



ANDAMAN & NICOBAR ISLANDS

Anisa Zulfikar
Mandira Saha
Shreya Rai
Riya Naim

ANDHRA PRADESH

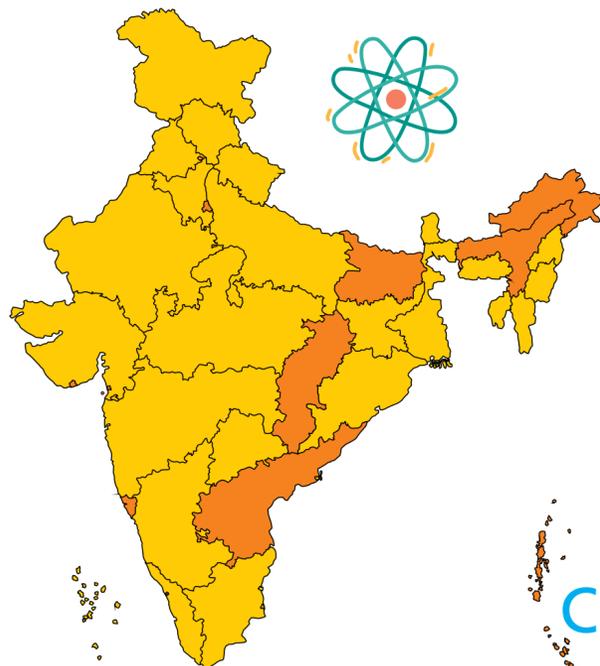
S. Lasya
Ch. Joy Vincent
P. Sneha
G. Dheeraj
K. Sirisha
B. Kesava Naidu
G. Joshitha
A. Rupavathi
K. Rehana
G. Dhasritha
P. Durga Bhavani
Shaik Asifa
K. Nagalakshmi
P. Ruchi
P. Muktha Navya Sri
N. Lohith Yadav
S. Sireesha

ARUNACHAL PRADESH

Etemso MaloLulu DeoriArun
GyadiSonam Lhamu
BagipaTsering Deki
KhrimeyTai JasmineMegha
HankarLomra TalarRoban
BellaiMamta Dirchi

ASSAM

Anisha Roy
Aska Kotoky
Ayush Bordoloi
Bedanta Sarma
Birina Sarania
Darshit Kashyap
Deepsikha Medhi
Dheerjyoti Baishya
Diya Das
Esharani Gogoi
Gayatri Kshetropal
Gungun Gogoi
Harshita Kashyap
Jyotishka Pritam Borah
Khamseng T. Gogoi
Neehar Dutta
Neehir Boro
Niharika Dutta
Pingku Baro
Preshilla Lakra
Punya Dutta
Sanalee Brahma
Shazida Parvin Mazumder
Shivaani Shristi Lahkar
Tahsin Rabbi Rahman
Tonmoy Bharali



CHILD SCIENTISTS FOR 30TH NCSC

BIHAR

Harsh Kumar
Ansh Pratap Singh
Khushi Kumari
Hozaiifa Shakeel
Pratyush Sharma
Prachi
Nima Kumari
Shivam Durgesh
Pushkal Raj
Nitu Sinha
Gungun Gupta
Tanu Shree
Pranav Suman
Akshay Kumar
Deepa Kumari
Anjali Srivastva
Raj Ragini Kumari
Adarsh Kumar Mishra
Pratyaksha Singh
Sweta Dixit
Kumari Saloni
Aditya Singh Chauhan
Meerani Vatsalya
Aprajita Narayan
Adil Naushad Khan
Dipika Kumari
Raushan Sharma
Akhil Prakash
Niyati
Nidhi Ghosh

CHANDIGARH

Samriti Kumari
Master Uday Singh
Bhavesh Majahan
Saksham Aggarwal

CHHATTISGARH

Priyansh Bhaduri
Nandita Kenwat
Rupshikha Sahu
Disha Sahu
Priyanshu Patel

Radhika Kanvar
Bhumika Joshi
Karam Samuel
Maheshwar Sahu
Janhavi Thakur
Kiran Kanwar
Khushi Jha
Manohar Baghel
Prathana Kewat
Anvika Gupta
Ananya Singh

DELHI

Rachit Sharma
Etant Rustagi
Tripti Singh
Zoya Arif
Priyadarshini Jena
Mokshit Jain
Tushar Chopra
Samridh Prabhakar

Daman & NH & Daman & Diu

Rishu Rajeshbhai Yadav
Bariya Palak Vinod
Damini N. Malkani
Chavda Nisha Mahesh

GOA

Reena Ramesh Gaonkar
Aditya Prabhu Maliyar
Vibhuti Vithoba Kerkar
Samarth V.Patil
Shaurya S. Chari
Rishik Kaustubh Patnekar
Atharv Surlekar
Omkar Bhiva Gawas



27th - 31st JANUARY 2023

NATIONAL CHILDREN'S SCIENCE CONGRESS

A PROGRAM OF NCSTC - DST
GOVERNMENT OF INDIA



27th January 2023

We the Child Scientists of India take the pledge to understand our ecosystem properly for our health and well-being.



WELCOME TO NCSC

30th NATIONAL CHILDREN SCIENCE CONGRESS (NCSC) has been organized by Gujarat Council on Science & Technology (GUJCOST), Dept of Science & Technology, Govt of Gujarat, supported by National Council for Science & Technology Communication (NCSTC), Dept of Science & Technology, Govt of India. This 5 days event will be hosted by GUJCOST at Gujarat Science City and SAL Education Campus, Ahmedabad. Several activities like scientific demonstrations, technical sessions, workshops, poster presentations, meeting the scientists, etc. will be conducted from 27th to 31st January 2023. NCSC's main aim is an ideal and innovative program for children to inspire, empower and expand both their mind

and world. Post-independence India has seen quite a few marvellous science & technology interventions for the emancipation of peoples' life in all its facets. Scanning through the truly national efforts in the last couple of decades, one event that readily comes to mind is National Children's Science Congress (NCSC), which not only has changed the way we look at science; but also has ignited the minds of Indian children, because it directly involves these budding citizens of our vast country.

As the eco-critic Vandana Shiva remarks, "We share this planet, our home, with millions of species. Justice and sustainability both demand that we do not use more resources than we need".

Moreover, understanding human impacts on ecosystems affecting health and well-being are also quite important. It is essential to know how our activities disturb the ecosystem functions leading to various negative impacts on health and overall well-being. Hence, our 30th NCSC principal theme is "Understanding Ecosystem for Health and Well Being". The sub-themes are:

- Know your Ecosystem
- Fostering Health, Nutrition & Well-being
- Social & Cultural Practices for Ecosystem & Health
- Ecosystem Based Approach for Self-Reliance
- Technological Innovation for Ecosystem & Health

Here begins the NCSC Fun...



Around 658 child scientists across India, 18 child scientists from Gulf countries, 250 guide teachers, 70 evaluators, 25 resource persons, 18 NAC members and 50 scientific exhibitors will be participating in the 30th National Children Science Congress.

The program will be formally inaugurated by Dr. Kuberbhai Dindor, Hon'ble Minister of Education, Govt. of Gujarat on 27th January 2023 at 11:00 am at Vigyan Bhavan, Science City, Ahmedabad, Gujarat.



THE EARLY BIRDS AT NCSC



Shreeya Rai (11)
Andaman and Nicobar Island

"Basically, I am interested in Botany. I want to make research how to make plant-based medicines more effective. So far I have researched on some of the facts for plant-based medicines like: Hathishur is a plant found in Andaman and Nicobar Islands which helps reduce Conjunctivitis ; Coolekharashag plant helps to purify blood. Khankunishak is an iron rich plant. I wish to further expand my wings and build network with the people who can help me further my research."



Ashirbad Panda,
Odisha

"I am very excited to meet new people and be friends with them. It is exciting for me to be here. I have studied Azolla Filiculoides to increase the milk production among animals and the ultimate motto is to boost the economic status of farmers"



Lalnunthara
16 Years - Mizoram

"NCSC is an inspirational event. My expectations from this event is to learn new facts that would help me create scientific thinking that can be utilized for human welfare. I wish to meet new people who are innovative and want to make my progressive development. I am very much curious to be a part of NCSC 2023. This event will give me the opportunity to meet higher dignitaries and satiate my curiosity on scientific knowledge."



Abhinaba Banik
14 Years - Tripura

"I feel fortunate to be the part of NCSC 2023. I want to become a scientist at ISRO and make space crafts. I am here to gain more of the practical knowledge as I aspire to know how the scientific principles which are taught us can be applied into practice. I want to seek some help and valuable suggestions for making an alternative of hand sanitizer which is less harmful. I want to learn more about Space Science."



Anisa Zulfikar
16 Years - Andaman and Nicobar Islands

"I am really very excited to be here at NCSC 2023. I am here to attain more knowledge. I wish to gain a deeper understanding in 'conversion of physical energy to electrical energy'. It generates much curiosity when you are going to meet new people with knowledge. I have worked on "When waste becomes Lifeline" I have burnt the plastic and paper waste and converted the released CO2 into electrical power. I wish to create lubricants and paints with the help of the waste and i want to save our environment."

Riya Naim
12 Years - Andaman and Nicobar Islands

"NCSC 2023 offers an opportunity to get connected with different people with different ideas, Moreover, I want to develop my social skills which this event offers too. I want to explore creative projects. I wish to learn and develop some of the practices that would help save the ecosystem. I myself have created yellow and green coloured crayons from banana peel. Further, I wish to make food colour using banana stem and am here to meet some ecologists help me gain some ideas."



Meeting with National Academic Committee Members at Science City



The arrival of the Child Scientists on the land of Mahatma and Sardar

THE NCSC THEME

FOCAL THEME:



UNDERSTANDING ECOSYSTEM FOR HEALTH AND WELLBEING

- Know your Ecosystem
- Fostering Health, Nutrition & Well-being
- Social & Cultural Practices for Ecosystem & Health
- Ecosystem Based Approach for Self-Reliance
- Technological Innovation for Ecosystem & Health



The event kick started with introducing the children to the city and visiting the landmark places of the city such as the Sabarmati Ashram, Riverfront and Atal bridge. Indeed, a patriotic start!



SABARMATI ASHRAM

Located on the banks of the river Sabarmati, The Sabarmati Ashram, looked like a peaceful abode amidst the chaos of the busy streets of Ashram Road in Ahmedabad city. Around 300 students visited and took blessings of Mahatma Gandhiji as they landed on the Karmbhoomi of the Father of the Nation. The clean and green residence of Mahatma and Kasturba Gandhi instantly reminded the freedom struggle tales the history books have told us. The journey to the Ashram showed the children one man's devotion, willpower and thoughts back in the time and also reminded them of his humbleness and compassion. It was a successful visit as they got to see the place where the style of living of Mahatma Gandhi is still implemented.

The serenity of the place was something indescribable. While being there, they saw Upasana Mandir, Udyog Mandir, Vinoba Mira kutir, Gandhi memorial Museum, Magan Niwas and many more that lived up to the Swaraj and Swadeshi views of Gandhiji. It gave the children the 'Swadeshi' feeling as they got to spin the wheels of Charkha and visiting the territory schools that mainly focused on labour, agriculture and literacy to advance the efforts for nation's self-sufficiency. The spirit of simple living and high thinking invoked in the children made it a once in a lifetime visit. Truly, *Sabarmati ke sant tunc kar diya kamaal!*



SABARMATI RIVERFRONT



Riverfront is the perfect balance of ideas like environmental improvement, social upliftment and sustainable development. Around 300 students visited the riverfront park and explored different parts of riverfront like the biodiversity park which was a mesmerizing part of riverfront that had different plantations with a motive of environmental improvement. Students also visited the promenade along the river bank of Sabarmati River which grants an opportunity to pedestrians and cyclists with around 10 kms wide track. They also had the opportunity to visit different Ghats of the longest riverfront of the nation. This visit helped the children learn different values of life such as teamwork, managing skills, time management and of course socializing as they made many friends while playing together in the grand garden such as the flower garden of the riverfront. Children found riverfront to be an interesting place and had lots of fun!

ATAL BRIDGE

The state-of-the-art Atal bridge is the latest tourist attraction in Ahmedabad. The bridge connects the east and west side of the city creating a balance between modern infrastructure and city's world renowned heritage. The students visited the Atal bridge during their visit to Ahmedabad, that had grandness and at the same time created an image of sophistication and development. The modern marvel was inspired from the celebrations of the famous kite flying festival of Uttrayan in Ahmedabad and the colors chosen for the glass over the bridge reflected the hues of kites. The visit imbibed the children into imagination and creativity as they visited the kite like bridge.

Children were enthusiastic about walking on the bridge, as it had different plantations creating a symphony of urbanization and environmental balance. Some children decided to enjoy the scenery by sitting on the sides of bridge while some decided to explore the bridge by walking with music on while the rest were eating in the cafeteria of the bridge. The weather was just perfect for the visit to Atal bridge and everyone was capturing the moments in their cellphones by clicking pictures of each other. Even the faculties were delighted by the view from the bridge and consider this visit as a colorful memory to carry throughout their lives.



NCSC VENUE

30th NCSC is being organized by GUJCOST at the picturesque Gujarat Science City and Sal Education Campus. The venue has been featured in Time Magazine as World's Best Places to visit in 2022. With multitude of galleries and activity centres, Science City is unique wonder to explore.





AASMAKAM BHARAT

Words may feel short when it comes to describe Asmakam Bharat. The meaning of the Sanskrit word Asmakam is 'Ours'. Yes, with pride we say its our India. India is the land of heritage and unique culture that distinguishes it from other Nation-States. India is world's largest republic with second largest population over the globe. There is a massive mountain called the Himalaya on India's northern coast. The Ganga, Yamuna, Brahmaputra, Krishna, Kaveri, Godavari, and Narmada are India's principal rivers. India is renowned as a spiritual hub and God's own country. Famous Indian temples include Kedarnath, Badrinath, Kashi, Mathura, the Golden Temple, and Vaishonavdevi. Our ancestors wrote the Vedas, the Ramayana, the Mahabharata, and the Puranas. People still co-exist despite having distinct cultures, customs, faiths, and languages, which exemplifies the Indian culture of "Unity in Diversity." India as a whole is unified and adheres to a culture of peace, harmony, and prosperity from Kashmir to Kanyakumari.

Shri. Ravin Vyas is a multitalented individual with extensive experience in the field of business development dating back 30 years. RashtraYog, an ancient form of Indian wisdom, is another discipline that Mr. Vyas practises. He motivated the students by saying that, "If three out of hundred people prefer to prioritize their efforts for nation building, that country can become and remain amongst the most

powerful and respected countries of the world." He urged everyone to "invest one day per week for country development.

The session included ancient history, rural empowerment, holistic development, grass-roots leadership, and nation-building. An interactive session was conducted wherein students asked questions they were bothered with and received satisfactory responses from Mr. Vyas. It was indeed an insightful session.

Another Interactive Session was conducted by Ms. Hiral Mehta- a pedagogic Reformer, VolunTeacher. With the academic and administrative experience, she outlined the AtmaShiksha, AtmaShodh, and AtmaVishesh methodology for volunteer teaching. She threw some light on the need for the teachers and volunteers to come forward and contribute as a volunteer teacher to build a strong foundation for futuristic India. She provided in-depth knowledge of the distinctions between culture and civilization, as well as information on temple architecture and some lesser-known facts about it. Great civilization of Mohenjo Daro and Lothal were also discussed along with a large number of cultural remains such as pre-historic rock paintings, Stupas, Temples, Forts, Sculptures, Inscriptions, etc

It was indeed a great opportunity for the students and the teachers to hear from these experts.



THE ACTIVITY PAGE

**Solve a real problem and the world is yours.
Coming together with Young and Bright Child Scientists.**

DID YOU KNOW?

One of the most important mathematicians of the Middle Ages, Leonardo Bonacci — later known as Fibonacci, "the son of" Bonacci — invented a sequence of numbers that shows up constantly in nature, physics, and design.

Starting with 1, 1, 2, 3, 5, the Fibonacci sequence is created by adding up the two previous numbers to get the next one.

The Golden Ratio, a proportion associated with the Fibonacci sequence and also frequently found in nature, is roughly 1 to 1.6. This ratio shows up in the branching patterns of trees, the distribution of seeds in berries, the spiral arms of galaxies, and many more natural and human-engineered thing.

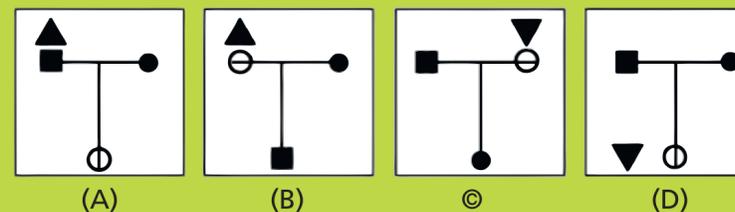
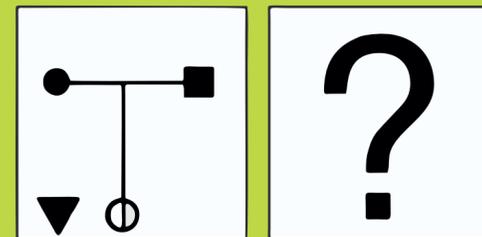
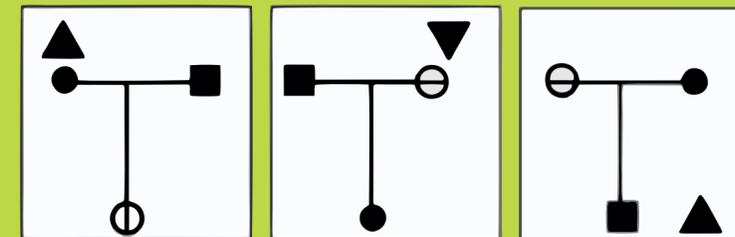
E.g. Shells, Spiral Galaxies, Flower petals etc.

Fibonacci Day celebrates this important mathematician and gives us an opportunity to marvel at the way math pervades everything around us.



FIND THE CORRECT ANSWER

Out of the given Answer figure, which is the correct one to replace the question mark?



Answer: (A) - The Triangle shifts in clockwise direction.

RIDDLES TIME

You will find me in Mercury, Earth, Mars and Jupiter, but not in Venus or Neptune. What am I?

Answer: The letter R

I am a god, a planet and I can measure heat. What am I?

Answer: Mercury

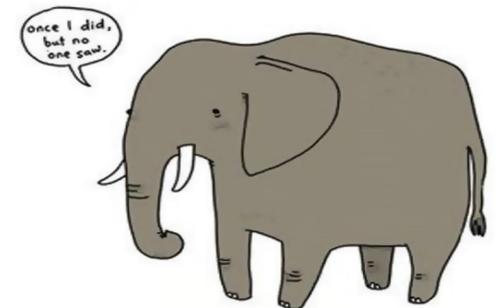
What are the three R's that keep our planet clean?

Answer: Reduce, Recycle, Reuse

What two periodic elements, when combined, heal?

Answer: Helium and Aluminum (He + Al)

ELEPHANTS CAN'T JUMP.



GUINEA PIGS SLEEP WITH THEIR EYES OPEN.

