GYAN BHARATI SCHOOL, SAKET, NEW DELHI

TECH SPECTRUM

QUEST : OCTOBER EDITION 2024

"TECHNOLOGY IS BEST WHEN IT BRINGS PEOPLE TOGETHER."

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FROM THE EDITOR'S DESK

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MRS. PRABHJOT KAUR

All the students of classes P4 - SS2 are encouraged to bring forth their scientific temperament in any representation of writing, videos, photography or art forms. Share your work at https://forms.office.com/Pages/ResponsePage.aspx?id=uWYNCSgIt0-C41wF7EuWrnlKIO74p5NAl8uEWvqNRwVUQTlYWEFZUEI2RklNUVVRMkg1OExJWk5PTi4u

Compiled by:
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M3B

“CRAFT YOUR OWN VR WORLD: GOOGLE CARDBOARD WORKSHOP & IDEATHON”

VR is a technology that uses a headset to create a simulated, immersive experience. It combines visuals, sound, and tracking to make you feel like you're in a different world.
Gyan Bharati School hosted a VR Ideathon on July 20th, 2024.The event began with an insightful one-hour workshop in which experts introduced students to the basics of virtual reality, its applications and its potential to revolutionize various industries. Participants were able to gain hands-on experience with VR equipment, sparking their curiosity and enthusiasm for this technology.

Students working on their presentation

Students showcasing their VR headsets

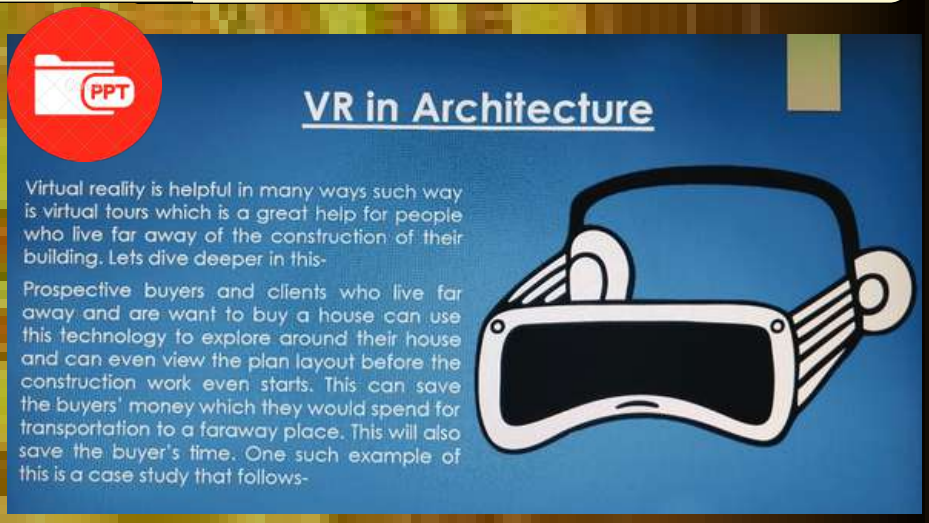
- The facilitator provided the materials required for the VR headset, such as cardboard, lenses, and elastic bands.
- Step-by-step guidance was given on how to assemble the VR headset, including cutting, folding, and attaching the components.
- Participants were encouraged to test their VR headsets with their smartphones and explore available VR apps to experience the technology first hand.

Click here to see the glimpse of VR ideathon

“CRAFT YOUR OWN VR WORLD: GOOGLE CARDBOARD WORKSHOP & IDEATHON”

The winning teams presented a diverse range of innovative VR applications, including:

- Healthcare: Immersive surgical simulations, virtual therapy for mental health disorders, and pain management techniques.
- Education: Interactive learning experiences, virtual field trips, and simulations for STEM education.
- Architecture and Design: Virtual walkthroughs of architectural designs, interior design visualizations, and urban planning simulations.
- Entertainment and Gaming: Next-generation gaming experiences, virtual concerts, and interactive storytelling.



Our esteemed judge, evaluated the ideas presented based on originality, feasibility, potential impact and overall presentation. The teams demonstrated exceptional creativity and critical thinking, presenting a wide range of VR applications.

The winners of the Ideathon are

1. Mayoor School Noida
2. Amity International School, Pushp Vihar

[Click here to watch the full presentation]

MINE BLOX

Minecraft Education Edition is a tailored version of Minecraft aimed at educational use. Our Interschool Minecraft Competition was a remarkable success! Students from different schools showcased their creativity and teamwork as they faced challenges and created impressive structures within Minecraft. We were genuinely amazed by their inventive ideas and strong problem-solving skills.

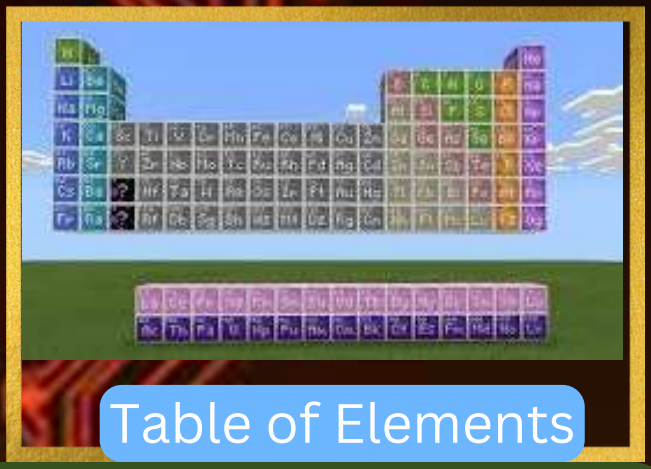


Table of Elements

The winning team, Birla Vidya Niketan, developed a project that showcased the Periodic Table: "Exploring the Periodic Table through Minecraft Education." This initiative provided a distinctive and engaging experience, combining chemistry with creative problem-solving and gamification.

The H2O Hustle!

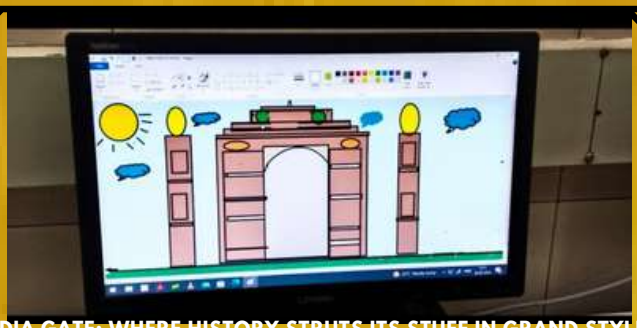
The Runner-Up team from Tagore International (East of Kailash) developed a project illustrating the water cycle. Participants demonstrated the natural stages of water movement: Evaporation, Condensation, Precipitation, and Collection—using Minecraft's creative environment, which encouraged scientific learning and enhanced problem-solving skills.
Meanwhile, Gyan Bharati School created a project focused on Ecological Interaction, utilizing various biomes in Minecraft, and also secured the Runner-Up position.

Dive into the action by clicking right here to watch the video!

ARTISTIC BYTES

(JUST FOR THE CWSN CREW!)

Microsoft Paint is an easy-to-use image editor designed for Windows. It's an excellent tool for beginners and children to acquire fundamental computer skills and explore digital art.



INDIA GATE: WHERE HISTORY STRUTS ITS STUFF IN GRAND STYLE!

GATEWAY TO ADVENTURE IN INDIA!

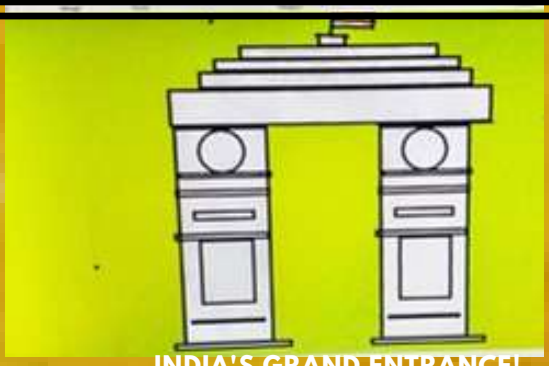
The Interschool MS Paint Competition for Children With Special Needs was a touching celebration of creativity and inclusivity. We are excited to share some highlights and reflections from this uplifting event.

The theme centered around "Any Famous Monument of Our Country," and the students' artworks vividly captured their individual viewpoints and creativity

Champions

Winner:-St.Columba's School and Gyan Bharati School

Runner up:- Mayoor School ,Noida

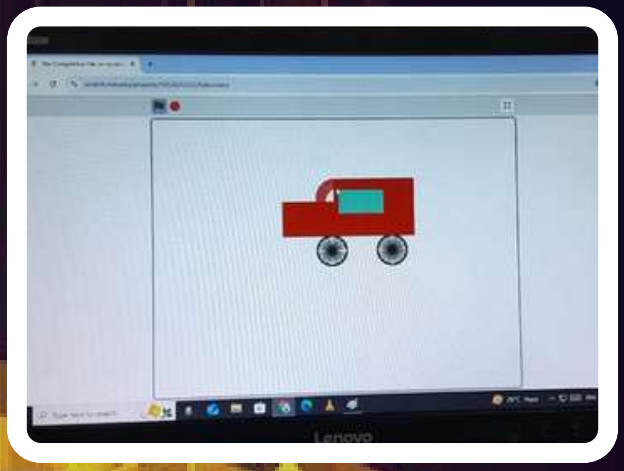


INDIA'S GRAND ENTRANCE!

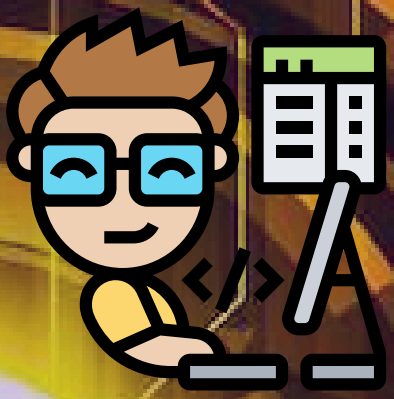
CLICK HERE TO GET A SNEAK PEEK OF THE ARTISTIC BYTE.

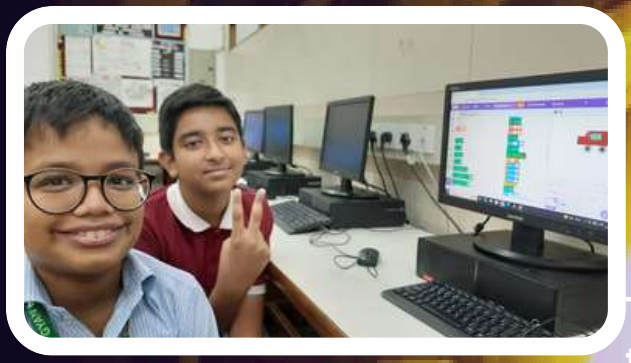
SCRATCH DRAWING CHALLENGE

Scratch is a beginner-friendly coding language that uses block level coding. Students can create animations, games, and stories using Scratch. It is an excellent platform to learn basics of coding as well. One of the exciting features of Scratch is its ability to draw objects and shapes using simple commands. In Drawing Challenge, participants went through four rounds of riddles to guess the object to be drawn and then used commands in Scratch programming to draw the object guessed.



CAR DRAWN BY THE WINNING TEAM USING CODING IN SCRATCH





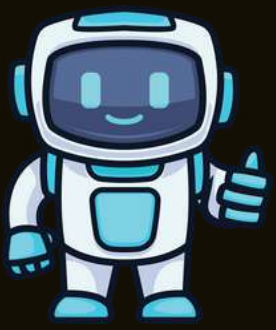
YOUNG BRILLIANT MINDS

The event highlighted the potential of technology to inspire creativity and collaboration among students. Winners were selected based upon their creativity, resemblence to the object given, effective use of constructs available in Scratch and The winners were:

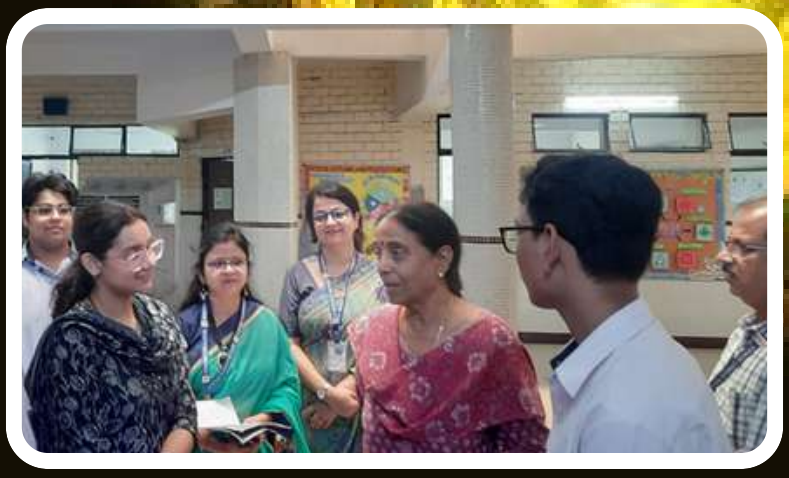
1. Gyan Bharati School Saket
2. Amity International School, Pushp Vihar
3. Chinmaya Vidyalya

CLICK HERE TO VIEW THE VIDEO

AI QUEST

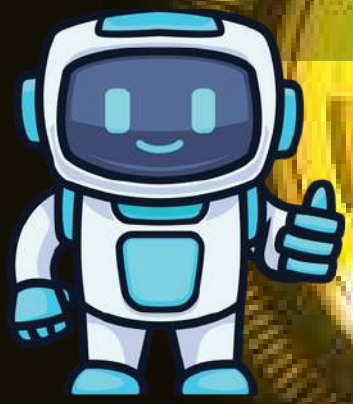


Artificial intelligence has seamlessly woven itself into our daily lives, enhancing both convenience and efficiency. From voice-activated assistants like Siri and Alexa helping us manage tasks and control smart home devices, to personalized recommendations on streaming platforms that curate our entertainment choices, AI tailors experiences to our individual preferences.



AI QUEST WAS A HUGE SUCCESS. STUDENTS FROM VARIOUS SCHOOLS SHOWCASED THEIR CODING SKILLS AND CAPABILITY OF USING ARTIFICIAL INTELLIGENCE IN THE FIELDS LIKE THREAT DETECTION, READING ASSISTANT, TRAVELBOT, VIOLENCE DETECTION USING CONVOLUTIONAL NEURAL NETWORKS, TUTORING USING AI, AI IN CROP PRODUCTION ETC.

AI QUEST



The winner team of Ambience Public School made a Project named " Agrosentry" which demonstrates optimal crop cultivation , remote access, reduced labour work and optimized crop production .

The Runner Up team of Chinmaya Vidyalya School had developed a Tourism Chatbot guiding tourists to select a place as per their schedule, availability of accomodation as per their budget and other preferences.

Click here to watch the video

LEARNING WITH ROBOTICS

Gamification and robotics can create a fun and effective learning environment. Combining game elements with robotics makes complex concepts more accessible and enjoyable. This approach's key components are interactive challenges, rewards, storytelling, collaboration, simulations, and feedback.

Interschool Robo Race and Techno Soccer Tournament are examples of how gamification and robotics can teach technical skills while fostering problem-solving, teamwork, and critical thinking.

CASTLE RUN

At Tech- Spectrum teams across Delhi were invited where schools competed with their self-built robots showcased their Programming and Designing skills with the zeal to accept challenges leading using team work and collaborative mind sets .The robots navigated a challenging course with obstacles. Teams were scored based on how quickly they completed the course. DPS RK Puram was the proud winner, The completed the entire Course with obstacles and demonstrated their problem solving and critical thinking skills.

Arena with Obstacles

Students showcasing their sportsmanship and resilience.

Click here for the castle Run Glimpses

TECHNO SOCCER TOURNAMENT

A Tournament where the arena with the shape of a soccer field is used for the event play and different teams from Delhi NCR showcased their robot's skills by passing the ball (with the help of two robots) inside the goal to score points. This gamified approach emphasized on fair play, respect for opponents, and understanding the importance of integrity of technology in sports. Teams of Gyan Bharati and Birla Vidya Niketan competed in the final round where students of Gyan Bharati School showcased their exemplary technical , critical and problem solving skills by winning the match. We being the host School As the host school proudly presented the award to the participating schools in recognition of their achievements.

Students playing the Techno Soccer Match

Click here to see the Techno Soccer Tournament

BRAIN TEASER

Q1. WHAT IS THE TERM FOR THE FEELING OF BEING PRESENT IN A VIRTUAL ENVIRONMENT?

Q2. WHAT IS THE NAME OF THE ROBOT DEVELOPED BY TESLA RECENTLY?

Q3. IN THIS SCRIPT , ASTRONAUT REFERS TO :

Q4. WHAT ARE THE COMPONENTS THAT ENABLE MOVEMENT, SUCH AS MOTORS AND SERVOS ?

Q5. WHICH TYPE OF ROBOT IS DESIGNED TO OPERATE IN ENVIRONMENTS THAT ARE TOO DANGEROUS FOR HUMANS?

Answers

1. Immersion
2. Optimus
3. Sprite
4. Actuators
5. Teleoperated robots

GALLERY

Immerse yourself in the event.
Scan the QR code.

TEACHER CREDITS

- Mrs. Rinu Maan (Mineblox, Artistic bytes)
- Mrs. Khyati Thukral(Techno soccer, Castle run)
- Mrs. Kanika Ahluwalia (AI Quest, Drawing with Scratch)
- Mrs. Prabhjot Kaur (AR/VR ideathon)

Mrs. Neha Sharma (TechFest incharge)


thank you