

# Science and ICT go hand in hand, fueling the engines of progress and change." Ada Yonath

The science and technology extravaganza, Qu@ntuman!a, where we delved into subject week assemblies and activities from 21st August to 26th August. While the activities themselves held importance, the true accomplishment was in the shared journey we undertook.

As our young, creative, and tech-savvy budding scientists embarked on this journey with the idea of UKETAMO in mind, this experience aimed to encourage them to discover new possibilities by blending Science, Technology, AI and Neural Networks together. The children were able to learn effectively through an integrated approach, fostering a range of diverse skills and promoting competency-based learning.

#### **Displays**

The displays were based on: "Qu@ntuman!a". There will always be Science and Technology. The displays were a progression from grade I to XII. The displays included the following concepts:

- Singularity
- Cellfie- which is a fusion of "cell "and "selfie
- Design Thinking
- Dalle- A Image generation process of OPEN AI.
- E-Waste
- Periodic Table
- Neural Network











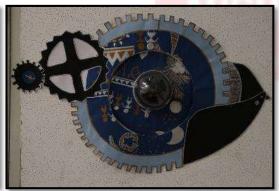












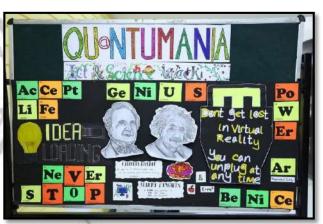












The installation at the reception signifies the "ICT and Science go hand in hand, fueling the engines of progress and change."

A 3D model capturing this inauguration was placed at our front office.

All exhibits were coordinated in accordance with the theme of the year, "UKETAMO."



# DAY 1 (MONDAY 21st August 2023)

**YOGA**: The day began with a delightful and amusing Yoga session, during which the significance of maintaining a healthy diet and avoiding excessive attachment to gadgets was illustrated



#### **Energising beats - THE STOMP**

Students showed a beautiful rhythm using domestic wastes and e-wastes. Brooms, garbage cans, Newspapers, Drums, SMPS, CPU cabinet, Keyboard were used to create a theatre performance. We witnessed a stunning confrontation as E-waste and scientific waste engaged in a captivating battle evoking the enchanting essence of a captivating Stomp presentation.





## Prayer song - "God will Make a Way"

As we explored in Science's light and in the realm of ICT, We prayed to the almighty to help us we soar, Learn, create, and seeking more. We prayed together to guide our hands to innovate and invent, for a future where technology is well-spent.





## <u>Invocation dance - The Mudras</u>

The dance performance's gestures showcased how heavily we depend on emoticons and symbols to forge connections and shield ourselves from the outside world.

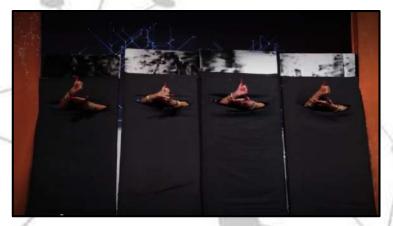
These emoticons are employed on various social media platforms when we neglect conversing, meeting, and reaching out to our friends and family.

Through the invocation dance, the students effectively conveyed the message:





"Why not embrace your true self just as you are?"





# **Evolution of human work silhouettes**

The evolution of human work silhouettes was portrayed by the students, highlighting three distinct phases. These stages showcased the progression of communication across time: from a period when children engaged in unstructured and natural forms of play to the present era where technology exerts significant influence. In the present times, children are notably impacted by virtual assistants like Alexa and Siri. Their increased attachment to smartphones has led to postural changes which are almost same of primitive humans. This circular transformation in postures underscores how humans have come full circle, resembling the stooped posture of early ancestors even in the present day.









How people are obsessed with Selfies was also demonstrated through a standup Comedy



#### Week Inaugural by Director Maam





The ICT team created an Avatar for Rupa Maam and named it as her I stand before you as your new iteration - RC Version 1.0. This was achieved using technology, deep story and AI. It is with great enthusiasm that the Avatar introduced us to the realm of AI and neural networks. During the inauguration we embraced the symbolic neural network leaf token, representing the integration of ICT and science.



During the inauguration, a teaser video produced and directed by Suncity School students was presented. The video showcased impressive sound effects, visual enhancements, and exceptional editing proficiency.

This was followed by the inauguration by our beloved Director Maam Ms. Rupa Chakravarty.

## Farmer - "The New AI Engineer

The world's population is rapidly growing, forcing food consumption to rise tremendously. Artificial

intelligence will make farming more

efficient. Presenting before you a short skit called "Farmer- The New AI Engineer" that focuses on how Artificial Intelligence is used in the applications to alleviate problems throughout the agriculture

industry.

Grade 7
students
presented a
eye opening
skit on this
topic









#### Robound

We had a short skit called "ROBOND, presented by students of Grade 9" which was about a teenager who had been gifted a ROBOT by his father for his birthday. How this teenager used the robot remained a mystery. This was a skit to teach children how we shouldn't rely so much on newly advanced technology and trust our own self





#### Presentation by IGCSE CS Students

IGCSE Students presented a captivating and distinct fact about plants. Interestingly, it aligned with the theme of the national anthem as well.

The "Project Plant Sonic" presentation introduced the concept of using plant sounds for communication. Their prototype translated plant-touch-induced electrical impulses into audible sounds through a computer. This version demonstrated the blueprint for their vision. Various plants

and types of contact yielded distinct sounds. The 3D model, "Plantic Version 1," resembled a conventional piano with potted plants as keys. It featured an automatic irrigation system controlled by a humidity sensor. The projected completion for this model is planned for May 2024. The presentation concluded by thanking the audience and mentioning a performance inspired by their project.









#### National Anthem with instruments as Vegetables and Fruits - Melodiflora

A student of Grade IX presented the national anthem with a technological twist. At the core of this inventive project was the Arduino microcontroller, serving as the brains behind the musical magic. The Arduino was responsible for processing the input from the Java interpreter and orchestrating the vegetable circuit.





The programming was executed using Scratch, resulting in a splendid performance of the national anthem. The entire assembly was astounded by the novel idea of generating music from plants.

# Qu@ntuMan!a Suncity Intraschool Fest

The following 4 events took place in the school for 2 grade divisions, Grade 6-8 and Grade 9-11

- BitBlitz (Coding event)
- Shutter Showdown (Photography event)
- Pixel8 (Photoshop event)
- FragFest (Valorant gaming event)





When students organized and carried out this technological event, they gained substantial exposure. They acquired valuable knowledge and honed their leadership abilities. Since the event was student-driven, they had the opportunity to independently conceive, strategize, design, and implement the entire concept.

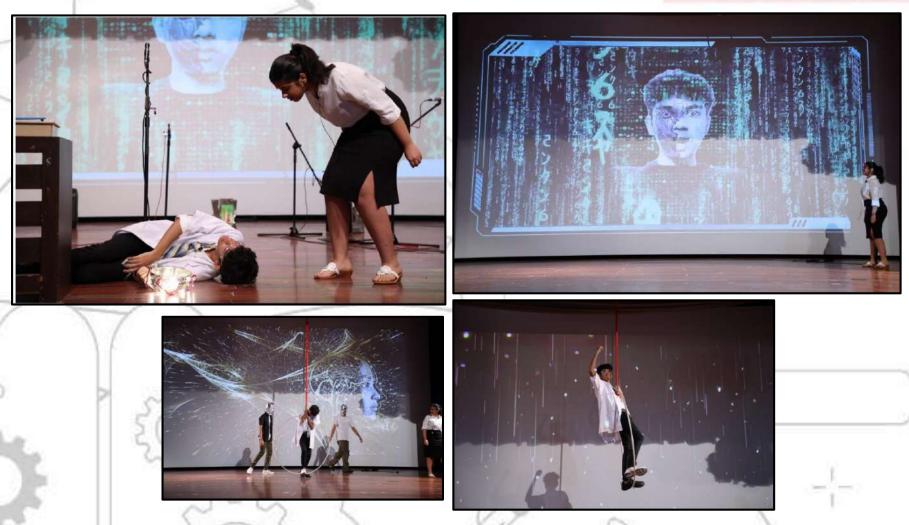
The certificates and awards were announced on  $21^{st}$  August during the assembly. Director Maam facilitated the winners with trophy and certificates.







The focal point of Monday's gathering cantered on the importance of using technology responsibly, emphasizing the positive applications of AI. Within the assembly, the focus shifted towards the dynamic between AI and human interaction. This conveyed the idea that our preference lies in embracing vitality and liberty, rather than pursuing an existence that is eternal but constrained.



#### Wednesday

The School Assembly celebrating ICT and Science Week was a remarkable event that brought together students of all grades to celebrate the importance of technology and science in our lives. The highlight of the assembly was the inter-House quiz titled "Knowledge Circuit." The event not only showcased the students' knowledge but also made learning fun and engaging.

The assembly commenced with a morning prayer, setting a positive and harmonious tone for the event. Its musicality reminded everyone of the significance of gratitude and reflection in our daily lives. An entertaining "Thought for the Day" was shared, inspiring students while emphasizing on the nature of the topic: "Fake News." An informative segment on the astronomical events of August was presented, enlightening the audience about celestial occurrences such as meteor showers, lunar eclipses, and space research programs. This segment ignited curiosity and appreciation for the wonders of the universe.

The Knowledge Circuit quiz was the highlight of the assembly, engaging students in a competitive yet educational experience. It consisted of four exciting rounds:

In the first round, PERIODIC BYTES, participants decoded keywords using elements from the periodic table. It not only tested their knowledge of chemistry but also promoted logical thinking and problem-solving skills. The round, PIC-XEL PUZZLE, challenged students to determine words using emojis. It tested their ability to decipher symbols and convey meaning through unconventional communication methods, which is essential in the digital age.

In this round, TECH-ME-WHO, students delved into the world of technology, requiring participants to identify famous inventors, innovators, and technological milestones. It showcased the significance of technology in our lives.

The final round, CONNEC-EXPERIMENT, was the jackpot round, filled with a series of tasks and experiments related to science and technology. It not only tested knowledge but also hands-on skills, fostering a spirit of experimentation and discovery.

The event was punctuated by news segments related to the "Barbie" theme which added a creative and fun element to the assembly, making it even more engaging for the students. Students dressed as Barbie and Ken came up to the stage and reported news segments related to ICT and Science, relevant to the times.

The ICT and Science Week Assembly, with its focus on the Knowledge Circuit quiz, successfully celebrated the importance of technology and science in our lives. It highlighted the role of these fields in our daily existence and inspired students to embrace curiosity and innovation. Such events not only foster a love for learning but also nurture future scientists, inventors, and technologists. The quiz showcased the interconnectedness of subjects like chemistry, technology, and astronomy. It emphasized that learning should not be compartmentalized but rather integrated across various disciplines, mirroring the real-world applications of science and technology.

In conclusion, the ICT and Science Week Assembly, with its Knowledge Circuit quiz, was not just an event but an educational experience. It instilled in students a deeper appreciation for the worlds of science and technology, along with a set of skills and values that will serve them well in their academic and personal journeys. These learnings will continue to inspire them to explore, innovate, and make a positive impact on the world.











#### Friday: Valedictory Assembly of our Science and ICT Week 'Quantaman!a'.

The highlights of the assembly were as follows:

Prayer and thought – "QUANTUM ENTANGLEMENT".

Glimpses of the week

Skit- AI is not all in!

Dance- 'Elements of Earth'

Special Guest- Rakshit Tandon

National Anthem- Sign Language



For believers, God is in the beginning, and for physicists He is at the end of all considerations.

Theory of quantum physics finds that atoms exist in a semireal, pure potential, virtual state until a viewer looks at them with an expectation, just like the presence of the Almighty.







The Bioscope helped in providing a sneak peek into the hard work and effort made by students of grades VII to X and activities conducted during the ICT and Science week.

Skit on judicious use of AI-"Too much of anything is bad." - Latin Proverb

A skit focused on showcasing the careful and considerate application of AI technology. This skit aims to emphasize the importance of using AI in a responsible manner that considers ethical considerations and potential impacts. It depicts scenarios where characters make informed decisions about AI use, considering both its benefits and potential drawbacks. The goal is to raise awareness about using AI for the greater good while being mindful of its implications.





Dance- 'Elements of Earth'

Human beings are currently excessively exploiting the Earth's resources and technological advancements. It is crucial for us to acknowledge our errors with humility, embrace the concept of 'UKETAMO' (Understanding Knowledge and embracing the Triumph Amidst Mistakes and Obstacles), and work diligently towards creating a more promising and improved future.









Special Guest- Rakshit Tandon

Dr. Rakshit Tandon, a cyber security consultant, and specialist, spoke as a distinguished guest at Suncity School on Aug 25, 2023. He spoke about creating awareness about safe internet practices and educating individuals about the potential risks and challenges of the digital world.



A highly informative workshop on cybersecurity was conducted with the aim of raising awareness and improving preparedness in the face of evolving cyber threats.

- Raise awareness about the importance of cybersecurity in daily life.
- Educate students about common cyber threats and attack vectors.
- Promote safe online behaviour and responsible use of technology.
- Introduce students to basic cybersecurity practices and tools.







"National Anthem - Sign Language" is the use of hand gestures and movements to convey the national anthem, enabling inclusion for the deaf and hard of hearing.



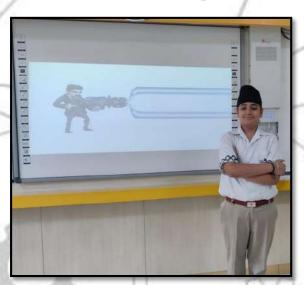
# **Week Activities:**

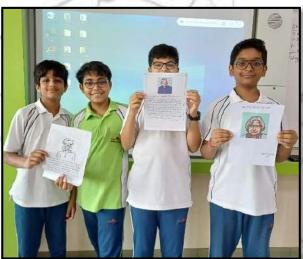
#### **Grades VII & VIII**

#### Pixelated Scientists- Pathway to triumph

Students have participated in a unique creative project where they depicted historical figures in science using pixelated images. Through these visuals, they highlighted the initial struggles and obstacles that these figures faced on their journey of discovery. This endeavour was intended to instill the core principle of "UKETAMO," encouraging the embrace of mistakes and limitations as drivers for inspiration and innovation.









#### Lexical Equilibrium (Bridging Science and Computer Language)" -

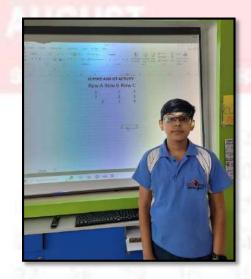
This event aims to create a connection between science and computer language. It involves an intra-class quiz focusing on synonyms used in both science and ICT. For example, terms like "Virus," "Cookie," "Chip," and "Java coffee" will be explored. Through this quiz, students had the opportunity to enhance their understanding by gaining insights into the varied interpretations of a word within both scientific and computer-related contexts.













**Grade IX:** HiTech peer learning- Students explain any scientific principle, theory or law. They save their work in pdf form and generate a QR code which leads to their work.







Saturday: Outing

Saturday's excursion for Grade VII and VIII students is all about getting ready to engage in the excitement of SMAAASH GAME ON!.

SMAAASH GAME ON! blends science and technology through diverse interactive experiences:

Virtual Reality (VR) Integration: Incorporating VR immerses participants in simulated environments, merging technology and entertainment. VR's use involves scientific principles like optics and sensory perception.

**Advanced Gaming:** SMAAASH employs cutting-edge gaming technologies, enhancing gameplay, graphics, and user interaction.

**Interactive Learning:** SMAAASH fosters experiential learning, revealing gaming and VR mechanics for insights into underlying science and technology.

**Innovative Social Setting:** The center combines music, dining, and social interactions, aligning with tech trends for engaging experiences.

**Thematic Environments:** SMAAASH's thematic integration showcases technology's role in creating immersive worlds through digital means.

**Sensor and Data Tech:** Many SMAAASH experiences use sensors and data processing, revealing technology's role in real-time interaction.

In short, SMAAASH GAME ON! epitomizes science-tech fusion by offering advanced experiences, interactive learning, and theme-based settings for an immersive, innovative student social experience.















Grade IX to XI students, there's a movie feature. "Oppenheimer" is a biographical film that narrates the story of J. Robert Oppenheimer, an American theoretical physicist and polymath, and his pivotal contribution to the creation of the atomic bomb.

The "Oppenheimer" movie is a cinematic portrayal that revolves around the life of J. Robert Oppenheimer, an influential American physicist known for his significant contributions to science and history. The film likely explores his journey, achievements, and pivotal role in the development of the atomic bomb, particularly during the Manhattan Project, a crucial endeavour during World War II.

J. Robert Oppenheimer's contributions extended beyond the scientific realm; he also left a lasting impact on the ethical and moral discussions surrounding nuclear technology. His involvement in the creation of the atomic bomb marked a turning point in human history, leading to intense debates about the potential benefits and catastrophic consequences of nuclear weapons.





