MARCH 2025

THE COTTONIAN POST

EDITION NO.8

Annual Art & Craft Exhibition 2025

The Annual Art & Craft Exhibition 2025, held from 19th to 21st February, was a vibrant celebration of creativity, themed 'A Spectrum of Unity.'The event was inaugurated by Rev. Dr. Vincent Vinod Kumar, the esteemed Diocesan Secretary and Board of Management member, alongside The Principal, Vice Principal, Treasurer, Rev. Immanuel Nehemiah , Rev. Y. Justin and Mrs. Vinisha Nero.











The exhibition showcased paintings, sculptures, pottery, and handcrafted artefacts, blending tradition with contemporary expression. Some of the highlights of the exhibition were 'Little Wonders' by Lower Kindergarten guided by Mrs. Hema P, where young artists crafted birds, camels, fish, and finger-painted octopuses; 'Wildlife in Art' by Upper Kindergarten under Mr. Suraj R where students created tigers, giraffes, and paper-quilled porcupines; and 'Wealth from Waste' from Junior School led by Mrs. Bhagyalakshmi M J, Mrs. Helen Mary, and Mrs. Sujatha B, where students transformed discarded materials into stunning art pieces.

Middle School presented 'Expanding Skills' mentored by Mr. Ram Prasad S.Y where students explored glass painting, T-shirt art, pencil shading, and kite designing.'Masterpieces of Maturity' was brought out by the Senior & ISC students under Dr. Shridhara S. They displayed artistic finesse through canvas paintings and wood prints.
The exhibition drew an overwhelming number of visitors including parents, students, and art enthusiasts.The event was a resounding success, thanks to the dedication of our students, teachers, and volunteers. With high spirits, we look forward to an even grander exhibition next year!

"It is good to have an end to journey toward; but it is the journey that matters, in the end." — URSULA K. LE GUIN













A Legacy of Learning

Bishop Cotton Boys' School integrating value-based education and making learning practical and enjoyable for all-round development of the students

Bishop Cotton Boys' School (BCBS), managed by the Karnataka Central Diocese (KCD), Church of South India (CSI), has remained steadfast in its mission to impart meaningful education since its establishment in 1865 by Rev. Samuel Thomas Pettigrew. Inspired by the vision of Bishop Edward George Lynch Cotton of Calcutta, the school, often referred to as the 'Eton of the East, has seamlessly blended modernity with its rich traditions, vibrant history, and strong core values.

A private day-cum-boarding school affiliated with CISCE New Delhi, it offers ICSE and ISC curricula. The institution prioritises holistic education combined with character building, co-curricular activities, and sports. With an unwavering commitment to discipline and a strong spiritual foundation, the school focuses on developing young boys into responsible, mature, and sensitive individuals ready to face the challenges of tomorrow.

Ranked among the top schools in Bangalore, Karnataka, and India, BCBS proudly claims its legacy of producing young men with the courage and ability to chase their dreams.

Today, BCBS is home to over 7,000 students, a well-qualified faculty, and state-of-the-art facilities. From smart classrooms and well-equipped laboratories to expansive libraries and playgrounds, the school is equipped to meet the diverse needs of its student community, incorporating innovation and tradition harmoniously.

"I AM PRIVILEGED TO LEAD AN INSTITUTION THAT PRIORITISES ACADEMIC BRILLIANCE, CO-CURRICULAR ENGAGEMENT, AND SPIRITUAL GROUNDING. TOGETHER, LET US NURTURE THE LEADERS OF TOMORROW WHO WILL UPHOLD THE VALUES OF HUMILITY, COURAGE, AND INTEGRITY."

ALISTAIR R.A. FREESE
Principal, Bishop Cotton Boys' School

The school has also been privileged to host luminaries such as His Holiness the Dalai Lama, former Presidents of India—Dr A.P.J. Abdul Kalam and Shri Pranab Mukherjee—and Member of Parliament Dr Shashi Tharoor, among others. The illustrious alumni network includes figures like General K.S. Thimayya and Grammy winner Ricky Kej, affirming our role as a 'cradle of leadership.'

At BCBS, students are groomed to think globally and act locally. Civic awareness and social responsibility are integral to student life through our unique Uniformed Services Scheme. Every festival is celebrated with equal fervour, fostering a secular and inclusive environment.It is more than an institution—it is a legacy, a safe haven, and a place where lifelong friendships are formed. It is where students find joy in learning, nurture endless possibilities, and experience a 'home away from home.'

PRIDE AND EXCELLENCE: THE STORY OF BISHOP COTTON BOYS' SCHOOL

We are thrilled to announce that our school has been ranked #1 in Bangalore by Outlook Magazine in their school ranking! An achievement of this magnitude reflects the board members', the Principal's and faculties' continual commitment to excellence in both education and co-curricular activities. Furthermore, the dedication of both the teaching and non-teaching staff cannot be overstated. Finally, the achievements of us Cottonians have thrust our school to this position, showcasing our hard work and unity as one Cottonian family.

OVERALL

S.NO	SCHOOL NAME	BOARD	LOCATION	STATE	OVERALL RANK	CITY	CITY RANK
1	Bishop Cotton Boys' School	ICSE	RESIDENCY ROAD	KARNATAKA	1	BENGALURU	1
2	Chitkara International School	CBSE	SETOR 25	CHANDIGARH	1	CHANDIGARH	1
3	Presidency School	ICSE/CISCE	RT NAGAR	KARNATAKA	2	BENGALURU	2
4	Vantage Hall Girls' Residential Senior Secondary School	ICSE	DOONGA	UTTARAKHAND	3	DEHRADUN	1
5	Dhirubhai Ambani International School	INTERNATIONAL	BANDRA EAST	MAHARASHTRA	4	MUMBAI	1
6	Vasant Valley School	CBSE	VASANT KUNJ MARG	DELHI NCR	5	DELHI	1
7	Jain Heritage School	CBSE	HEBBAL	KARNATAKA	6	BENGALURU	3
8	Inventure Academy	ISCE, ISC, IGCSE	SARJAPUR ROAD	KARNATAKA	7	BENGALURU	4
9	The Mann School	NATIONAL	HOLAMBI	DELHI NCR	8	DELHI	2
10	Pathways World School	INTERNATIONAL	BALIAWAS	DELHI NCR	9	GURUGRAM	1



INTER-CLASS CRICKET TOURNAMENT JUNIOR – I

The junior school physical education department organized an Inter-Class Cricket Tournament for standard 3 students from 12th to 14th February 2025. The event was an exhilarating experience for both students and teachers. The tournament commenced with an inaugural ceremony graced by our Principal and Vice Principal.





The Junior-I cricket tournament witnessed a series of thrilling matches, culminating in the White Champs (3E) and Black Panthers (3F) emerging as finalists.
The final match was played with great enthusiasm, with cheerleaders bringing tremendous energy and supporting their teams with unwavering spirit. The White Champs (3E) clinched a nail-biting victory, showcasing exceptional sportsmanship.

During the ceremony, our Principal encouraged the teams to come up with creative names and even named two teams himself: Golden Hawks (3B) and Purple Warriors (3C). The Class Teachers also contributed unique names for their respective teams, as follows:

- 3A: Blue Rockers
- 3D: Yellow Raiders
- 3E: White Champs
- 3F: Black Panthers
- 3G: Orange Rangers
- 3H: Green Thunder
- 3I: Red Royals







The Principal presented the winners with trophies and medals, celebrating their well-earned triumph. A heartfelt gratitude is extended to our Principal for providing this wonderful opportunity for Junior – I to showcase the talents of our budding cricketers.

INTER-HOUSE SPELLING BEE



The Inter-House Spelling Bee Competition was held on 6th February 2025, with enthusiastic participation from the students of Junior I. The event aimed to enhance spelling proficiency, vocabulary, and confidence among young learners.

The competition featured five engaging rounds, including 'Word Wizardry', 'Picture Clues', 'Word Jumble', and 'Spot the Correct Spelling', for Standards I and II. Students of Standard III faced more challenging rounds, such as 'Clue Me In' and 'Rapid-Fire'. Each round tested the participants' ability to spell words of varying difficulty levels. The young spellers displayed remarkable enthusiasm, focus, and determination.

After an intense and closely contested competition, the overall winners were Thomas House, with Pope house finishing second and Pettigrew finishing third.The event concluded with a prize distribution ceremony, where the winners were awarded certificates in recognition of their efforts.

KINDERGARTEN ANNUAL DAY

The 35th Kindergarten Annual Day was celebrated with immense enthusiasm on the 22nd of March, 2025. The event was graced by the esteemed presence of the Chief Guest, Mrs. Keerthi Anantharam, and the Guest of Honour, Mr. Ajay Raj. Their inspiring words set the perfect tone for a morning filled with joy and celebration.







Parents, teachers, and well-wishers gathered to witness the remarkable performances of the young students. One of the highlights of the morning was the vibrant dance sequences performed by the children. Set to trending upbeat regional songs, the performances radiated energy and excitement. The rhythmic movements and cheerful expressions of the children brought immense delight to the audience. Parents beamed with pride as they watched their little ones perform with confidence and grace.

The fusion of colorful costumes, synchronized steps, and lively music created an electrifying atmosphere. Another remarkable segment of the morning was the theatrical presentation titled Just Being Me. The play beautifully conveyed the essence of self-acceptance and the joy of embracing one's true self. Through expressive dialogues and heartwarming performances, the young actors delivered a powerful message. Their sincerity and innocence added depth to the play's theme, leaving the audience deeply moved.

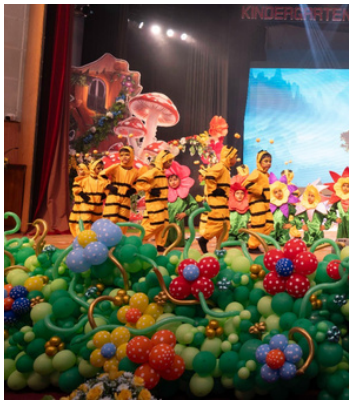








The entire program was a testament to the hard work and dedication of the students and teachers. Every performance was a reflection of the countless hours of practice and preparation. The flawless execution of the event was a result of meticulous planning and teamwork. The grand success of the Annual Day reaffirmed the creativity and talent of the kindergarteners. As the curtains drew to a close, the hall resonated with applause and appreciation. The morning left behind cherished memories and a sense of fulfillment.







AN ADVENTURE TRIP TO RAMANAGARA

A group of 100 students from Standard 8, representing the NCC (Army Wing), SAFE, SARS, and the Green Brigade, embarked on an adventurous trip to the iconic Sholay filming location in Ramanagara. The students arrived at the camp spot at 10:00 AM and were welcomed with refreshments and a cool welcome drink. After a brief introduction to the day's activities, the students were divided into four groups and sent to different venues for various adventure challenges, which included Zip Line, Rappelling and Rope Bridge.









Post-lunch, the students set off on a 2-kilometre trek through the forest, where they immersed themselves in nature and admired the breathtaking scenery. After the trek, everyone returned to the campsite and enjoyed a lively rain dance session. Later, tea and snacks were served to them. The boys returned to school, with a heart full of memories.

"People will forget what you said, people will forget what you did, but people will never forget how you made them feel."

— MAYA ANGELOU

PARENTS' ORIENTATION PROGRAMME

Bishop Cotton Boys' School hosted a comprehensive Parents' Orientation Programme for Grades VIII and X; this was designed to engage parents as "partners in progress." This session provided a detailed overview of the academic curriculum, particularly elective courses, as well as the school's rules, regulations, and co-scholastic activities, ensuring parents were informed about the academic year.









Mr. Dhiviyanathan J, ISC Coordinator, delivered the welcome address. Following him, The Principal, Mr. Alistair R. A. Freese, provided a detailed explanation of the diverse subject combinations available at the school. The parents were also briefed on the school's Code of Conduct. The ISC and ICSE Coordinators, along with subject teachers, were introduced to the parents, fostering a sense of gratitude and transparency.

The school's student counsellor addressed the emotional well-being and developmental expectations of Grade VIII students, providing valuable guidance on how parents can support their children's academic and emotional growth. An interactive session allowed parents to gain deeper insights into Cottons' pedagogical approach. Further, a discussion on co-scholastic activities provided parents with a clearer understanding of the school's emphasis on self-directed, experiential learning. The session concluded with a Vote of Thanks delivered by Mrs. Mercy Stanley, ISC Associate Coordinator, which was followed by the solemn rendition of the National Anthem.

SENIOR SCHOOL TRIP TO WONDERLA

The one-day trip to Wonderla was a much-needed respite for the senior school students, offering a refreshing break from the academic rigour of the third term. A total of 318 students from grade 9 embarked on this exciting journey on 24th February, accompanied by their teachers. The comfortable bus ride was filled with energy and enthusiasm as students enjoyed the camaraderie of their classmates.





Upon arrival, students were welcomed with a refreshing drink, setting the tone for an exhilarating day ahead. Their excitement knew no bounds as they explored a variety of thrilling land and water rides. The staff, too, found this trip to be a delightful escape, allowing them to rejuvenate before diving back into their academic responsibilities.

A sumptuous lunch buffet, filled with an array of tasty delicacies, was the highlight of the day. Students eagerly lined up to relish the unlimited, lip-smacking treats served with warmth and hospitality. By 4:30 p.m., the students gathered back, fully satisfied after an unforgettable day of fun and adventure. They returned to school safely, carrying cherished memories of this special outing.We express our gratitude to God, the Principal, and the Board of Management for making this wonderful opportunity possible for the students of grade 9 and the senior school staff.



AGRICULTURAL SCIENCES FIELD TRIP



On January 28th, the Biology and Biotechnology students of Class 11 at Bishop Cotton Boys' School embarked on an enriching field trip to the Gandhi Krishi Vigyana Kendra (GKVK) Campus of Agricultural Sciences. This visit marked a significant milestone in their educational journey, providing them with valuable practical exposure to agricultural and plant biotechnology.



Accompanied by their Biotechnology teacher, Mrs. Shaheen Taj, and Biology teacher, Mrs. Neelika Joel, the students explored various departments, including Horticulture, Hydroponics, and Plant Biotechnology. They had the unique opportunity to engage with professors and research scholars, delving into discussions on innovative agricultural technologies and ongoing research.

Additionally, the students interacted with pioneers of India's Seed Project, which plays a crucial role in supporting the nation's farmers. The excursion concluded with a visit to the Agricultural Sciences Museum, where they gained insights into India's advancements in agriculture and plant biotechnology.

ANNUAL SCIENCE EXHIBITION

On the 5th and 6th of February 2025, the Junior II section of Grades IV and V hosted its Annual Science Exhibition with the theme Mind Spark. The exhibition showcased an array of intriguing working models and educational charts, reflecting the enthusiasm and creativity of our young scientists.









The projects spanned a diverse range of scientific disciplines, from elementary engineering and physics to geology, chemistry, and biology. The models, crafted with ingenuity, demonstrated skillful use of basic electronic motors, strings, and levers. The students' explanations highlighted their academic aptitude and deep understanding of scientific mechanisms. Some exhibits delved into the principles of physics, including optics, mechanics, and fluid dynamics, drawing inspiration from eminent scientists like Newton and Archimedes. These included models such as Archimedes' Screw, Newton's Wheel, pinhole cameras, and demonstrations of refraction.

Other exhibits explored geological processes like volcanic activity and weathering, while several models effectively illustrated complex biological processes such as respiration and digestion. The Mind Spark Science Exhibition truly lived up to its name, igniting curiosity and passion for science in our young learners. It served as a launchpad for their scientific exploration, inspiring them to push the boundaries of knowledge and discovery.

> "Whatever the cost of our libraries, the price is cheap compared to that of an ignorant nation."
>
> — WALTER CRONKITE

8TH EDITION OF 'PARIKSHA PE CHARCHA'









The live telecast of the 8th edition of Pariksha Pe Charcha – 2025, hosted by the Honourable Prime Minister of India, Shri Narendra Modi, was screened at the Bishop Cotton Edward Lynch Auditorium. The session was attended by Middle School students and staff.

Prime Minister Modi provided valuable guidance on managing exam stress, emphasizing a positive mindset, self-discipline, and perseverance. He advised students to maintain a balanced lifestyle, cultivate leadership skills, avoid comparisons, and embrace failures as learning opportunities. He also highlighted the inspiring resilience of differently-abled individuals and the importance of responsible technology use. Additionally, he urged students to contribute to environmental conservation by planting and protecting trees.

The session left students and staff inspired, equipping them with practical strategies for exam preparation, stress management, and personal growth.

PICNIC AND DAY TRIP STANDARD 4





On February 14, 2025, 381 students of Standard 4, accompanied by 19 staff members, embarked on an exciting day outing to The Garden Asia Resort with Birds of Paradise. The picnic was a perfect blend of learning and fun, offering students a refreshing break from their daily classroom routine. It was a day of experiential learning, where they could explore, engage, and enjoy nature firsthand.

At The Garden Asia Resort, the children had a fantastic time cooling off in the pool and dancing joyfully under the water sprinklers during the rain dance. The delicious meals served throughout the day were to their liking, making the experience even more enjoyable. Birds of Paradise provided a unique opportunity for interaction with various creatures of the biosphere. Travelling with friends made the experience even more memorable. The students displayed care, caution, and camaraderie, strengthening their friendships. Experiences like these foster a sense of responsibility, wonder, and awe for the natural world.





"The mind is not a vessel to be filled, but a fire to be kindled."

– PLUTARCH

NCC NAVY RAISING CEREMONY

Bishop Cotton Boys' School has once again etched its name in history by becoming the first private school in Bangalore to house all three wings of the National Cadet Corps - Army, Air, and Navy. The inaugural NCC Navy Raising Day was a landmark moment, showcasing the school's unwavering commitment to discipline, leadership, and service to the nation.







The grand occasion was graced by Capt. Manikandan Nambiar, Commanding Officer, 1 Karnataka Naval Unit NCC, Bengaluru, whose presence inspired the cadets to uphold the core values of the Indian Navy—courage, integrity, and perseverance. A special note of gratitude is extended to Vice Admiral Krishna Swaminathan, an esteemed Old Cottonian, whose guidance and support played a pivotal role in making this achievement a reality.

The success of the ceremony was made possible by the dedicated efforts of Mr. Wilson Sampath Kumar, Mr. Robertson (ANO of the Naval Wing), Mr. Vinod Sampson, and Mr. Louis, whose commitment ensured a seamless and memorable event. The school also extends its appreciation to Mrs. Evelyn Sumana for her compering and to Mrs. Prabha for the IT support, which added depth and professionalism to the occasion. With this historic milestone, Cottonian cadets now stand at the helm of a new journey, ready to embrace the rigour of naval training and uphold the school's proud legacy of excellence in service and leadership.









2024-25
A YEAR IN PICTURES

















BISHOP COTTON BOYS' SCHOOL
Bengaluru








RHYTHMIC RHAPSODY
OUR FAVOURITE THINGS










BISHOP COTTON BO




















KINDERGARTEN RHYTHM AND RHYME TIME
"RHYTHMIC RHAPSODY"

Message from the Principal

Bishop Cotton Boys' School

As we conclude another remarkable academic year at Bishop Cotton Boys' School, I take great pride in reflecting on the dedication, perseverance, and achievements of our students and faculty. This year has been a testament to the Cottonian spirit—one of resilience, excellence, and unwavering commitment to holistic education.

Our students have excelled not only in academics but also in sports, cultural events, and leadership initiatives, bringing laurels to the school at various levels. Their achievements stand as a reflection of the strong foundation and values instilled at Bishop Cottons. I extend my heartfelt gratitude to our Vice Principal, Coordinators, dedicated faculty, staff, and parents, whose unwavering support and guidance have played a pivotal role in shaping our young minds. A special thank you to Mrs. Madhuri Nair Sanjeev and her team of young editors for the editions of the Cottonian Post.

I would also like to express my deep appreciation to the Board of Management for their steadfast support, guidance, and vision. Their leadership has been instrumental in driving the school forward.

As we move forward, let us continue to uphold the rich legacy of our institution while embracing new opportunities for growth and learning. I encourage each student to remain curious, compassionate, and committed to excellence in all endeavours.

Wishing our Cottonian family a restful and enriching break, and I look forward to another year of success and innovation.

Alistair R A Freese
Principal
Bishop Cotton Boys' School

ACHIEVEMENTS



GOLD MEDAL AT THE BALDWIN BOYS' ANNUAL ATHLETIC SPORTS MEET, IN THE 4X25M INTER-SCHOOL RELAY.



YUGVEER, DAKSH, AARIV, AND KABIR OF UPPER KINDERGARTEN WERE AWARDED FOR THEIR OUTSTANDING PERFORMANCE



RISHI AND CHAYANK OF BISHOP COTTON BOYS' SCHOOL ADVANCE TO 91.9 FRIENDS FM QUIZ FINALS. THE SCHOOL COMMUNITY EAGERLY AWAITS THEIR PERFORMANCE IN THE FINALS AND WISHES THEM CONTINUED SUCCESS.

SUMMER! FINALLY !!

As we approach our summer holidays, let's remember to have fun and enjoy a well-deserved break from schoolwork. Nevertheless, it is also essential to make the most of this time by completing projects, exploring our passions, and cherishing moments with family. Time truly flies like the wind, slipping through our fingers before we even notice. Each day offers a chance to grow, create lasting memories, and invest in ourselves. Whether it's learning a new skill, diving into hobbies, or simply unwinding, every moment is valuable. The weeks ahead may feel endless now, but soon we'll look back and wonder where the time went. So, let's embrace each day with intention, ensuring this summer is both enriching and unforgettable.

The Creative Corner



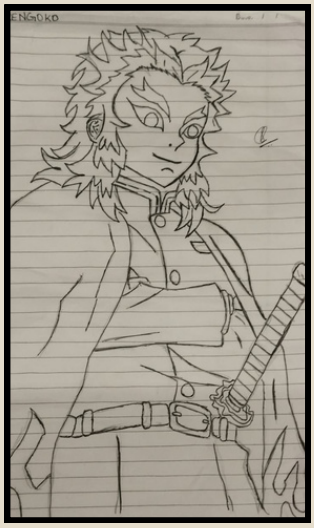


















Poetry Corner

The Rumours Of a Man In The Woods

There's a man in the woods. Ha what a spectacle!
Before that this school was still respectable.
Near the blacktop, my students used to skip down the hill to the honeysuckle,
pluck a couple and eat their nectar to negate their hunger
They say "A bad apple can ruin the bunch" in this case that would be one obnoxious kid, Walter.

He would not share his sweet little treats throughout recess hours.
Seething and sieving through every inch of the bushes, he wouldn't leave a single flower.
I remember one day he said to me "There's a man in the woods" of course this concerned me, and I immediately brought all the kids to safety.
I took a look around the forest, only to find nothing.

Was this some sort of joke? Well if it was it wasn't funny.
Still, Some of the school staff and I looked a
bit through the forest ultimately finding nothing suspicious.
Eventually, the forest was deemed safe so we took our students out again.
When we went out I saw Walter telling all the kids about
this so-called serial killer in the forest.

The rumour spread everywhere, and soon everyone saw him. "I saw him! He has crazy yellow eyes! Wwe swear!"

All the poor kids were too scared to skip down the hill like they used to.
While all the kids stayed back, Walter went down to pick his fill.
Who else was brave enough to save us from the killer's next plot?
Finally, the day was over, and when the buses left, the parents finally heard.

With a wall of irate e-mails and all.
Apparently, They didn't like my lack of action.
And when the PTA heard they dismissed me from the class.

What was I supposed to do? comb the whole forest?
yeah right, would you?
That means I didn't care!? That's not fair, the stories you word aren't true!
Of course, I'd feel scared if some poor kid got kidnapped while I was watching
And you accuse a kid of lying!? Just monstrous.

Do you know how hard it is to get a job when an accident slanders your rep with child neglect from the outset!?
Those kids were lucky to have me.
And you speak like I'm committing crimes!?

But, i can play along.Do you hear that Walter? I said,
from behind a tree
There's a man in the woods.

Rithin Raahul 7 - I

Still Waters

The sun's rays appeared at the horizon, slow,
The mountains gazed o'er the world,
Naught but the whispering wind was heard
At the still waters' edge.
At dawn, the birds awoke,
The air was full with chirps and hoots,
The rustling of leaves, the flutter of wings,
Yet, the still waters remained just so.
The sun rose high; the mountains loomed tall;
The trees at the shore hung low over the lake;
Foxes ran, birds flew, squirrels leapt, insects buzzed,
And the still waters mirrored them all.
Animals and birds came to the waters
To quench their thirst and to cool their aches
Yet through the crystal-surface was seen but stones and sand
An endless, lifeless stretch underneath the still waters.
They gave life, yet were devoid of it.
They gave reflections of others, yet were formless.
Purposeless yet important, shaping yet shapeless,
The still waters remain unchanged, eternally still.

Ameya Karaba , 8 I

The Earth :

The king of Earth!
Who is he ?
The son of Joseph and Mary,
Who do you think created the sea?
Oh, It's the son of Joseph and Mary!

He created water and land,
He even created soil and sand!
But who knows who is he?
Oh, that's right it's the son of Joseph and Mary!

He made rivers and seas,
He even made hives for bees,
But who knows who is he?
Oh,that's right it's the son of Joseph and Mary!

He made bodies and plants,
He even made souls with hearts,
He is always right,
Oh, that's right it's Jesus Christ!

Rudra Mitra , 2 E

THE VIRTUAL WORLD OF THE FUTURE

The definition of virtual reality comes, naturally, from the definitions for both 'virtual' and 'reality. The definition of 'virtual' is near and "reality" is what we experience as human beings. So, the term 'virtual reality' basically means 'near-reality. This could, of course, mean anything but it usually refers to a specific type of reality emulation. Virtual Reality (VR) is a computer-generated environment with scenes and objects that appear to be real, making the user feel they are immersed in their surroundings. This environment is perceived through a device known as a Virtual Reality headset or helmet.

Today's virtual reality technologies build upon ideas that date back to the 1800s, almost to the very beginning of practical photography. In 1838, the first stereoscope was invented, using twin mirrors to project a single image. That eventually developed into the View-Master, patented in 1939 and still produced today. The use of the term "virtual reality," however, was first used in the mid-1980s where Jaron Lanier, founder of VPL Research, developed the gear, including goggles and gloves. Heilig also patented a head-mounted display device, called the Tele sphere Mask, in 1960. By 1965, another inventor, Ivan Sutherland, offered "the Ultimate Display," a head-mounted device that he suggested would serve as a "window into a virtual world." The 1970s and 1980s were a heady time in the field. At NASA Ames Research Centre in the mid-1980s, for example, the Virtual Interface Environment Workstation (VIEW) system combined a head-mounted device with gloves to enable the haptic interaction. Today's current virtual reality gear owes a debt of gratitude to the pioneering inventors of the past six decades who paved the way for the low-cost, high-quality devices which are easily accessible.

To understand how effective VR works, we first need to understand a little about how the brain makes sense of the world around us. Let us stop and think about the senses that allow us to experience the world: vision, hearing, and touch, to name a few. To make sense of the world, the brain needs to first bring in information from sensory organs, such as the eyes, ears, and skin. But bringing in the information only describes sensation. What happens next is that the brain interprets this information, allowing us to understand what is happening in the environment. The brain's interpretation of the senses which create our understanding is called perception. For instance, we can see a dog running across the room, hear it bark, and feel its fur brush against our skin—these are sensations that we come to understand and perceive as experiences. It is this interplay of sensation (using vision, hearing, etc.) and perception (our brain's interpretation of this information) that creates our experience of reality.

There are three types of virtual realities :
NON-IMMERSIVE VIRTUAL REALITY : Non-immersive virtual experiences are often overlooked as a virtual reality category because it's already so commonly used in everyday life. This technology provides a computer-generated environment but allows the user to stay aware of and keep control of their physical environment. Non-immersive virtual reality systems rely on a computer or video game console, display, and input devices like keyboards, mice, and controllers. A video game is a great example of a non-immersive VR experience.

SEMI-IMMERSIVE VIRTUAL REALITY : Semi-immersive virtual experiences provide users with a partially virtual environment. It will still give users the perception of being in a different reality when they focus on the digital image, but also allows users to remain connected to their physical surroundings. Semi-immersive technology provides realism through 3D graphics, a term known as vertical reality depth. More detailed graphics result in a more immersive feeling. This category of VR is used often for educational or training purposes and relies on high-resolution displays, powerful computers, projectors, or hard simulators that partially replicate the design and functionality of functional real-world mechanisms.

FULLY IMMERSIVE VIRTUAL REALITY : Fully immersive simulations give users the most realistic simulation experience, complete with sight and sound. To experience and interact with fully immersive virtual reality, the user needs the proper VR glasses or a head mount display (HMD). VR headsets provide high-resolution content with a wide field of view. The display typically splits between the user's eyes, creating a stereoscopic 3D effect, and combines with input tracking to establish an immersive, believable experience. This type of VR has been commonly adapted for gaming and other entertainment purposes, but usage in other sectors, namely education, is increasing now as well. The possibilities for VR usage are endless.

Advantages of Virtual Reality:
1) Virtual reality creates a realistic world
2) It enables the users to explore places.
3) Through Virtual Reality users can experiment with an artificial environment.
4) Virtual Reality makes education easier and more comfortable.

Disadvantages of Virtual Reality
1) The equipment used in virtual reality is very expensive (more than $350).
2) It consists of complex technology.
3) In a virtual reality environment, we can't move on our own like in the real world.

Virtual Reality is a growing industry as PCs and specialized hardware are getting better and faster because of the development in VR. There will also be a huge demand for VRML programmers in the near future.

By: B. Jonathan Lodwin

HAWKING RADIATION

The universe is full of secrets, for centuries scientists believed black holes were final destinations-places where matter vanished forever. But a revolutionary theory suggests something extraordinary happens. It is 1974, a sunny afternoon on April 15th and Stephen Hawking is having his lunch"FLASH" an idea occurred.

A black hole is said to be a large celestial body (probably a million times larger than the sun) that sucks everything including light that comes near it. It is known that a black hole is formed from the remains - of a dead star. A Journey of a star begins when large amounts of particles and solar dust is accumulated in a vast region in space called a nebula. When one of the particles collide with each other Hydrogen fuses to form Helium. This releases some amount of Neutrons which leads to a chain reaction. This reaction lasts up to billions of years depending on its mass. The star starts expanding rapidly as it is running out of fuel (Hydrogen atoms) and results in a supernova (a large explosion that sends out massive shockwaves and marks the death of a star). The core left behind after the supernova can collapse under it's own gravity. It can turn into one of two things, a black hole or a neutron star.

Neutron star- If the core's mass is between 1.4 and 3 times the mass of the sun, the core may collapse into a neutron star. A neutron star is incredibly dense, with neutrons packed together tightly. It is about the size of a city but with more mass than the sun.

Black hole- If the core is larger (more than 3 times the mass of the sun), it will continue collapsing under it's own gravity to form a black hole.

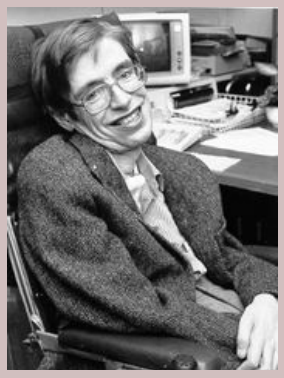
The collapsing core compresses into an extremely dense point known as singularity, surrounded by an event horizon (the zone where something experiences the gravitational pull of the black hole).
This marks the birth of a black hole.

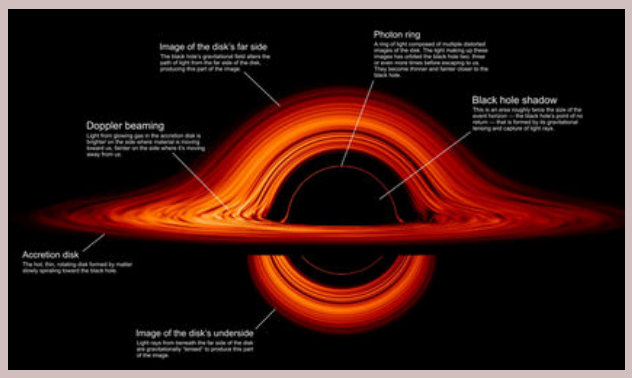
Everything that has mass also has its own gravity. You might ask "then why don't we attract other objects?". The pull is so less that it is negligible but objects like The earth and the sun have strong gravity. With that in mind imagine the gravity of an average size black hole which is infinitely dense and a million times larger than the sun. we truly do not know what happens inside a black hole. Stephen Hawking discovered that radiation was released near the event horizon of the black hole. Matter and anti-matter spawned randomly near the event horizon and then annihilated each other making the black hole lose mass. Once this overcomes the mass intake of the black hole it starts to shrink in size and then disappears. This proved that black holes aren't permanent and will expire. Stephen Hawking made this revolutionary theory. His hard work inspired many people and this paved a path for quantum mechanics to enter the field of astronomy.











By: Ritvik R Gowda

CODECRACK

CODES:

1) .- -.. -- .. -. .. ... - .-. .- - .. --- -. / -... .-.. --- -.-. -.-

2) KLIZZIE-YAZZIE TKIN NESH-CHEE BE DZEH GAH KLIZZIE WOL-LA-CHEE GAH BE DZEH NESH-CHEE

3) QLOFRECTGKOHQJ

4)[.. / .- -- / .--. .-. --- ..- -..][OILWOMMRHSEXBS]
[TKIN WOL-LA-CHEE NA-AS-TSO-SI KLIZZIE GAH DZEH WOL-LA-CHEE THAN-ZIE MA-E NO-DA-IH DIBEH-YAZZIE THAN-ZIE NE-AHS-JAH DIBEH THAN-ZIE NO-DA-IH BE TSAH-AS-ZIH LIN DZEH GAH DZEH]

HINTS:

1) Used to transmit messages by telegraph.
2) Used in World War II and till date it was never broken
3) Used to encode strategic messages and Marian Rejewski broke the code
4) It is the combinations of the above 3 codes square brackets are used for separating the codes.

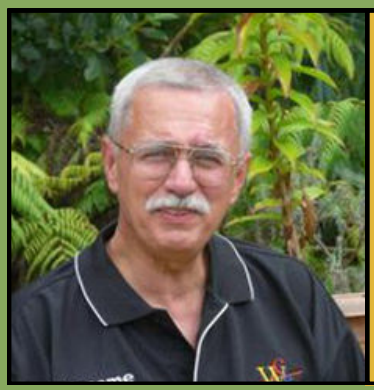
CRACK THE CODES?

Decode the given codes to uncover the hidden message. Use your problem-solving skills and analytical thinking to decipher the encrypted text. Good luck!



The first student to submit the DECODED messages at the reception will receive a prize from the Principal.
Please write your name, class and section neatly on top of the page.

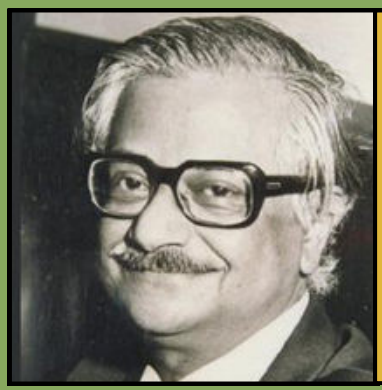
SOLUTION



1

Name : Philip Wollen

Profession : Australian Philanthropist



2

Name : Raja Ramanna

Profession : Indian nuclear scientist



4

Name : Gopal Krishna Pillai

Profession : I.A.S officer, former Home Secretary of India



3

Name : Nandan Nilekani

Profession : Indian entrepreneur, bureaucrat and politician

WINNERS

Mohammed Abdullah 3B – First prize

Alvin Samuel 4D – Second prize

Nathan Santosh 3D–Third prize

Ron Allen 6D – Third prize

THE TEAM

ARJUN GUJJARI	11-A
HARSH MAGESH KUMAR	11-A
BEN GARY LEO	11-A
DEBANKSH CHATTERJEE	11-E
DIKSHIT B	11-A

EDITOR: MRS. MADHURI NAIR SANJEEV

We the Cottonians,
We are all here,
We want to do yes,
Always our best.

Our motto is,
Nec Dextrorsum,
Nec Sinistrorsum,
Hip Hip Hurrah!!

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NEC DEXTRORSUM NEC SINISTRORSUM