Pasant Palley

December, 2012 T 0 D A Y

WHAT DO YOU FEEL?

I thought and thought, about a cover page article. One that would do justice to the year that I've spent as Editor, as a prefect, as a student in her last year of school life. And that is when I realized that what I needed to sum up were the feelings hooked onto everyday occurences. The feeling of not being able to do something ever again, the feeling of grasping every opportunity, every chance that arrived at our doorstep. This very feeling of welcoming every single challenge that came knocking on our door is what drove me, to experience it over and over again; use the exposure that Vasant Valley School provides to its maximum potential, and ultimately challenge myself. 'Raising the bar', initiated by Mr. Arun Kapur aimed at attaining this very feeling, of challenging ourselves, of embracing ourselves and celebrating ourselves.

Visiting *kusumpur pahari*, the slums on the periphery of the school opened our eyes to a world where satisfaction was attained by toil, determination, yearning for knowledge and education. The weeklong Mindfulness workshop showcased the wonders of life, the desires, and the unhappiness, all quenched by self-actualization, meditation and awareness. Visits to villages and museums exposed us to different scenarios where people, just like us, faced obstacles in their everyday lives, the difference being that their stories were those of success and commemoration because they strive to overcome these hurdles that form life. Studying glorious histories, profound political philosophy, social predicaments and economic theory instilled the feeling to explore, observe and know. The practicalities of physical, chemical, biological life embedded an everlasting feeling, yet again, one of curiosity and security comforted by the facts of science.

Indian and Western Music as well as Dance competitions exemplified the feeling of innovation, adaptation and pride in ones talents, all amalgamating into achievements, hard earned and well deserved. Every exhibition by the students of art displayed feelings, of narration, imagination and aesthetic creation. Every debate was an accumulation of opinionated, logically coherent, rational, passionate feelings. Every football and basketball match, every race from "Get, set, go!" to the finish line, was a feeling for every student, one of excitement, nervousness, desire, ambition and triumph. Such feelings of commitment and perseverance, of holding up team members after winning a match, or posing for photographs wearing jangling medals or holding polished trophies, are indescribable, and so find the need to be relived, recreated and reminisced over and over again.

The reason I've emphasized on some of the main events of this year is because I feel that somewhere, somehow, a link between these feelings and expression of the same is not being fixed, a gap between these memories and their recreation is not being bridged. There are grave issues facing countries all over the globe, from economic crisis, to political upheaval, dictatorial aspirations, social oppression and communalization of politics. Vasant Valley Today aims at reporting such issues of immense consequence to world citizens, urging the student body to think, absorb and react. Instead of shutting down feelings, the Newsletter is a medium for you to voice them out, share them and think differently. So, in the coming year, let us try to combine the outside world and our world, placing our schooling within a national and international framework. In the coming year, let us try to feel events, issues and causes, and stand up for what we believe in. In the coming year, let us be able to form our own opinions, shape our own attitudes, and let Vasant Valley Today be an amalgamation of feelings, of today and ideas, for tomorrow.

Vandita Khanna, 12

SCHOOL WATCH

<mark>Sanskrit Shabda Gyan Pratiyogita</mark>

Class 6

1st Kabir Singh and Rabiya Gupta

2nd Jai Arora and Ashutosh Trivedi

3rd Amay Gupta and Suryadip Bandyopadhyay

Class 7

1st Jenin Singh

2nd Divij Chandna, Abhishek Pathak,
 Abid Irfan, Akanksha Bajaj, Arshya Chopra,
 Avarokin Raj, Devika Vir, Ishita Malhotra,
 Pranavi Ahuja, Rishabh Suri, Simonil Jassawala
 3rd Siddhartha Arya, Kanishk Ali Khanna,
 Viha Sharma

Class 8

1st Diya Narag

2nd Gurleen Badal

3rd Nikita Dhawan

Class 9

1st Rishabh Periwal and Paras Marya

2nd Sukhmani Singh

3rd Ishita Aggarwal

Class 10

1st Aanya Bhardwaj and Ananya Jain

2nd Indraneel Roy and Shantanu Puri

3rd Aanya Dalmia and Isha Gupta

Sanskrit Rachnatmak lekhan:

Class 8

1st Diya Narag

2nd Kavya Sharma

3rd Nikita Dhawan and Manav Mitra

Impact: A Celebration of Science

Best Straw Bridge: Vasant Valley School Best Sci-innovation: Modern School,

Barakhamba Road

Best Digital Poster: Modern School,

Vasant Vihar



The Scientific Proposal

We go about our daily lives understanding very little of the universe around us. We give little thought to the mechanism that generates sunlight or the twinkling of the stars or the gravity that glues us to the earth's surface or the atoms and cells, which are the fundamental elements of our dependence.

Often young minds arise in every other classroom with that mental edge which allows them to think of the unusual and question it. Their questions are usually met with a shrug or ignorance by parents and teachers.

Many a time, children speak of names like Albert Einstein, Stephen Hawking, Dirac, Robert Hooke etc. Why these names? The answer is simple. The universe was made a little simpler a little more comprehensible because of them and due to their contributions we today have a universe, which we not only understand but also interpret as our own. The worlds most famous equation $E = mc^2$ or the record breaking bestseller 'A Brief History of Time' are those principles put forward by them which have shaped the universe. In Latin, 'Science' is briefly defined as 'knowledge', while the common definition would be- it is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe.

But have you ever asked yourself what the universe really is? What do we know about it? How do we know it? Did it have a beginning? If so what happened before that? Where is it going? What is the nature of time? Will it ever come to an end? What is our future then? Perhaps another Big Bang or will gods wrath really cause tsunamis and volcanic eruptions, which covers the planet with lava and water at the same time ripping it apart from its very geological core?

Several of these questions still remained unanswered. With each mind turning towards science its future grows brighter. The world could use some excess light at this point! Keep looking for you never know what you'll find! A great man once said "No amount of experimentation can ever prove me right; a single experiment can prove me wrong.

We must strive forward in the field of science with contributions from the young minds flowing in which aim simply to be the -Best.

'Giving science another chance and the dazzling universe another glance!'

-Preenon Majumdar, 10



TEDx Youth - Delhi

The Ted youth talks mainly aim at motivating and inspiring young people. On the 1st of December speakers from all over the world came to promote this concept of spreading awareness, this time amongst the delhites. It was truly a marvellous spectacle.

At first I expected long and boring speeches the entire afternoon, but to my surprise they were all concise, and put across their point through laconic speech but impactful words. The speakers were even more inspiring than I had imagined. Some of them included:

Arthur Benjamin- He is known for his mental maths capabilities and mathemagics performances

Jordan Casey- A 12 year old from Ireland who is the youngest founder of a programming Company (at 9). He launched a multiple hit virtual world which got a million hits. The small boy, with his crisp Irish accent took us by surprise and envy of his charming and talented nature.

Lior Suchard- The Mentalist was a witty supernatural entertainer with an extraordinary talent for mind reading. He left everyone in awe of his unique and enigmatic demeanour.

Eduardo Straunch- one of the few survivors of the 1972 plane crash in the Andes, he survived for 72 days under the most inhospitable conditions on human meat.

Rajdeep Sardesai- A highly influential Indian journalist, he is the editor-in-chief of CNN-IBN and a well known and respected political

commenter.

From the wide array of speakers the talk covered all aspects and walks of life....

It was a great learning experience for everyone present and even though the speakers spent little time with us, it had a profound impact on us and it was a great learning experience for all of us.

Anya Bharadwaj, 10

सपनों की दुनिया

फिर से वहीं सोचना, सपनों की दुनिया, पैंसिल मेरी घिस चुकी है, सोच सोच कर सपनों की वही दुनिया। मम्मी बोले सोचो अगर सारे विषयों में नंबर परे आ जाएँ, पापा कहते कछ कर दिखाओ तो सब मान जाएँ, आकाश से बच्चे तारे भी तोड़ लाएँ, फिर भी सपने खत्म न हो पाएँ। किन किनके सपनें मैं पूरे कर दूँ, यहाँ तो पूरी लिस्ट बनी है तैयार, अब कुछ जल्दी नहीं किया तो, सपनों के वजन से हो जाऊँगी बेहाल। पर एक बात मुझे है कहनी, मुझे भी है सपने देखने का शौक, हर बार दिल मॉगे थोड़ा और। एक छोटा सा देखा सपना, हर पल हर रोज बस मेरा यही है सपना हे भगवान हे प्रभ विल गेट्स अपना सारा काम धाम सब कुछ कर दे मेरे नाम

पर पता है मुझे, कॉच की तरह होते हैं सपने, इतनी आसानी से जुड़ जाते हैं, और एक पल में टूट जाते हैं। सपने हैं गुव्वारों की तरह, कहाँ से कहाँ ले जाते है, आसानी से हाथ लग जाते है, कभी आसमान भी छू लेते हैं। शिया डावर 6



A Football Club's Manager, A Short Time Role Or A Long Time One?

Football, the world's most popular sport, played by approximately 250 million people in over 200 countries, is also one of the sports which is regularly injected with money via rich billionaire owners. This huge cash supply is then handed over to the respective club managers and this is when their greatest dream comes alive or the have just said "hello" to their worst nightmare ... A football club manager is responsible for many events such as:

Selecting the team of players for matches, and their formation; Planning the strategy, and instructing the same on the pitch; Delegating duties to the first team coach and the coaching and medical staff; Scouting for young but talented players for eventual training in the youth academy or the reserves; Buying and selling players in the transfer market, including loans; Facing the media in pre-match and post-match interviews and many more events depending on their club etc.



I believe that football is a sport as well as a religion for many of us, and at the end of the day what matters is the progress of your respective club. But due to the billions of dollars being pumped into the sport, it has sadly turned into a very investor controlled game with the current wants of the owners being the priorities instead of really focusing on the long term benefit of the club. Yes the investors are important; they are really the people who keep the club alive but is a financial acumen the only the defining factor for football? Lets look at the case of the incredibly talented and successful club of the Russian tycoon Roman Abarahmovic, since he has bought the club in 2003 Chelsea FC have had 8 managers who have been fired for diverse reasons over the years. The most recent example being that of the exceptionally talented Roberto Di Matteo. A few questions can be raised

regarding the highhanded expulsions. On the whole the results were positive during the tenure of these managers... the club became European champions for the first time, won 12 trophies after the take over by Abarahamovic and have many outstanding

achievements to its credit including becoming profitable for the first time, being completely out of debt etc. but what I am firmly against is the fact that the owner of a club can single handedly make a decision affecting the 11 most important men of the organization. Arbitrary, off the cuff decisions based on myopic short-term viewpoints cannot contribute to a stable legacy of success. The success of the manager should be measured by the contribution to the future he can make and to the longevity of success. The manager's role should not be limited to winning battles but to ensure that the war is won. But in Di Matteo's case the journey of creating a legacy was seized well before the full time whistle could be blown.



Sirhaan Seth, 9

'Kuch Nahi Badla' Series.

It was as if the outstanding 8 overseas losses didn't hurt the Indian side enough that they chose to treat the mighty English very lightly and the results are to show for it.

It's pretty simple, the English were a better side, be batting, bowling or fielding and clearly outperformed the Indians in all aspects of the game. But what were the contributory factors which lead to our team being ousted by young English side?

#1: Casual Attitude

India's casual attitude has often been slammed after all major losses. So was the case once again. The players were often late for morning training and many members were seen at the local markets, pre and post the matches. Ex-captain Sunil Gavaskar was also seen lambasting the team for indulging in a game of football soon after the series loss.

#2: Lack of preparation

While the visitors arrived in the country, 3 weeks in advance, the Indian side only began training 3 days before the first test. After the loss at Mumbai, the English were quick to overcome their fatigue and arrived in Kolkata a good four days before the next test, however the men in blue, extended their weekend and only made it to the city of joy, two days in advance.

#3: Pitch Talks

Despite winning the Ahmedabad Test by 9 wickets it seemed like India's focus was on the pitch. Captain Dhoni made strong statements about the track and asked for spin tracks. This triggered a controversy ahead of the third Test in Kolkata where the pitch was more talked about than all other factors.

Dhoni and Co. would have done well to concentrate on their game rather than worry about the pitch.

#4: The High of early Victory

The nine wicket tornado which seemed to crumble the English was indeed fatal for the Indians. Having tasted early victory, the men in blue looked to be more relaxed and approached the next match casually.

Alastair Cook led by example and started his onslaught which would only end with sunken heads all over the sub continent.

This maybe the biggest defeat in recent times, however, i am positive, that with necessary frontline changes and a desire for victory, the Indians will overcome this setback and bounce back to pristine form.



-Shaurya Abhi, 10

THE KINDLE VS. CONVENTIONAL BOOKS

It doesn't come as a surprise, that now, due to technology, books are being replaced, too. Newspaper stories have been reduced to Twitter's trending topics, aging photographs have been immortalized in iPhones, and now books are following suit. This innovation has received a lot of criticism; you can't flip through a book, turn pages in the same way with a Kindle.

The Kindle does come with its advantages. Despite the disapproval from avid readers, the Kindle actually benefits less well known and self-published authors. With its browsing facilities, the Kindle no longer disadvantages authors who do not have the marketing advantages of agents and publishers available to them. Thus, talented yet lesser-known authors do get their time to shine. In standard publishing contracts, authors generally receive royalties of around 10%. Standard eBook contracts, however, have a royalty rate of between 25-50%. Therefore, eBooks have resulted in the shutting down of many stores, but the question here is, is it worth it? They are, in fact, giving writers more opportunities to write. Also, the zoom-feature, which provides large print, the fact that you can carry a whole bookshelf in your backpack, and the risk-free factor (No stains, bent pages, etc.) are some of the reasons why people seem to love this machine. No waiting, either - as Kindle books arrive in seconds. The youth these days would prefer to read a book on a screen rather than take a trip to the store, only to find nothing interesting enough. For those readers, the Kindle has a wide browsing range, which would interest them.

On the other hand, you don't get the turned page corners, dusty aromas and bent spines that make your long-loved book different from the millions of other books published. The trek to the bookshop, browsing the shelves, and the tactile elements of books are what you do not get while sliding your finger across a white screen. For the avid reader, I think the conventional book has its own charm, and is one thing that, for me, cannot be replaced by technology.

-Noor Dhingra, 9

Lance Armstrong - A Fallen Hero

Lance Armstrong is one of the most recognised and respected sportsmen worldwide. He successfully fought testicular cancer and went on to win a record 7 Tour de France titles across a career filled with endorsements and adulation.

Rated as one of the 'cleanest' and most 'tested' athletes in history, he was revered for being a true athlete in a sport clouded by drug abuse. This is why thousands of fans were appalled and heartbroken at the shocking revelations that Armstrong systematically took performance enhancing drugs throughout his career and regularly beat the 'testing' system. Many of his former colleagues/cyclists have now come out against him to reveal his drug abuse to USADA, the anti doping organization of America, resulting in him losing all his titles, endorsements, and respect. He has also had to step down from his own foundation against cancer, Livestrong.

This incident has shaken people's faith not only in Armstrong, but, in sportsmen everywhere. It has revealed the price sportsmen are willing to pay for success, and the premium we put on winning. The difference in coming first and second place is monumental in

terms of prize money, endorsements, and stardom. After all, who remembers the silver medallists in any championship? This 'pressure to win' makes sportsmen succumb to unfair methods to win. Today, Armstrong has lost everything, and is just another fallen hero, but before blaming him, we need to ask ourselves - is it entirely his fault?



Riddhima Wahi, 10

Why Are You Reading This Article?

Every Friday afternoon, the more dedicated members of the newsletter editorial board sit down together to work on the next issue of 'Vasant Valley Today'. These hardworking students juggle their school work with their newsletter obligations, tirelessly writing article after article without a word of a complaint, and the question arises, 'who are they doing this for?' Naturally, it is assumed that the newsletter is for the students to read, and so a great amount of thought goes into making articles that would catch the eye and entice people into reading them. However, speaking from personal experience, the only people who are really interested in reading the newsletter are the ones who have made some contribution to it. When I first joined the newsletter in class 9, I wrote an article almost every issue and being a contributor myself, I was curious to know how the issue turned out. Recently, my articles have become shorter and rarer, but you will see more of me in the coming year.

So why are you reading this article? Well I'm sure the name written at the bottom has something to do with it, but why *should* you be reading this article? You should be reading this article because you should be curious to know how this particular issue of our newsletter turned out. You should be a regular contributor and take time out of your not-so-busy schedule to share your thoughts here, on this wonderful tradition our school has somehow kept up over so many years (it's a miracle!). At the end of the day, the newsletter shouldn't be 'By the Ed. Board, for the students' but rather, 'By the students, for the students', as is every organization that has any chance of being successful.

Bharat Somanathan, 11

Love Letter

"Brown paper packages tied up with string, these are a few of my favourite things" as Julie Andrews so eloquently put; Love Letter packages are everyone's inner most desires. A girl's heart can never be more elated then an awaited letter by her man. Verbal memories are cherished and secure a place close to the heart, but those handwritten often evoke deeper emotions when read and then re-read.

Historically courageous men such as Henry the fifth wrote tender-hearted letters to their wives while away in war. It was the age where a pen paved way for romantic relations. These letters were symbolic of his devotion towards his sweetheart and hers' towards him. Today, however this institution fails to gain recognition. Deep emotions and overwhelming declarations of love have been reduced to abbreviations of incorrect English and emoticons. So the question arises: Does this mean that those emotions don't exist? And if they do, why can't they be portrayed as they are felt? So, as we all sit around waiting for cute bbms, texts etc. Girls, know this; it'll never be as impactful as holding a letter from your beloved expressing the same. And to all the members of the opposite sex, don't leave your ladies pining for words, and elaborated emotions. Write a love letter.

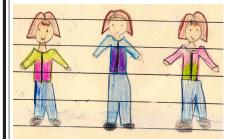


Mallika Kishore, 10

Winter

Winter is so much fun Even without the sun.

I'm having a picnic on a bright day, When I see the sun, I run out to play. Under the blanket, drinking hot soup,



My mom doesn't allow me an ice - cream scoop.

I get up in the morning I see the fog, My parents don't let me go for a jog. I feel scared to take a bath,

My mom just says- its cold in the start.

My sister and I play in the snow, It is soft and not tough to throw.

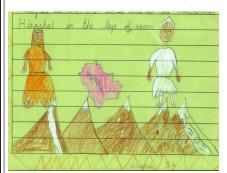
Ayzra Dang III- A

Himachal Pradesh

Himachal, up in the mountains, Himachal is in the lap of snow. It is glowing with hot springs, Himachal is famous for its apples. It has Shimla as the capital, Chamba, famous for it's 'rumal'. Mandi, known as "Varanasi of the Hills",

Dharamshala, the "Scotland of India"!

Kullu Valley the "Valley of the gods",



People from all over the world come here to see Dussehra. Himachal is in the lap of snow.

Suyash Das Gupta III - B

Book Review

I recently read a book 'How To Steal A Dragon's Sword'. It's author and illustrator is Cressida Crowell. It is from the series 'How to train your dragon' and is meant for 8 to 12 year olds. I chose to write about this book as once I started reading it, it was hard for me to put it down. It is set in an archipelago featuring a young boy Viking called Hiccup Horrendous Haddock the Third, who is the heir of the tribe 'Hairy Hooligans'. The book has three more main characters, two of them are Hiccup's best friends, Fishlegs and Camacazi and Hiccup's hunting dragon, 'Toothless'. It's genre is fiction.

The plot is all about the time Hiccup and the younger Vikings have to climb up the Angry Mountain, the hard way up to reach the best school of sword fighting to be finally declared as proper Vikings. Meanwhile evil Dragon Furious is plotting a dragon rebellion. At the school of sword fighting awaits an evil witch, Excellinor, who is an outcast and secretly wants her son, Alvin, the treacherous to be the king of Wilderwest. So she organizes a sword fighting competition and whoever wins will be the next king. All the tribes do not agree with this at once as they have not had a king for long. The last one being Grimbeard, the ghastly. The Vikings did not like to be ruled. During the last match of the sword fighting competition, all the dragons turned against their masters, all except for Toothless. Would Hiccup be able to stop the dragon rebellion and save them all before it's too late? You'll have to read the book to find out!

I was fascinated by the names the author has given to the characters e.g. Snoutlout, Lard Tummy Lo-Watt, Stoick the Vast etc. I loved the way Cressida Cowell ended the book with a question, which made me eager to go and buy the next book of the series. The one thing I did not like about the book was that the two Vikings, Snoutlout and Dogs Breath kept on teasing and hitting Hiccup and Fishlegs. I recommend this book, as it is breathtaking and heart stopping.

Reana Soni IV - C

An Adventure in the Sea

My family and I went scuba diving in the Arabian Sea. While scuba diving I saw a 'giant devil fish'. It was big and green and covered with red spots all over. It's eyes were burning red and it's teeth super yellow. It was as big as our school or maybe even bigger.

Suddenly it caught a glimpse of me and started chasing me. I swam as fast as a rocket through corals, shipwrecks and more. I was saved from it's bites but it's fin did hit me on the head and caused a big bruise. Then I saw a black thing coming towards us. I thought that another giant devil fish had come. I quickly swam to hide under the corals and found my family hiding there too, so I went to hide with them. Then I saw 10 other black things appear. I asked, "Is it someone's birthday and we are the meaty cake?"

Then I saw the black things shooting missiles and that also on the giant devil fish! It was very peculiar. Then I understood that these were submarines of the MKF (Monster Killing Federation). Luckily, they had found us and things went back to normal.

Raag Yagnik Setia IV - C

मुझे प्रकृति से प्रेम है

हमारी सुंदर प्रकृति, हमें क्या - क्या देती

> हरी - हरी घास गाय को खिलाती, फूल की खुशबू मुझे लुभाती।

हमारी प्यारी प्रकृति,

सब कुछ सुंदर बनाती,

हमें देना चाहिए सम्मान, क्योंकि ये है जैसे एक वरदान।

हमारी सुंदर प्रकृति, हमें क्या - क्या देती,

मुझे तुमसे प्रेम है,

हमारी प्यारी प्रकृति कहती।

एशवर्या आर्य पाँच - स



Foundation
"Getting Ready for a New Year"

THE MAN IN UNIFORM

The sun shone, so bleached and bright, All the eye could see, was draped in light, But betwixt spiked grass and cattle, A man in uniform strode home from battle. He lost all his friends to bombs and bullets, He had no parents, he never did, But his dearest fere, was still alive, To whom, he was going to arrive.

A woman so perfect, her lips ruby red, Eyes so deep, they'd speak without anything said, Her hair, so brown, reaching up to her knee, Like a wave drifting through a smooth sea. As he stepped on her porch he heard her laugh, He shivered, down from his head to calf, He walked up slowly, on the wooden stairs, To see his lady, she was as fair as fair.

As he opened the door to her room, it creaked, Inside, with care, he silently peeked, She was beautiful, covered with a perfect tan, But wait! There was another man! Her eyes fell on him, he fell sick, The loud silence, filled the room so quick, His heart shattered like broken glass, He felt pain, in every bit, in every mass.

He ran downstairs as fast as he could,
Vibrations quivered through every tile of wood,
She called for him, he didn't listen,
He assumed that she wouldn't hasten...
He ran and ran till he couldn't any more,
Till every bone in his body fell sore,
He then realised he didn't have anybody near,
His only companions were his body, and a silver tear.

He felt broken, he felt used, but his heart, It was forever bruised, In the middle of nowhere, on warm golden sand, We found him with a note clenched in hand... It read, 'I'll love her forever'. Yet, he believed she loved him never. Rumours, here and there, they flew, But the guilt she felt, nobody knew.

She finally decided to let go of her life, Blood splat all over the silver knife, Her life was beautiful but it wasn't bigger than the love she felt for him, The mistake she madesuch worthless sin.

The mistake she madesuch wortness sin The pain she felt she couldn't bear For him, oh! How much she did care By his grave, lying cold, we found her, with his picture in her hand, Her feet burnt by the warm golden sand.

But still, the sun shone, so bleached and bright, All the eye could see, was draped in light, But betwixt spiked grass and cattles A man in uniform strode home from battle...



:Mehr Mehta, 8

The Social Tool

Social Media brought a new dimension to the US presidential election this year that has never been seen before. Candidates during previous campaigns appealed to voters through rallies, speeches and by using the radio and television advertisements. This year however, campaigns spread their messages instantly and interactively through the Internet's social media. Obama and Romney both used various facets of social media to spread messages, to raise money, and to motivate voters to get actively involved. The two candidates had different strategies when it came to social media. Ultimately it was the plan adopted by Obama's team that helped convert their followers into voters. This year's winner used the celebrity-like fan following that he had been able to cultivate during the last 4 years. His posts and pictures were interactive and engaging to the young population who account for the majority of people on social



media sites. On the other hand, Romney's strategy was boring and lacked innovation. His interactions were boring and the issues brought up were not something that got the younger generation hooked. It was this inability to effectively interact with this sphere that contributed to Romney losing this election.

-Armaan Grewal, 10

Our National Flower-More Than Just A Heritage

Lotus plants have superhydrophobic surfaces: water droplets falling onto them bead up and, if the surface slopes slightly, will roll off. As a result, the surfaces stay dry even during a heavy shower. What's more, the droplets pick up small particles of dirt as they roll, so that the lotus leaves are self-cleaning.

How does this happen? Due to their high surface tension, water droplets tend to minimize their surface by trying to achieve a spherical shape. On contact with a surface, adhesion forces result in wetting of the surface. Either complete or incomplete wetting may occur depending on the structure of the surface and the fluid tension of the droplet. The cause of self-cleaning properties is the hydrophobic water-repellent double structure of the surface. This enables the contact area and the adhesion force between surface and droplet to be significantly reduced resulting in a self-cleaning process.

Keeping this phenomenon in mind, Scientists at the IIT Delhi, as well as a German Chemical company, BASF, have designed products not only for industrialisation, but also for making the lives of people easier. While BASF have innovated waterproof wood, IIT Delhi is trying to add this pigment into clothes, so that clothes repel dust and dirt and remain clean without washing.

In my opinion this is just the beginning of a series of events-innovations, discoveries, and inventions-which are going to make a huge mark and contribute immensely to the evolution of Science.

Rishabh Chatterjee, 9

