



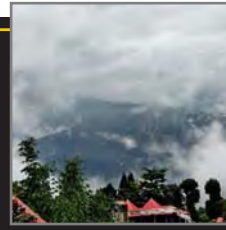
THE TIMES OF INDIA

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**TODAY'S
EDITION**

➤ Heard the travel tales of Xuanzang and his role in Indo-China relations? Figure out in Concepts to Classrooms
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➤ Want to take a break with your family after the exams are over? Visit Kalimpong and get rejuvenated
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➤ New Zealand begin tour of India with Tim Southee as T20 captain
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STUDENT EDITION

WEDNESDAY, NOVEMBER 17, 2021



STATE OF ECONOMY
IT MAY TAKE SEVERAL YEARS TO RECOVER LOSS OF OUTPUT DUE TO THE PANDEMIC: RBI

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Climate change may force AEROPLANES TO FLY HIGHER

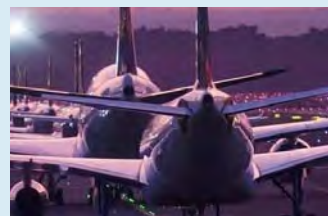
Climate change is having an increasing impact on the structure of the Earth's atmosphere, and may cause planes to fly higher to avoid turbulence, a new study shows. The research draws on decades of weather balloon observations and specialised satellite measurements to quantify the extent to which the top of the lowest level of the atmosphere - called tropopause - is rising.

MATTER OF CONCERN

1 The analysis of weather balloon observations alarmingly showed that the tropopause has increased in height at a steady pace since 1980: about 58-59 metres per decade

2 Of these, 50-53 metres per decade is attributable to human-induced warming of the lower atmosphere

3 This trend has continued even as the influence from stratospheric temperatures has waned,



demonstrating that warming in the troposphere is having an increasingly large impact

4 The satellite observations taken since 2000 verified that the height of the tropopause has increased over the past two decades

ROLE OF TROPOPAUSE AMID FLIGHT

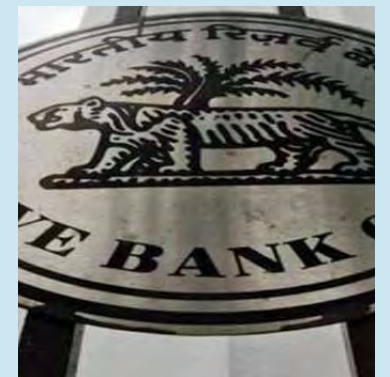
■ The height of the tropopause, an atmospheric region that divides the dense and turbulent troposphere from the overlying and more stable stratosphere, ranges from about 5 miles above the Earth's surface at the poles to 10 miles at the equator, depending on the season

■ The location of the tropopause is of interest to commercial pilots who often fly in the lower stratosphere to avoid turbulence, and it plays a role in severe thunderstorms, whose overshooting tops sometimes drive the tropopause higher and draw down air from the stratosphere

■ Previous scientific studies have shown that the tropopause is rising. This was not only because of climate change, but also because of cooling in the stratosphere caused by ozone depletion gases

■ The steadily increasing height of the tropopause in recent decades does not significantly affect society or ecosystems, but it illustrates the wide-ranging impacts of greenhouse gas emissions

■ These gases shrank the stratosphere through the destruction of the stratospheric ozone layer, although restrictions against their emission in more recent years have caused the atmospheric concentrations of these gases to decline



The pandemic caused loss of output of over a tenth of annual GDP of a normal year. Recovering this lost output may take several years, said RBI deputy governor Michael Patra. Moreover, as countries moving back to normalisation of policy will involve global spillovers, India cannot be immune, he added. The agglutination of supply disruptions, the health crisis, an unparalleled mass migration and a hostile global environment has caused a considerable loss of output - over a tenth of annual GDP of a normal year" said Patra.

India is currently one of the fastest-growing major economies in the world. In purchasing power parity (PPP) terms, India is the third-largest economy in the world. Projections show that by 2040 India will be the second largest economy in the world

CHINA IS NOW WORLD'S RICHEST nation, ahead of US



Global wealth tripled over the last two decades, with China leading the way and overtaking the US for the top spot worldwide. That's one of the takeaways from a new report by the research arm of consultants McKinsey & Co that examines the national balance sheets of 10 countries representing more than 60% of world income.

Net worth worldwide rose to \$514 trillion in 2020, from \$156 trillion in 2000, according to the study. China accounted for almost one-third of the increase. Its wealth skyrocketed to \$120 trillion from a mere \$7 trillion in 2000, the year before it joined the World Trade Organisation, speeding its economic ascent

■ The US, held back by more muted increases in property prices, saw its net worth more than double over the period, to \$90 trillion

■ In both countries - the world's biggest economies - more than two-thirds of the wealth is held by the richest 10% of households, and their

share has been increasing, the report said

■ As computed by McKinsey, 68% of global net worth is stored in real estate. The balance is held in such things as infrastructure, machinery and equipment and, to a much lesser extent, so-called intangibles like intellectual property and patents

First edition of Fit India quiz to have 2 prelim rounds

The first edition of the Fit India Quiz launched earlier this year will have two preliminary rounds so that students get a chance to avail either one or both the opportunities to take the test, a government statement said. After the two rounds, a combined merit list of both the tests will be prepared to shortlist the students for the next stage. Students who have appeared twice have the advantage of the best score out of the two tests being considered, it added. The date and time for the second preliminary round would be announced shortly, the statement said.

The main aim of the quiz is to create awareness among students about India's rich sporting history, its centuries-old indigenous sports and the national and regional sporting heroes

■ The winners of the preliminary round will take part in the state round in December and its winners will then go on to participate at the national level in January-February, 2022

■ The winners of the quiz at each level will have a chance to win cash prizes, along with the honour of being called the country's first Fit India state or national level quiz champion, it said

Full vaccination likely to provide immunity against Covid-19 for a year



The World Health Organisation (WHO) on Monday asserted that the effects of Covid-19 vaccines are likely to last for a year or possibly longer. It also added that the vaccination of vulnerable population has led to "uncoupling" between infections and deaths. Dr Soumya Swaminathan, chief scientist, WHO also asserted that vaccination is necessary, adding that the natural infection after getting exposed does generate immunity. "In some people, it is strong, it can last for a long time. In others, it may be not that strong. In about 10 to 20 per cent of people, you can't even detect antibodies after infection," she said.

IN OTHER NEWS



European nations launch new measures to curb Covid resurgence

With Europe now the epicentre of the Covid-19 pandemic, countries across the continent are introducing new measures to curb the resurgence, including several curbs for unvaccinated people. The German capital of Berlin has banned unvaccinated people from entering restaurants, bars, cinemas and other entertainment venues. In Austria, as of Monday unvaccinated people were only allowed to leave their apartments for essential reasons such as purchasing

groceries, visiting a doctor or pharmacy, or going to work.

Seven host cities for 2022 T20 World Cup

Seven Australian cities, including Melbourne, Sydney, Brisbane, Perth and Adelaide, will host the ICC Men's T20 World Cup from October 16 to November 13 next year. The



other two cities which will in all likelihood host the Round 1 matches include Geelong and Hobart with the iconic Melbourne Cricket Ground hosting the final. The semi-finals will be held at the Sydney Cricket Ground and

Adelaide Oval on November 9 and 10, respectively.

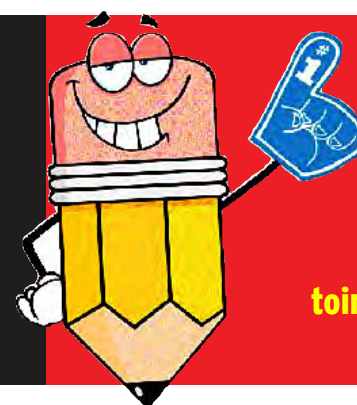
Twitter no longer auto-loads new tweets on web

Micro-blogging site Twitter will no longer automatically refresh timelines on the web with new tweets and users can now decide when they want to load new tweets. Twitter acknowledged that in the past, tweets would often disappear from view mid-read when a user's timeline would automatically refresh. Now, users can load new tweets when they want to by clicking on the tweet counter bar at the top of their timelines, reports TechCrunch.





Beginning the journey
of learning in an
alphabetical order, Times
NIE takes you through
one concept from each
subject every week



TEACHERS, IF YOU
HAVE A CONCEPT
THAT CAN CHANGE
A CLASSROOM,
SHARE IT ON

toinie175@gmail.com WITH
YOUR PHOTOGRAPH

CLASSROOMS TO EXPERIENCE ZONES

BIOLOGY

XEROPHYTE

Any plant adapted to life in a dry or physiologically dry habitat (salt marsh, saline soil, or acid bog) by means of mechanisms to prevent water loss or to store available water are called Xerophytes (xero meaning dry, phyte meaning plant). They can survive in an environment with little availability of water or moisture.



DID YOU KNOW?

Succulents (plants that store water) such as cacti and agaves have thick, fleshy stems or leaves. Other xerophytic adaptations include waxy leaf coatings, the ability to drop leaves during dry periods, the ability to reposition or fold leaves to reduce sunlight

FEATURES OF XEROPHYTES

Adaptations of xerophytes include reduced permeability of the epidermal layer; stomata and cuticle to maintain optimal amounts of water in the tissues by reducing transpiration, adaptations of the root system to acquire water from deep underground sources or directly from humid atmospheres and succulence, or storage of water in swollen stems, leaves or root tissues. The typical morphological consequences of these adaptations are collectively called xeromorphisms.



Types

■ **EPHEMERAL ANNUALS:** These plants are also called as drought evaders or drought escapers. They do not withstand dry seasons but actually avoid them. Few examples are Argemone mexicana, Solatium xanthocarpum.

■ **SUCCULENT:** These plants grow in habitats with less or no water. They store water whenever it is available. Eg: Euphorbia and Opuntia.

■ **NON-SUCCULENT PERENNIALS:** These are drought resistant and called as true xerophytes. They possess a number of morphological, anatomical and physiological characteristics, which enable them to withstand critical dry conditions. Calotropis, Acacia, Casuarina and Nerium.

ACTIVITY: HOW CACTUS STORES WATER

WHAT YOU NEED:

Sponge; Glass of Water

WHAT YOU DO:

- Take a sponge and cut it in the shape of a cactus.
- Now dip the cactus in a glass of water.

WHAT HAPPENED:

Observe how the water gets soaked up by the sponge and if you let it be, the sponge can retain the water for at least another day. The cactus has spongy parts that works on the same mechanism.

PHYSICS

X-RAY



X-rays are a form of electromagnetic radiation, similar to visible light. Unlike light, however, X-rays have higher energy and can pass through most objects, including the body. Medical X-rays are used to generate images of tissues and structures inside the body. If X-rays travelling through the body also pass through an X-ray detector on the other side of the patient, an image will be formed that represents the "shadows" formed by the objects inside the body.

HOW X-RAY WORKS

One type of X-ray detector is photographic film, but there are many other types of detectors that are used to produce digital images. The X-ray images that result from this process are called radiographs.



IF A PERSON GETS AN X-RAY

The person who will take the X-ray picture is called the technologist. They'll help you get ready for the X-ray by telling you how to stand, sit, or lie down, and might strap down the part of your body they need a picture of. This strap will be like the seat-belt to hold you in place during the X-ray exam. For your X-ray exam, you will get a gown to wear. The technologist may also have you wear a protective neck covering, or they might put a heavy blanket on parts of your body that they don't need a picture of to protect you from getting too much radiation. X-rays use a small amount of radiation, electromagnetic waves that can go through your skin, to take pictures of the inside of your body.

WC Röntgen reported the discovery of X-rays in December 1895 after seven weeks of assiduous work during which he studied the properties of this new type of radiation able to go through screens of notable thickness. He named them X-rays to underline the fact that their nature was unknown



LANGUAGE

XENIAL

By Kartik Bajoria
Jaipur-based
Communication Skills
Educator & Writer



It is important to understand and appreciate that when we communicate, we must always come across as polite, generous, sensitive individuals. Particularly, when one is in a situation when one has to deliver some bad news, or be critical, or furnish a complaint, one must try to be xenial.

Xenial simply means warm. Let us look at a very plausible example from one's everyday life. Say you have visited a restaurant and your food arrives under-cooked! You need to complain to the waiting staff or chef. One way of doing this is to create a fuss about it, shout and say something like "I am appalled at this shoddy service. This is supposed to be a top-class restaurant where you are charging the earth for the meal but serving poor-quality food!" You may get your dish replaced but it will leave the proverbial bitter after-taste in everyone's mouth – for you have soured the situation by being 'unkind' in your communication. Chances are that as is human tendency, your aggression is met with a defensive stance by the restaurant management. If on the other hand, you remain xenial and say "I'm terribly sorry to be critical but I think my food is a touch undercooked, perhaps you could take a look?" – your politeness will go a long way in the staff being much more receptive to your complaint, manifesting in them gladly fixing, even replacing your dish! That is the power of being xenial.

ECONOMICS

X-EFFICIENCY

Producing OUTPUT at the minimum possible cost. This is not enough to ensure the best sort of economic EFFICIENCY, which maximises society's total CONSUMER plus PRODUCER SURPLUS, because the quantity of output produced may not be ideal. For instance, a MONOPOLY can be an X-efficient producer, but in order to maximise its PROFIT it may produce a different quantity of output than there would be in a surplus-maximising market with PERFECT COMPETITION.



MATHS

By Sandeep Srivastava
Educator since 20 yrs, he specialises in making Maths easy and fun

X FOR X-GEN (PERMUTATIONS)

More options exist for us all, than ever in the past! Many more permutations of possibilities exist today for all kinds of situations. We will be exploring this topic more through examples.

Permutation, in general, means each of several possible ways in which a set or number of things can be ordered or arranged, whereas, we use the word 'combination' without thinking if the order is important, say a combination of ideas.

This salad is a combination of cucumber, tomato, onion and cheese, wherein the order in which the four are combined is immaterial. We may put tomatoes first and cucumbers last or we may start with cucumber.

An interesting everyday usage where the distinction between permutation and combination is ill-applied is when talking about security codes. Whereas saying "This lock is a combination of the digits 1,2,3" may be grammatically correct, to be precise, it's wrong. Here the order of using these digits is important. The lock may just open with 123 and not 321. Hence, mathematically the code is not the combination of 1,2,3 but a permutation of the same digits.

The two are very practically useful mathematical models. They help us quickly compute the total number of realistic choices available when selecting, or arranging, a set of things from a collection of such things is required. Thus, we also use permutations and combinations in computing probability, the two concepts significantly reduce computational effort in finding probability, in some situations.

Why are permutations important?

To do that, let's first talk about factorials.

For any positive integer n, the continued product of first n natural numbers is called factorial n, denoted by n!, or n!. We define 0! = 1. Thus, n! = n(n-1)(n-2).....3.2.1. When n is negative or a fraction, n! is not defined.

For example, if one needs to arrange 5 different books on a shelf. Let's see how many ways we can arrange them. The first book has 5 choices where it can be put, and say we put it in the first slot from the left (5). We are now left with 4 more slots. And for each of the 5 choices there

are now 4 possible books for the second slot from the right (4). And so on for the rest of the books.

Hence, all the 5 books can be arranged in $5 \times 4 \times 3 \times 2 \times 1 = 120$ ways on the book shelf or we say they can be arranged in 5! ways.

The number of arrangements of n different objects taken all at a time is shown by the symbol $P_n = n!$. And in general,

$$P_n = n! = 1 \cdot 2 \cdot 3 \cdot \dots \cdot n = n \cdot (n-1) \cdot (n-2) \cdot \dots \cdot 1 = n!$$

What if we want to arrange things but not all the things? Let's say we have 10 action figures but only have space on the shelf for 6 of them. How many different ways can we display the figures?

We could calculate it by saying that there are 10 figures to choose from for the first position on the shelf, then 9 figures to choose from for the second position, 8 for the third position, and so on. This is $10 \times 9 \times 8 \times 7 \times 6 \times 5$ ways of placing six of the ten figures on a shelf.

A small arithmetical jugglery will give us the following mathematical expression –

$$\frac{10 \times 9 \times 8 \times 7 \times 6 \times 5}{4 \times 3 \times 2 \times 1} = \frac{10!}{4!}$$

which we can rewrite as: $\frac{10!}{4!} = \frac{10!}{(10-6)!}$

and now we have everything in terms of what we knew (picking 6 things from a population of 10 things) and this is what a permutation is:

$$P_n = \frac{n!}{(n-k)!}; n = \text{population, } k = \text{picks}$$

We know that $10! = 3,628,800$ and $4! = 24$, and we can easily calculate the final count of permutations:

$$\frac{10!}{4!} = \frac{10!}{(10-6)!} = \frac{3,628,800}{24} = 151,200$$

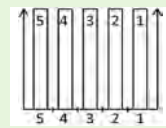
Let's take another example. There are 8 participants (identified as A, B, C, D, E, F, G, H) in a 100-metre race competing for first, second and third positions. So, how many ways can the medals be awarded amongst them?

For the first position, there are 8 choices out of A, B, C, D, E, F, G, or H. Now the competition is among the remaining 7, i.e., B, C, D, E, F, G, or H for the second position (if A was in the first position). The third position would be grabbed by either B, D, E, F, G or H, i.e., 6 choices, if C secured the third position.

Hence, the total number of choices for the three medals = $8 \times 7 \times 6 = 336$. Let's reframe this as:

$$\frac{8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}{(5 \times 4 \times 3 \times 2 \times 1)} = \frac{8!}{3!}$$

Hence, for the 8 participants, to find the number of ways 3 positions can be filled (and the order of the participants matter), we apply $\frac{8!}{(8-3)!}$



Number of permutations with repetition

(1) The number of permutations (arrangements) of n different objects, taken r at a time, when each object may occur once, twice, thrice,.....up to r times in any arrangement = The number of ways of filling r places where each place can be filled by any one of n objects.

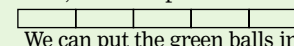
r - Places:	1	2	3	4
Number of choices:	n	n	n	n

The number of permutations = The number of ways of filling r places = $(n)^r$.

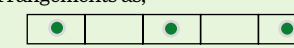
For example, the number of 4-digit number which can be made using the digits 1 to 7 if repetition is allowed is the number of ways of filling these 4 places with any of the 7 digits. The first place has 7 options, the second has 7 options too and so on, all 4 places have 7 options to be filled from, which makes it $7 \times 7 \times 7 \times 7 = 7^4$ ways.

(2) The number of arrangements that can be formed using n objects out of which p are identical (and of one kind), q are identical (and of another kind), r are identical (and of another kind) and the rest are distinct is $\frac{n!}{p!q!r!}$.

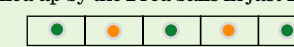
Suppose we have to arrange 5 balls in a row, of which 3 are green and the other 2 are red, as in the space below:



We can put the green balls in any of the spaces, where the order doesn't matter and therefore, can be done in $\frac{5!}{3!}$ ways. Suppose, this is how we take one of the arrangements as,



Thus, the remaining 2 places can be filled up by the 2 red balls in just 1 way,



Therefore, the total arrangements that are possible are $\frac{5!}{3!2!}$.

Example: In a library there are 3 books on fairy tales, 4 novels and 5 activity books. In how many ways can we arrange these so that books of each kind are together in one place?

By themselves the 3 fairy tale books can be arranged and put together in 3! ways. Suppose the fairy tale books are numbered A, B, C. The possible ways those can be put together are ABC, ACB, BAC, BCA, CAB and CBA, i.e., $6 (=3!)$ ways.

Similarly, the 4 novels can be arranged in 4! ways and the 5 activity books can be arranged in 5! ways.

Hence, all of them together can be arranged in $3! \times 4! \times 5! = 17280$ ways.

Since there is no order mentioned, so the 3 sets of books (i.e., fairy tales, novels and activity books) can be arranged in 3! ways.

So, these books can be arranged in any order with books of each kind together in $3! \times 17280$ ways = 103680 ways.

HISTORY

XUANZANG

Onkar Singh Rathore writes for Times NIE about interesting events and terms from History. The author is interning at the 'History Diaries' – an initiative to revamp the current pedagogical system of History through tours, drama in schools



He was born in China in 602 AD and following his elder brother's footsteps, he became a Buddhist monk at the age of 20. To know more about Buddhism, at the age of 30, he secretly left China and reached India, crossing the treacherous mountainous regions.

Xuanzang also known as the 'Prince of Pilgrims' was a well-known Chinese Buddhist monk, who visited India during the reign of King Harshavardhana.



HIS TRAVELS

In India, he visited almost all the sacred places associated with the life of Buddha. He visited Kashmir, Punjab, Sarnath, Kushinagar, Bodhgaya, Kapilvastu and also traversed through Deccan, Odisha and Bengal. To gain knowledge about the Indian subcontinent, he spent five years at the University of Nalanda, where he studied logic, grammar, Sanskrit, and also yoga from the Yogacara school of Buddhism.

AS BUDDHISM GREW...

During the time of his visit to India, Xuanzang narrated that Patliputra lost its former glory, and Prayag and Kanauj became important cities.

King Harsha admired Xuanzang and his devotion for Buddha, and honoured him in Kanauj religious assembly. He also arranged for his safe return to China along with strong military escort within the frontiers. Xuanzang carried back with him around 150 pieces of Buddha's relics, statues made of gold, silver and sandalwood, and over 600 manuscripts loaded on the back of 20 horses. He translated over 70 Buddhist works before he died in 664 AD.

Children of today are leaders of tomorrow

"The greatest gifts you can give your children are the roots of responsibility and the wings of independence." This quote of Denis Waitley beautifully tells us about the enormous responsibility the society has towards children. Children are the priceless treasures; precious gifts from God. We are accountable to nurture them as holistic individuals ensuring their physical, emotional, psychological, and spiritual growth. If we take care of them and their education then they will become the responsible leaders of tomorrow. But if our children are weak today, then the future of our society will be weak.

November 14 is the birthday of Pandit Jawaharlal Nehru, the first Prime Minister of Independent India who is popularly known as Chacha Nehru amongst children. He was a great leader who was keen about the welfare, education and development of children in India. Even though he was very senior in stature, he was fond of children and would spend valuable quality time with them. As a tribute to him, his birthday is celebrated as Children's Day in India. Children's Day is an important event not only for children but



also for parents and teachers as this day celebrates the spirit of childhood and reminds us that our children need to be loved and cared for. Children are our future; they are the leaders of tomorrow. It is beautifully said that they are the living messages we send to the future.

There were a number of challenges that our children had to face during these challenging times of the Covid-19 pandemic. Apart from the challenges, the pandemic also taught us that roles and responsibility need to be shared. While teachers and parents do their best for the children; children on their part need to put in required efforts to make the

best out of the opportunities provided. The situation of lockdown provided children the space to become independent learners, enabling them to explore their abilities for time management, development of 21st century skills and taking ownership of their learning journey through online and offline mode of learning. Keeping the impetus, parents and teachers should continue to encourage children and motivate them to become resilient, responsible and proactive learners. Children are full of energy and potential; parents, teachers and society can together help them realise it in their lives.

Parents and teachers are urged to nurture children and train them to be honest and responsible citizens of tomorrow. Love them and care for their happiness. Dear children, do not be discouraged due to the challenges of the present times, you are precious to your parents and to us. You are kings and queens in the making. Be grateful to Almighty for your parents, teachers and for the gift of life that has been given. We wish you a healthy, happy and bright future!

DR A F PINTO, Chairman, Ryan International Group of Institutions

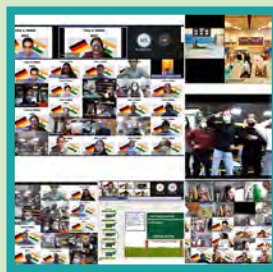
Exchanging cultures at VGS

The Indo-German virtual cultural exchange program day-7 was the end of the second phase of this incredible and amazing virtual tour of India organised by Venkateshwar Global School, Rohini, Delhi.

To make this day interactive, Indian students prepared some fun filled activities for PMHG students including 'Heads or tails', 'Recognise the personality'. The PMHG students with their mentors had lots of fun, sportingly participating in all the activities.

The VGS and PMHG students jointly put up a beautiful dance performance for which they had been painstakingly rehearsing since day one, which came up as a surprise element on the farewell day for all.

Lastly, Indian partners shared video experiences with their German partners, which was indeed an emotional moment. It has been a wonderful experience and a pleasant journey hosting the guests for seven days. It's time now to bid farewell to our friends and sure that these sweet memories will stay with us forever. Undoubtedly, it has been a great learning experience for both



partner schools alike and looking forward to many more such exhilarating opportunities!

Excitement marks DPSG's adventure camp

DPSG International ushered in the joy and excitement of Children's Day by organising an adventure camp. The school in collaboration with Rocksport, Asia's largest adventure programme, organised the camp on the pleasant morning of November 12 in the lush green, sun bathed school premises. The school campus was abuzz with enthusiastic children of classes I-V who filed in merrily, with the excitement of getting back to normal school life that is happening joy-



ful and rejuvenating.

The camp commenced with a comprehensive briefing session wherein the rules and regulations were shared and the children were allotted their groups. The children participated in a plethora of fun filled and stimulating adventure activities like 'Commando Net', 'Zip Line', 'Sport

Climbing', 'Double Rope Bridge', 'Burma Bridge', 'Rope-Ladder Climbing', 'Hoppy Hop Race', 'Commando Crawl' to name a few.

The zeal, commitment, involvement and focused effort put in by 88 children under the able guidance of teachers and other experts, proved that the camp has gone a long way in boosting their collaboration, self-awareness, sensitivity towards the surrounding and team spirit. School principal Meera Mathur appreciated the efforts of the children.

Prayer meet held to honour Covid warriors

Amidst the atmosphere of fear and insecurity due to Covid-19, St Angel's School, Gurugram organised a prayer meet to support the Corona warriors and sufferers. Students from classes I-XII participated in the meet praying the Almighty to bless the humanity with his

love and mercy according to their beliefs. A verse from 'Bible', 'Ayat' from 'Quran', 'Shabad' from 'Gurubani', 'Hanuman Chalisa' and even 'O Palanahare' were recited not only by students but also by their parents and grandparents. It was a way out to de-stress and connect to the supreme power for a future of everlasting hope.



Bosco hosts zonal badminton tournament

Bosco Public School, Paschim vihar hosted the Zonal Badminton Tournament that was organised by Zone 17 from November 2 to 3.

Around hundred players from the schools of Zone 17 participated in both girls and boys category in the tournament. All the contestants showcased tremendous strength and commendable techniques as they took on the opponents in their run to the graceful win in junior girls and senior boys categories.

The badminton champions of Bosco, Ayaan Duggal, Shivaay Aroa, Ansh Dagar and Vaibhav Sharma bagged first position in the senior boys category. Bosco's junior girls - Isman Kaur, Bhumi Agarwal and Garvita bagged the first po-



sition and flew the Boscon banner high with their perfect shots. Audience roared with the applause and the joyous cheers for the participants.

The event not only developed the technical skills of the players but also created conducive environment of bonhomie and peer motivation. Chairman Dr G S Tuteja, principal Rajiv Duggal and vice principal Priya Handa congratulated the winners.

Student Corner



PMANVIK JUNEJA, class IV IPC, MSS School Rajendra Nagar



ARONA BINU MATHEW, class VII, St Michael Sr Sec School Pusa Road



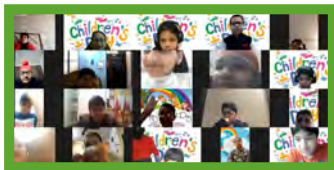
MANVIK JUNEJA, class IV IPC, MSS School Rajendra Naga

Children's Day celebrated with gaiety and verve

The teachers of Manav Sthali Global School, Double Storey decided to 'Create Magic' for all the little ones.

In India every year on November 14, Children's Day is a celebration to increase awareness of the rights, care, and education of children. This day is also marked in remembrance of the country's first Prime Minister Jawaharlal Nehru who is fondly known as 'Chacha Nehru.'

The morning of fun, energy



and laughter for kids was well forethought and premeditated with great meticulousness and passion by the teachers. The children were enthralled by the vivacity and passion with which

each member of school faculty performed. The skit presented by the teachers was a laugh riot, and it highlighted the virtual 'goof-ups' with a blend of some light-hearted humour.

The students paid homage by dressing up like Chacha Nehru and fashioned craft papers into beautiful red roses to be donned on their white kurtas.

The event culminated with a song that reverberated with love, warmth and affection for each child.

ASN celebrates virtual Diwali

ASN Senior Secondary School, Mayur Vihar, conducted a virtual assembly on the auspicious occasion of Diwali on the theme, 'Greatness lies in giving'.

The assembly commenced with 'Ganesh Vandana', followed by thoughts on the importance of sharing and caring. Children also voiced their thoughts through self-composed poems. A skit was presented by the children depicting the importance of balancing intellect and wealth in the context of worshipping Goddess Laxmi and Lord Ganesh on



Diwali. It was followed by the story of 'Ramayana'.

A dance on 'Laxmi Stotram' was also performed followed by the students passing on the diya wishing everyone a blissful Diwali. The beautiful day came to an end with

an 'arti' performed by the students and thus, spreading positivity and spirituality.

During the occasion, results for the talent hunt were also announced followed by a beautiful presentation showcasing the Diwali crafts done by the students.

School principal, Swarnima Luthra appreciated and motivated the students to follow the path of generosity and benevolence. The programme culminated with a vote of thanks by school coordinator Sushma Kalra.

A TREK TO REJUVENATION

Recently, I had visited the hill station of Kalimpong. It was a quaint little town, and I felt like I was a character in one of Ruskin Bond's stories. The skies were clear, the air was clean and there were trees everywhere. After two years of being confined in my house, an escape from the city was a pleasant and much needed one. I had gone with a number of friends and my favourite memory is playing Bluff with them at 3 am in the morning in our hotel room. I had bought 'Norwegian



Wood' by Haruki Murakami at the airport. Sitting in front of a window with

a view of the mountains and sipping hot tea is one of my fondest memories. We went trekking as well, and had lost our way while going back to the hotel. But Google

maps came to our rescue and finally trudging our way through the mountainous roads we made it back to the hotel. Hill stations are known for their little coffee shops and roadside Maggi stalls. Kalimpong for one did not disappoint me. We played a lot of board games accompanied by a lot of good food served in our room. I enjoyed myself thoroughly and after four days of good food and travelling, I came back home rejuvenated and was able to get

back to my studies with new vigour.

Uditi Saraogi, class X, Sushila Birla Girls School



One day of banning crackers is not enough to control pollution

Diwali is the festival of lights, celebrated in billions of homes in India. The diyas and sweets are it's ornaments, likewise crackers adorn the festival for children. It's their way of honouring the festival, their tradition. But 'crackers', the word itself raises the evidence of pollution. It demolishes the environment, pollutes the air we breathe.

This whole debate about banning crackers is quite palpable. From what I think it doesn't matter if you burn crackers this Diwali or if you don't. It's not about one day, it's about our daily lives. Banning crackers stops pollution for a day but

FOR what about the times when we ourselves pollute the environment, when we use our own vehicles instead of public transport knowing the fact that it will only add to the pollution. The smoke from industries is far more destructive than these crackers. Even if we do ban crackers for a day, there are other factors which add to the pollution. If we want to minimise pollution, we need to take small initiatives everyday, and not just one. Diwali should be enjoyed without setbacks. Children look forward to bursting crackers



and enjoying sweets during Diwali, let's not snatch their joy. As for crackers, we can minimise the amount we use and for pollution, take steps daily to reduce the damage we do to nature.

Zainab Iqbal, class XI, St Sebastian's School, Kolkata



DEBATE

world to be a better place and most importantly give fresh air to breathe for us and the generations to come.

Harsh Kumar Agarwal, class XI, National English School, Kolkata



AGAINST

WILLIAMSON TO SIT OUT T20 SERIES

NZ skipper to focus on tests as the Kiwis begin tour of India

New Zealand captain Kane Williamson will skip the three-game Twenty20 series against India this week to prepare for the test series that starts this month, the team said on Tuesday. The first T20 game will be played on Wednesday in Jaipur, three days after New Zealand's World Cup final loss on Sunday. New Zealand said it has decided to allow Williamson to prepare for the two red-ball matches with the test squad. Tim Southee will captain the T20 side.

Southee and team mates Kyle Jamieson, Daryl Mitchell, Glenn Phillips and Mitchell Santner are set to join the test squad when the series begins in Kanpur on Nov. 25. The second test starts in Mumbai on Dec. 3.

BIG NAMES MISSING

India will have big names missing for the test series but New Zealand coach Gary Stead believes the hosts will still provide a major challenge. Indian captain Virat Kohli has decided to skip the first of the two tests while batter Rohit Sharma, wicketkeeper Rishabh Pant and fast bowlers Jasprit Bumrah and Mohammed Shami will miss the series. "They're still very, very strong," Stead said from Dubai after the 'Twenty20 World Cup final.

"When you go to India you traditionally think of spin-friendly wickets and I still see (Ravindra) Jadeja,

BOULT TO MISS TESTS

India's Test batters will be relieved that Trent Boult will not bend a few into the right-handers as the Black Caps' leader of pace attack feels that he needs to refresh and rejuvenate after 12 weeks of continuous cricket. Boult is in India for the three-match T20 International series but will head back home from Kolkata after the final white-ball game as he takes a break before being back against Bangladesh for a home Test series.

"World Cup is a very big stage but probably second to that is playing India in India. I think boys are definitely looking forward to it and just adapting to it and reading the wicket is going to be a big play over here as well," Boult was quoted as saying in a video released by 'New Zealand Cricket'.



Trent Boult

(Ravichandran) Ashwin and Axar Patel in their line up. "They are obviously guys that have performed really, really well for them in the past three or four years."

EXPECTING BIG CHALLENGE

New Zealand will be looking to rebound from their loss to Australia in the World Cup final but their squad will also be without a few familiar faces. Seamer Trent Boult and all-rounder Colin de Grandhomme opted out of the tour because of the prospect of spending more time in bio-secure bubbles, while batsman Devon Conway broke his hand at the World Cup.

Test regulars such as Ross Taylor, Tom Latham and Neil Wagner will, however, return to the fold as the Black Caps seek a first series triumph in India. "We know it's going to be a big challenge there," Stead added. "(But) we have some new guys, who will be nice and fresh, and maybe add a different dynamic to the squad."

The series will include the first meeting between the countries in the longest format since New Zealand beat India to win the inaugural World Test Championship in June. "It's our first chance... to get out there and look at how we go about getting into the final again and defending what we won six or seven months ago," Stead said.

REUTERS

Kane Williamson



Photo: GETTY IMAGES

ENGLAND SEAL WORLD CUP SPOT

Harry Kane scores four goals in lop-sided 10-0 rout of San Marino

Harry Kane scored four goals in England's 10-0 demolition of San Marino as Gareth Southgate's side made official their place in next year's World Cup finals in Qatar on Monday.

In truth England needed only a point against the world's 210th and lowest-ranked footballing nation to seal top spot in Group I so the only real question was how many goals they would deliver to mark the occasion.

Kane duly filled his boots, following up his hat-trick in the 5-0 win against Albania on Friday with four goals before half-time, including two penalties, swelling his England tally to 48 to move joint third on the list alongside Gary Lineker.

Harry Maguire began the rout with a sixth-minute header and Filippo Fabbri scored an own goal before Kane took over to put England 6-0 ahead before half-time. Emile Smith-Rowe marked his first England start with the seventh and even after

We cannot do anything about the level of opposition but the mentality and the way they (England's players) applied themselves was terrific.

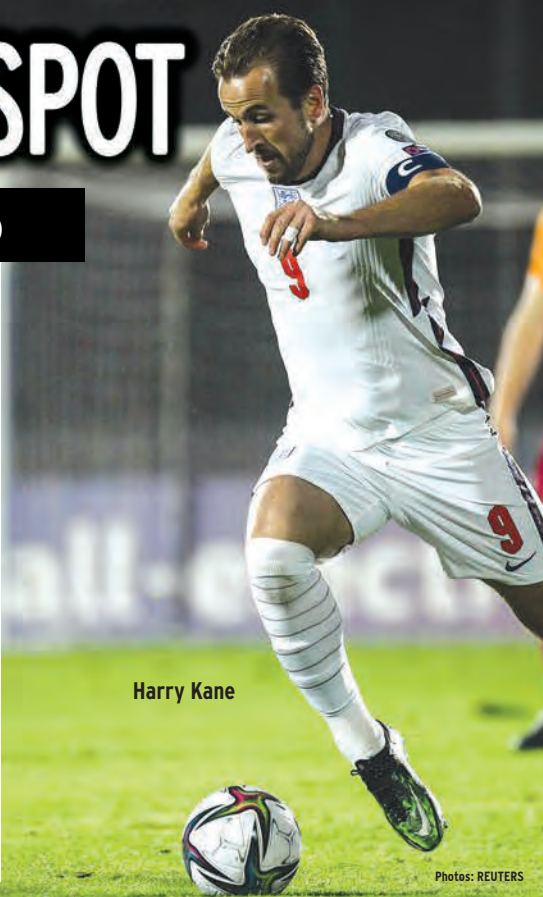
England manager, GARETH SOUTHGATE



ball. It was also the first time England had scored 10 in a match since a 10-0 rout of the United States in 1964.

HIGHEST TALLY

In topping the group by six points from Poland, who rested Robert Lewandowski and lost 2-1 at home to Hungary, England scored 39 goals, their highest tally in a qualifying campaign. All that must be countered by the fact that as well as playing San Marino, who have won once in 186 internationals, England also faced Andorra who are not much better. Things will toughen up from now on but they will arrive in Qatar as one of the favourites. Southgate made seven changes to the side that beat Albania with Maguire one of those remaining and his thumping header from Phil Foden's corner got things going. AGENCIES



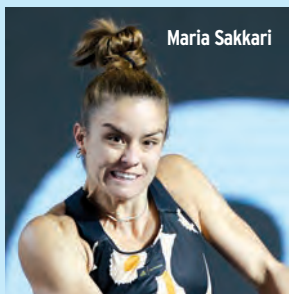
Harry Kane

Photos: REUTERS

SAKKARI WINS SABALENKA SLUGFEST, MAKES SEMIS

Maria Sakkari won a rollercoaster match against Aryna Sabalenka 7-6(1) 6-7(6) 6-3 to advance to the semi-finals of the WTA Finals, where the in-form Greek will meet red-hot Estonian Anett Kontaveit.

In a battle between two of the game's biggest hitters, Sakkari battled back from a break down and pounded three aces in the first set tiebreaker to take the early lead in the win-or-go-home group match. Sabalenka came out on the winning side of a wild second set, unleashing a punishing backhand winner to convert her fourth set point and bring the Guadalajara crowd to their feet. Sakkari's fitness proved the difference in the deciding set and she pumped her arms triumphantly when a worn down Sabalenka misfired on



Maria Sakkari

Photo: GETTY IMAGES

match point in the high-altitude Mexican city.

"It was a rollercoaster match from both of us," said Sakkari, who had lost in her four previous meetings with the Belarusan.

"I was up a break, then she was up a break. It was just a matter of who took the chances. I think at the end I just played with my heart and fought well, just turned things around." REUTERS

QUIZ TIME!

Q1: Which male tennis player won the most number of Grand Slam tournaments?

- a. Rafael Nadal
- b. Roger Federer
- c. Novak Djokovic
- d. Pete Sampras

Q2: Who was the first Indian captain to hold the IPL trophy?

- a. Virat Kohli
- b. MS Dhoni
- c. Sachin Tendulkar
- d. Rahul Dravid

Q3: Who took the first hat-trick in an IPL match?

- a. Yuvraj Singh
- b. Irfan Pathan
- c. L Balaji
- d. Yusuf Pathan

Q4: Which IPL franchise did Indian cricketer Yuvraj Singh never play for?

- a. Bangalore
- b. Kolkata
- c. Hyderabad
- d. Punjab

Q5: How many medals did India win at the Tokyo Olympics 2020?

- a. 5 b. 6 c. 7 d. 8

Q6: Antoine Griezmann scored his 42nd goal for France. Whose record did he overtake?

- a. Michel Platini b. Thierry Henry
- c. Olivier Giroud d. Zinedine Zidane



Antoine Griezmann

Photo: AFP

Q7: Who is the all-time top scorer at the finals of the FIFA World Cup?

- a. Djalma Santos
- b. Antonio Carbajal
- c. Miroslav Klose
- d. Philipp Lahm

Q8: Which of the following teams was not a part of the Big Four of the 2000 decade?

- a. Arsenal
- b. Liverpool
- c. Everton
- d. Chelsea

Q9: Who is the all-time top scorer at the finals of the FIFA World Cup?

- a. Djalma Santos
- b. Antonio Carbajal
- c. Miroslav Klose
- d. Philipp Lahm

Q10: Name the first Indian triathlete to compete in Ultraman?

- a. Kaustubh Radkar
- b. Anu Vaidyanathan
- c. Abhishek Mishra
- d. Arunaabh Shah

ANSWERS: 1. b. Roger Federer

2. b. MS Dhoni 3. c. L Balaji

4. c. Hyderabad 5. c. 7 6. a. Michel Platini

7. c. Miroslav Klose 8. c. Everton

9. c. Miroslav Klose 10. d. Arunaabh Shah