zoological Park is developed on Mythological theme. It highlights the role of wild animals in Mythology, ancient texts like the epics of Ramayana, Mahabharata, Puranas, Vedas and Upanishads. The message of nature conservation with all its diversity is conveyed emphasizing the role of animal and plant life in the Indian culture.

Depiction of Matsya, Kurma, Varaha, Narasimha avatharas which are the incarnations of Lord Vishnu at the entrance of the zoo makes the visitor aware of the mythological theme in which the zoo is developed. Similarly, a statue of Lord Ganesha, the God of wisdom and plenty, also symbolising the mega-herbivore Elephant, is installed near the entrance of the zoo.



MOKSHA SRI
GRADE-2A

MY DREAM JOURNEY TO NEPTUNE

I have always dreamt of being an astronaut travelling to space. I have watched number of videos and read in class books and got information from my teachers. When I read about outer space the whole day and imagined myself travelling thought space. I felt really great thinking of my becoming an astronaut and travelling through space. Sometimes I feel myself as an astronaut at the space research centre.

As an Astronaut, I went to a place where there was a huge rocket. I was amazed to see such a big size rocket. I entered the rocket along with the rest of the crew. In a moment the final countdown began and soon the rocket jet led into the air towards outer space. Soon the rocket left the earth's atmosphere and I was feeling light as ever. It was a great experience to find myself floating in the air. As I entered to the Neptune it looked blue because of Neptune's atmosphere, methane absorbs red wavelengths of light and reflects blue light outward. As we moved on, I could see the gases and Ice. I could see clouds of methane gas. I wondered if life existed on those planets. I did not have the words to express it.

Well! That was the end of my exciting journey.

CHARVI YARADESI
GRADE-3A



MY THOUGHTS

THE DAY I HEARD THE BALLOON RING

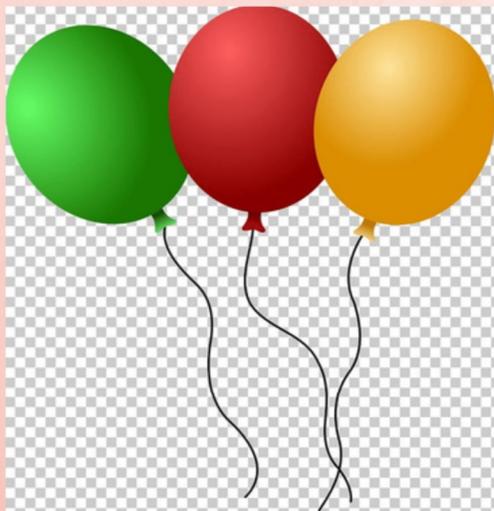
It was the day after my 7th birthday. I was playing with some left over balloons from the birthday party, and I accidentally dropped my balloon in a bucket of water. I picked it up and started bouncing it around , and that was the moment I heard the balloon ring!!

My father and I tried applying different types of liquids on the balloon and bounced the balloon. We found out that the low density liquid like oil when applied on the balloon, the balloon did not ring and liquids with higher density like water and honey when applied on the balloon it did ring.

We researched about the cause of the mysterious ringing sound and couldn't find an answer. That is when my father consulted a professor at IIT Delhi. He explained to us that this is an interesting observation and this could help making music out of a stretched balloon.

Since I am interested in music I was excited to hear about it. I started wondering if I could make a musical instrument out of balloons.

DEEPIKA BEJOY NAMBIAR
GRADE-4B



INTERSTELLAR MOVIE : A WRITE UP

Interstellar is a 2014 movie that was directed by Christopher Nolan

It won the Oscar for Best Visual Effects.

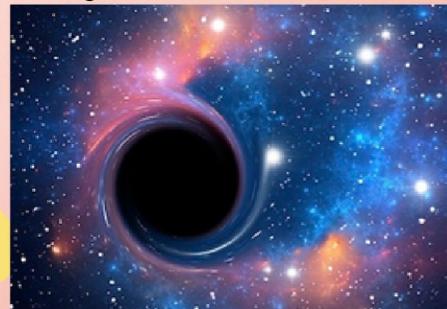
Interstellar is about Earth's last chance to find a habitable planet before a lack of resources causes the human race to go extinct. The film's protagonist is Cooper (part of the Endurance crew), a former NASA pilot who is tasked with leading a mission through a wormhole to find a habitable planet in another galaxy.

Dr. Brand explains to Cooper that NASA previously sent another group (Lazarus) to find a habitable planet but they've gone silent.

The movie's script has been written in such a way that it takes in the not-so-distant future. The Endurance crew decides to scout out Miller's planet because it was the one that had most recently transmitted data to them. But since the planet is so close to the black hole, time is extremely dilated — every hour on the water planet is equivalent to seven years on Earth. Cooper, Brand and Doyle land on the surface and attempt to locate Miller's transponder. But just as Brand finds the device, a massive wave rolls in, forcing the crew to flee to the courier ship. Doyle dies but Cooper and Brand narrowly escape — and Brand realizes that Miller must've died seconds before they arrived because of the severe time dilation. Dr. Mann is the captain of the Lazarus mission. After the failure of the water planet mission, Cooper is left with a difficult choice – go to Dr. Edmunds' planet or Dr. Mann's planet. Cooper chooses Mann's planet, taking the Endurance on a one-way trip. When the crew arrives, they find Mann in cryosleep. The crew understands that Mann has more than just a case of cabin fever, he's full-blown bent on finishing the mission, no matter the cost.

How does Interstellar end?

In order to save Brand, Cooper slingshots around Gargantua(a black hole) to generate enough energy to send the Endurance to Edmunds' planet. As a result, he slips into the black hole and beyond the event horizon. There, he finds himself trapped in the fourth dimension – a tesseract styled as a never-ending bookshelf.



SMRITHI RAJESH
GRADE-3A

MY THOUGHTS

Space space space
I wonder what is out there
May be I shall take a ride in spaceship
Discover the hidden secrets of Mars, Venus and Neptune.

My hands waving by my side
I am standing nice and tall
My eyes are looking straight ahead
I am ready for the hall

Space space space
Its time for my journey
The count down has begun
Here we go, get ready, get set
5, 4, 3, 2, 1



A Tune to the MOON
Every night I wait for that LIGHT
Seeing you my face go BRIGHT
At times you are a Silver PLATE
Many a times you FADE
And There are DAYS
With no TRACE
Oh!!! Moon, Come Soon!!!
Shine BRIGHT and Bring the LIGHT

KRITHIK.M
GRADE- 1C

RIYANSH
GRADE-2B

ಬಾಹ್ಯಾಕಾಶ-ವಿಜ್ಞಾನ

ಬಾಹ್ಯಾಕಾಶ ನಮ್ಮ ಊಹೆಗೂ ಮೀರಿದ್ದು
ಬಾಹ್ಯಾಕಾಶ ನಮ್ಮ ಕೈಗೆ ಎಟುಕದ್ದು
ಬಾಹ್ಯಾಕಾಶದ ಬಗ್ಗೆ ಎಷ್ಟೇ ಮಾಡಿದರೂ ಅನ್ವೇಷಣೆ
ಬಾಹ್ಯಾಕಾಶದಲ್ಲಿದೆ ನಮ್ಮ ಕಲ್ಪನೆಗೂ ನಿಲುಕದ ತಪಾಸಣೆ
ಮನುಕುಲ ಬಳಸುವುದು ನೂತನ ತಂತ್ರಜ್ಞಾನ
ಮಾನವ ಉಪಯೋಗಿಸುವನು ತನ್ನ ವಿಜ್ಞಾನ
ಆದರೂ ಪಡೆಯಲಿಕ್ಕಾಗಲಿಲ್ಲ ಸ್ವಪ್ನ ಚಿತ್ರಣ
ಇದಕ್ಕೆಲ್ಲ ಕಾರಣ ಪ್ರಕೃತಿಯ ತಲ್ಲಣ
ಬಾಹ್ಯಾಕಾಶಯಾನ ವಿಜ್ಞಾನಿಗಳ ತರ್ಕ
ಆದಷ್ಟು ಬೇಗ ಸಿಗಲಿ ಇದಕ್ಕೊಂದು ಅರ್ಥ
ವಿಜ್ಞಾನಿಗಳು ಮಾಡಿದ್ದಾರೆ ಅನೇಕ ಸಂಶೋಧನೆ
ವಿಜ್ಞಾನ ಲೋಕದಲ್ಲಿ ಆಗಲಿ ಅನೇಕ ವಿಮರ್ಶನೆ.



AAYUSH.R.ANAND
GRADE- 4B

MY THOUGHTS

VISIT TO LALBAGH BOTANICAL GARDEN, BANGALORE

Dear Friends,

It was a great trip to Lalbagh Botanical Garden, Bangalore with my family and cousins!

Lalbagh Botanical Garden is one of the beautiful parks in Bangalore. It holds two flower shows and has over 1,000 species of plants with many trees that are more than hundred years old. The Lalbagh garden, is spread across 25 acres today!

There are many things to see in Lalbagh. First, at the entrance we could see the big rock and we climbed on that and reached to the peak with my family and we saw a small temple there. It was amazing to see the panoramic view of the park.

Then we visited the lake. It was so beautiful, we fed the fishes over there, we enjoyed that. We could also spot ducks and other birds flit across the calm waters. We had some snacks over there and took a walk around and near the lake.

Next was the glass house. We took many photographs in front of the glass house with family and cousins. After that we went to a place where there was a nice grass land, we started playing ball with our cousins and enjoyed a lot. The rose garden is one of the prettiest things we could see inside Lalbagh. We were so lucky to see many flowers when we visited. We were roaming around the rose garden and took many photographs near the rose garden.

At the end of the day, we visited the plants nursery near the entrance and purchased a couple of plants, pots and some fertilizers for our home garden. To conclude, it was a memorable trip for our entire family to Lalbagh Botanical Garden and we enjoyed the trip.

Thank you!

EMILYRATHEESH
GRADE-1C



FLYING-MAN

Flying-man, Flying-man
up in the sky,
Where are you going to,
Flying so high?
Over the mountains,
And over the sea!
Flying-man, Flying-man,
Can't you take me?

TRISHA SINGH
GRADE-1D

SPACE TRASH



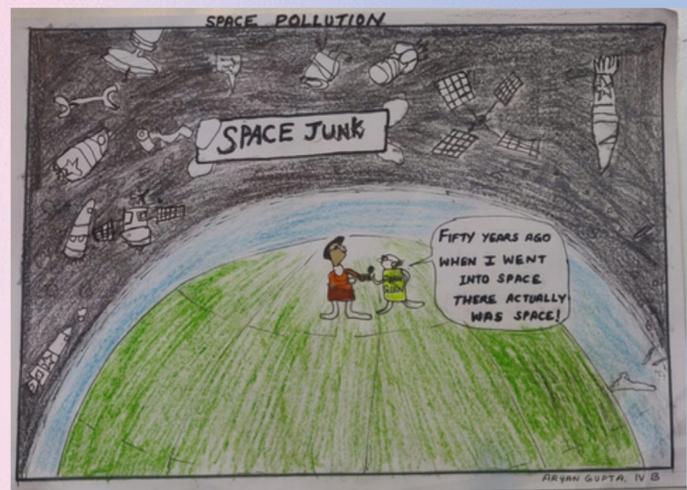
Space trash (also known as space junk, space pollution, space waste, space debris, or space garbage) is defunct artificial objects in space—principally in Earth orbit—which no longer serve a useful function.

Causes of Space debris

Defunct satellites. Satellites have a limited useful life and, when their batteries are spent or they break down, they are left drifting about in space. Missing equipment. Astronauts sometimes drop tools or other objects during space walks

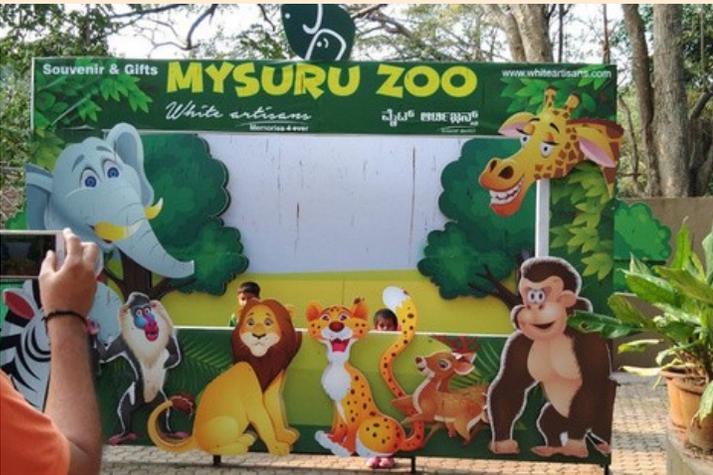
Effects of Space debris

The accumulation of space junk poses a particularly catastrophic threat to humankind's future in space exploration, due to increased risk of collision with and damage to functioning satellites. It could also have detrimental effects on Earth's environment



ANANYA VANAPARTHY
ARYAN GUPTA
KEERTHAN SURYARAJ
GRADE-4B

PRECIOUS MOMENTS....



Click the link below to watch

Students interactive video



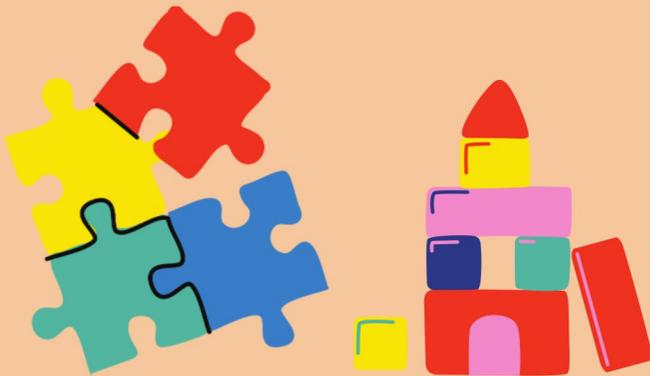
Kindergarten Updates



There are many little ways
to enlarge your child's world.
Love of books is the best of all.

To encourage our emerging readers the faculty of GMCHRD introduced the guided reading programme. This helped in engaging children in reading experiences, and it also presents infinite opportunities to develop language and help in improving creative thinking and literacy skills. During the guided reading sessions, the teachers provide opportunities for the children to engage with the text and make reading experience enjoyable and exciting for children. Children comment, describe, and narrate parts of the text they recognise or are familiar with. The programme opened the gateway of thinking creatively and the children enthusiastically predicted or related the events to their daily life. Parents also enjoyed and appreciated the guided reading programme.

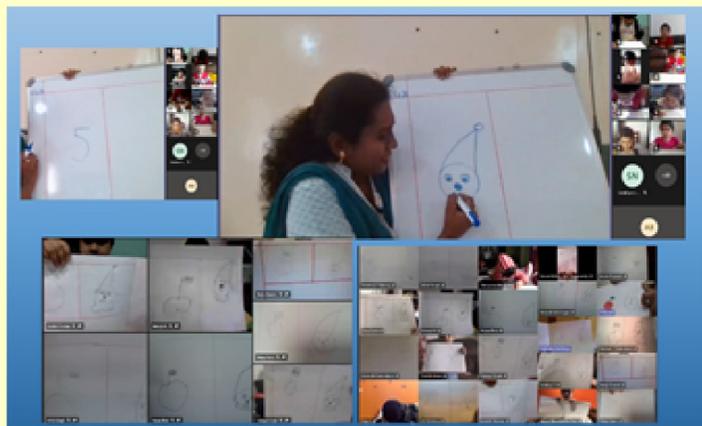
Aarav loved the guided reading sessions and has developed interest in attempting to observe and read books. Thankyou teachers for these sessions



Dear Teachers, it was really a great idea to engage the kids in the Guided reading session. Amogh really enjoyed it and gave an opportunity to open and engage with everyone. This also helped to improve the observation skills. All the kids for sure would be waiting for the sessions to start soon again.

The fun Wednesdays and Fridays kept the inquisitive minds and hands busy with lot of activities, which improved their listening speaking and observation skills. The number and the letter drawing helped our emerging artist.

Number Drawing KG-1



Leaf collage KG-1



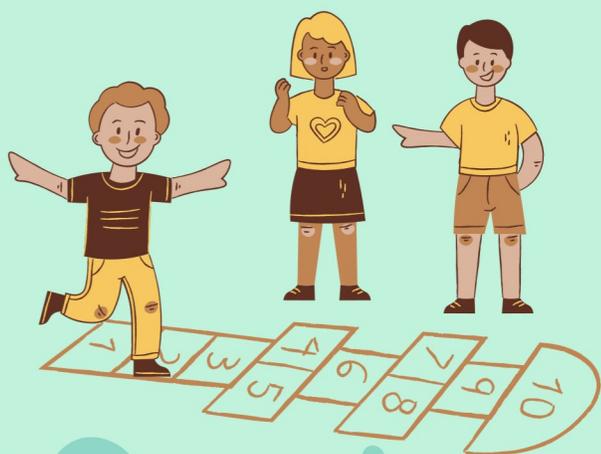
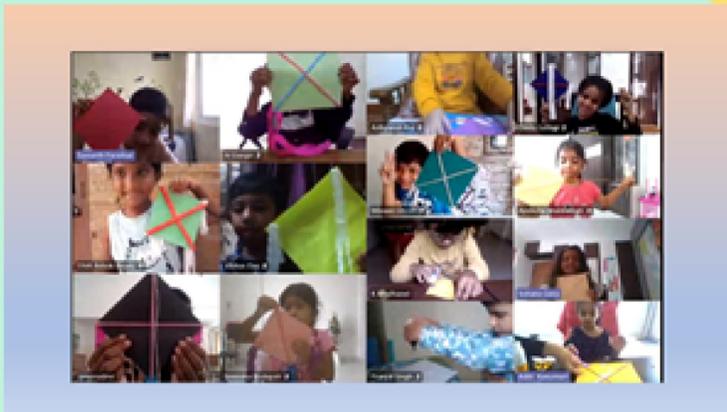
Thread painting KG-2



Lion Mask with Paper plate KG-2

Celebrations in kinder land

The term does not end without a peep into the celebrations. Each month had a specific celebration the December came with the Santa and jingle bells, In January we celebrated Makara Sankranti and the Republic Day. February laid the importance of Sivarathri The teachers also spoke about the famous personalities who have become memories. Each festival was celebrated by narrating the story and a craft was also done by the children with the guidance of the teachers.



LAKSHYA-2021-2022

For good physical fitness and strength, sports are an integral part of our life. It makes our life interesting, teaches us to work hard, and push our limits to a new high. Therefore, sports are an integral part of our Curriculum. Despite the COVID situation, the staff at GMCHRD organised a Virtual Fun Sports day “LAKSHYA” on February 25th, 2022. The wheels started rolling three months prior to the event the children joined the teachers for the drill practice. The very talented and versatile team planned interesting and engaging activities. Not only the children but the parents’ cooperation and enthusiasm were unmatched. The children had a thrilling and fun experience as the teachers and the family members collectively cheered for the children.



Some glorious glimpses of our sports day.” LAKSHYA”
Hyper link

- KG - 1**
- KG2 - A**
- KG2 - B**



MONTESSORI



Festive mood in the Montessori Christmas

Montessori children started the virtual Christmas celebration by singing Christmas carols all through the month. On 24th December 2021, the students came dressed to the online session wearing white and red dress with Christmas caps. The Seniors made the 'Christmas bell' using paper cups and decorated them with glitters and ribbons, the Juniors made a 'wreath' using straws dipped in green paint and decorated the wreath with ribbon and our little tots made 'Santa's sleigh' by finger printing Santa and reindeers on a paper and added Christmas tree to light up the craft. Children relished the Christmas snacks they ate and enjoyed dancing to conclude the event.



Republic Day

The 73rd Republic Day was celebrated on January 25th virtually by the Montessori Children of all 3 age groups. The virtual classes echoed with patriotic fervor as the children came dressed in tricolour clothes and sang patriotic songs to mark the occasion. The Senior children were presented with a glimpse of the Republic Day parade, followed by quiz and made a tricolour wall hanging by fan folding colour papers.

The Juniors showcased their talent by dressing up as 'Freedom fighters' and eloquently speaking about them. The Freshers made tricolour paper balls and pasted them on the outline of India flag.

The day concluded with the National anthem after which the children echoed the slogan 'Bharath Mata Ki Jai', making the day an unforgettable experience for everyone.



Sankranthi

On the occasion of Makar Sankranti and Pongal the Montessori students virtually celebrated the popular harvest festival by listening to Kannada and Tamil songs and our little ones came dressed up in beautiful traditional clothing. Children merrily participated in craft activities such as thoran made out of real leaves, made colourful kites and pasted grains on the outline of the kites.

The tots also learned how Makara Sankranti is celebrated in different parts of India through a story 'Harvest Festivals of India' that was streamed online for Seniors. The fun day ended with children longing to eat the traditional dishes made for Sankranthi and also danced for the Pongal songs.



Our Seniors turn Scientist

Over the months of January and February, the Seniors stepped into experimentation as 'Scientist of the week'. Every week they awaited the experiments that was being performed. With all the materials ready, little hands meticulously followed all the steps their friend demonstrated with excitement. They investigated and observed the various stages of the experiment. Some had lot of questions to ask, some exclaimed on the outcome while others were puzzled by the result. The children heard their friends share about how a gas called carbon di oxide puts off fire, about light travelling in a straight line, watched the thaumatrope effect, observed bits of paper sticking to a ruler as a result of static electricity. Hence the children got to learn the scientific skills such as observing as well as the scientific principles of investigation and experimentation.

Watch our young scientists in action



Seniors and Juniors – Discover the wild

Public Speaking in the month of February was a favourite among children, and the topic for the month was 'Animals'. All the children quickly chose an animal and enthusiastically shared many facts about it; from the Pandas of China to the Kangaroos of Australia !

They spoke about the black and white striped Zebras, long necked Giraffe, the roaring lion, our National animal Tiger, galloping horses, ship of the desert Camel, big and hairy gorillas, mooing cows, long tailed lemurs, and their loved pet dogs & cats. The children were in awe when they heard about the glass frog, which has a transparent body and the honey badger, which can crush the shell of the tortoise with its teeth.

The Juniors came dressed up as their favourite animal and spoke about their visits to a zoo and farms, where they had seen these animals, the rides they had on an elephant and on horse backs. All the children joined the monkey dance and enjoyed a fun moment.

The public speaking concluded, leaving a smile on the face of teachers, who were thrilled to the children speaking confidently.





Juniors continued enjoying the 'Greet & Eat' where they joined their friend virtually relished a snack based on the theme of the month such as a treat for Christmas, traditional dish for Sankranthi etc.



Freshers unleash their talent

Talent day was conducted where all the freshers explored their talents with various performances - such as dance, storytelling, gymnastics, shloka recitation, songs, free hand drawing and also a dialogue from the movie Pushpa...



Our Students at Work.
Click the links below

JUNIORS
FRESHERS

RE-SET..RE-ADJUST.. RE-START...

As the academic year draws to a close, it leaves us with mixed feelings and a feeling of hope for the year to come. A hope for a semblance of normalcy. A hope that our students will be able to enjoy their childhood at school, as they rightly should. For the past two years we have all experienced a new pedagogy of education. Students, parents and teachers have braved all odds and successfully executed this new pedagogy of online teaching. We have all strived and endured to make this year a memorable one with online classes, assessments, celebrations and competitions. We take this opportunity to thank the parents of our students for their continuing support in making learning possible this academic year and partnering with us in forwarding the cause of the education of our students. We appreciate your support. The past two years have made it evident that children need school not merely to learn science, math or languages.

AS POPULARLY TOLD BY EMMA WATSON -

"I'M NOT GOING TO SCHOOL JUST FOR THE ACADEMICS. I WANTED TO SHARE IDEAS, TO BE AROUND PEOPLE WHO ARE PASSIONATE ABOUT LEARNING." -

Our students have missed out on interacting with their peers, talking, playing and laughing with them. Going back to school after these extended periods could be a cause of anxiety for students. It can be an overwhelming experience especially for our toddlers who have never been to school. Having enjoyed the comfort and the ease of the online classes, students may take some time to adapt to the immutable offline classes. During the lockdown, the social relations were mainly limited to closest family members, and leisure time activities in sport clubs, social group activities and playgrounds were closed. Since routines are important for children, the sudden isolation and the potential feeling of loss of contact with friends, and social activities may impact the overall wellbeing of the child.

As our children prepare to leave behind the comfort of classes from their homes and head to going back to the school, a few measures by the parents can definitely make the transition smoother.

Parents need to equip and support their children. Set a routine for the children and stick to it. For starters, put children to bed early and at a fixed time, so that they are well rested when they wake up. Make sure they are fed healthy breakfast before they leave home, so that they can concentrate in class without feeling hungry.

At the start, kids may need greater help to settle and adjust. Be there for them with patience and help them in any way possible. Listen to them calmly. Talk about how they feel. Kids can also be anxious about going through change alone. Make sure to communicate and talk about how they are settling in at school.

There are likely to be gaps in their learning. Having patience and encouraging the child to identify and bridge the gaps (with support from the teacher) will go a long way in building the confidence of the child. It will also help them to look forward to new learnings.

Prep them for the transition beforehand. Help them prepare for what to expect and answer all the questions and worries they may have. Routines and knowing changes beforehand can help make the new normal less stressful for the children.

Our students are the life of our school. We are eagerly waiting to meet our students in our school compound. I am sure our students too must be just as eager to see their new school building and meet their teachers. That being said, we assure you that safety of our students and staff is our top priority. All required precautions and arrangements like daily cleaning and disinfection of the school environment, facilities and frequently touched surfaces, and ensure availability of hand hygiene facilities are put in place. All our teachers and staff are vaccinated.

No one can replace the two precious years lost by our students. But we can definitely strive to make up for it by working together to make the year to come rewarding and fruitful.