

GUJARAT

Nirav Bharadwa
Vasava Alpaben Mukeshbhai
Vir Patel
Ansh Oza
Panchal Saxi Girishbhai
Mahir Patel
Vasava Jaimini Bhavsinghbhai
Prayag Desai
Margi Jitenbhai Dobariya
Parmar Astha A
Solanki Yashviba Kiritsinh
Darshi Vakharia
Bavari Guddi Dineshbhai
Vatsalkumar Satishkumar Shah
Patel Jenil Satishbhai
Madhav K Bhatt
Manya D Suthar
Rathva Aesha Upendrabhai
Nitya Hapani
Gohil Floria Mrunalsinh
Shridhi Singh Rajput
Ulva Rajveer
Brisha A Shah
Krushali Sunilbhai Bansode
Maheta Avani Kalpeshkumar
Hirvanshi D Dabhi

HARYANA

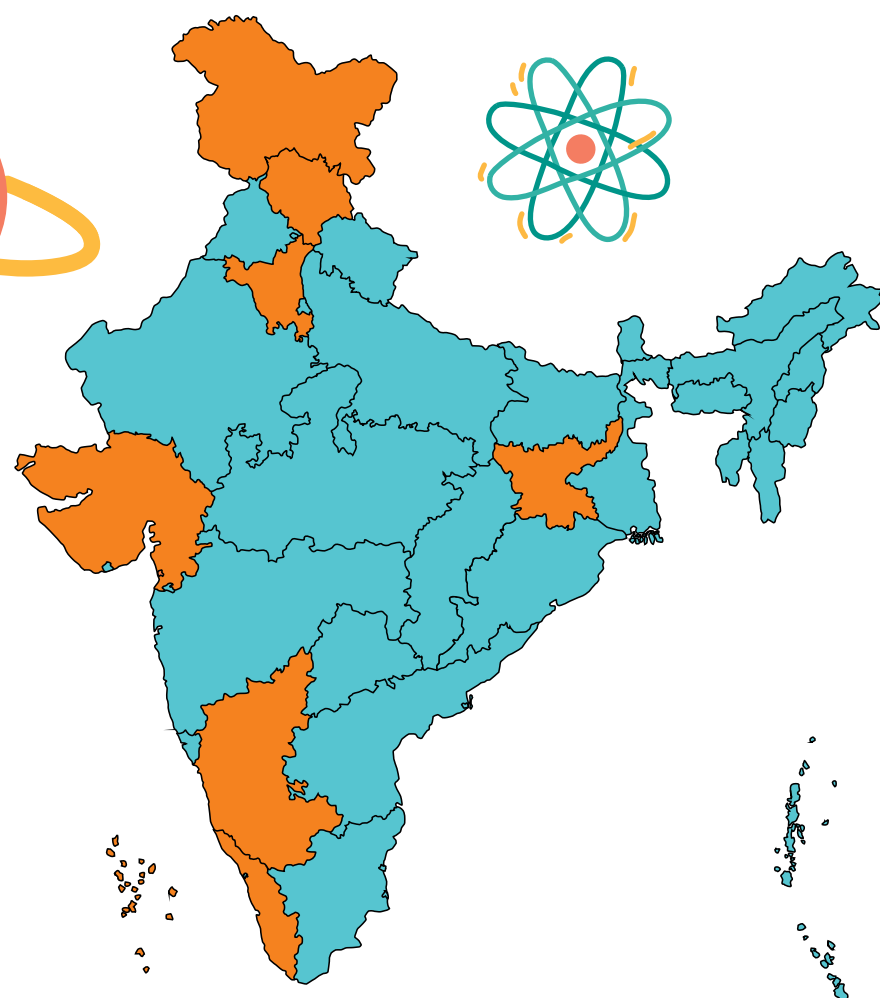
Parth
Medhansh Khanna
Nabhanyu
Pooja
Mahak
Vanshika
Samanpreet Kaur Virk
Kushagr
Varsha
Sanvi Mohapatra
Bhawna
Divya
Vanshika
Dhruv
Parbhat Saini
Kashmeena

HIMACHAL PRADESH

Sunaina
Anshita
Aryan
Rishit Sharma
Alisha Guleria
Anjali Verma
Abhishek Koushal
Krishan Kant

JAMMU

Paarth Magotra
Aarush Dev Sharma
Anirudh Sharma
Naman Jotshi
Yashasvi Koul
Rujla Mahajan
Vikrant Mehra



KASHMIR AND LADAKH

Sumaya Jan
Minha Nisar
Mohd Umar
Fatima Lala
Mariya Itrat
Seerat Javeed
Harshdeep Singh
Saleema Anwar
Asif Rizvi

JHARKHAND

Shatakshi
Payal Mahatha
Juhi Priya Murmu
Doli Kumari
Tarannum Gulnaz
Arpita Saha
Riddhi Sharma
Abhigyan
Saksham Jha
Abhineet Sharan
Arpan Kumar
Prince Raj

KARNATAKA

Madhushree
Rajashekhar
Ashwini N.B.
Swetha
Suresh Kajager
Pavitra Mudeppanavara
Shivaraj Koppad
Lekhana S.
Chandana S.A.
Anagha
Hridhaan R. Jain
Manish S.
Drush
Pavithra S.R.
Shreenidhi
Sinchana Byali
Lakshitha K.
Shriya
Bhima Goudar
Spoorti Shatiba

CHILD SCIENTISTS FOR 30TH NCSC

Sanika J. Naik
Yashaswini A. Barkur
Samay Mahale
Akshatha V.A.
Anagha H.P.
Saarvi S.P.
Athish Rajath
Soubiya Tehreem
Sushruth T.S.
Aditi

KERALA

Advait C Alex
Fidha Nesrin T
Iwin Sebastian
Nasha P
Aaqilah Jabin A K
Aimy Therese Tony
Arshitha J S
Neeraj N
Haifa P V
Prarthana Ghosh T V
Christy Gigi
Anjana C A
Lakshmi Bharathi V
Anusree S Nair
Vindusha E
Shivada P S

LAKSHWADEEP

Fahmi Shareef.K
Noura Bintah Ameer.D.K
Rafiya Farhath.K.C
Kiran Vadakkumpat



27th - 31st JANUARY 2023

NATIONAL CHILDREN'S SCIENCE CONGRESS

A PROGRAM OF NCSTC - DST
GOVERNMENT OF INDIA



Department of Science & Technology,
Government of India



NCSTC, DST
Government of India



Department of Science & Technology,
Government of Gujarat



SCIENCE CITY
AHMEDABAD



28th January 2023

Theme : Understanding Ecosystem for Health and Well Being



Inauguration Ceremony of 30th NCSC at Science City...!!!

With the great enthusiasm of our child scientists in the wintry morning, the magnificent inauguration ceremony of 30th NCSC took place at Science City, Ahmedabad. The ceremony was filled with motivation, zeal, splendour and hopes.

A procession of diverse states and cultures began the day, commencing at SAL Education Campus and concluding in Science City Amphitheatre. All invitees arrived at the Science City Amphitheatre for the Flag Hosting Ceremony, sang the National Anthem, and then proceeded to the Science City Vigyan Bhavan. The assembly of child scientists and invited guests was followed by an escort inside Vigyan Bhavan. Ganesh Vandana, a welcome song, was performed by the school students of Hillwoods School, Gandhinagar. The arrival of dignitaries on the dais was marked with flower and lamp lighting.

Honourable education minister of Gujarat Shri Kuberbhai Dindor joined the ceremony online and inaugurated the 30th NCSC. It was commenced with the lighting of lamp by the group of dignitaries including Shri Vijay Nehra, IAS, Secretary, Dept. of Science and Technology, Er Sujit Banerjee, Director, NCSTC, DST Govt of India, National Coordinator, NCSC Program, Shri Subodh Joshi, Deputy Secretary, DST, Govt of Gujarat, Dr. Lalit Sharma, Chairperson, National Academic Committee, NCSC Program, Shri J. B. Vadar, Executive Director, Gujarat Science City, Dr. Rupesh Vasani, Principal, SAL College, Dr. Narottam Sahoo, Advisor, GUJCOST, Shri Bharat Pathak, IFS (Retd.), State Academic Coordinator, Dr. Poonam Bhargava, PSO, And State Coordinator, NCSC Program.

The Ganesh Vandana is an invocation to Shri Ganesha that signifies the start of something good and positive. The program was also followed by Ganesh Vandana performed beautifully by the group students.

पर्यावरण का रखे ध्यान, तभी बनेगा देश महान!
In their speeches, the dignitaries talked about the need for environmental awareness and well-being as the focal theme of the 30th NCSC. Environmental consciousness is critical because it can help to



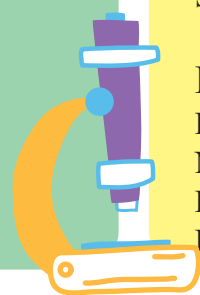
minimise pollution and global warming. It can also lead to a more sustainable world by promoting renewable resources such as solar, wind, and water. The notables invoked the children to inculcate the "scientific temperament". Shri Sujat Banerjee pointed out that the participation of 60% female children demonstrates the true women empowerment.

It's not a Competition, It's a Congregation!
IAS Shri Vijay Nehra who also inaugurated the Science Exhibition, welcomed all the children in

the 30th NCSC hosted by Gujarat state. He mentioned what an honour it was to host such national level program for 4 times. He told the participants that they all should consider themselves as winners for representing their respective states.

Honourable education minister of Gujarat Shri Kuberbhai Dindor who joined this inauguration ceremony online applauded all the participants, organizers and volunteers of NCSC on behalf of Gujarat Government. He said, "I am proud of the upcoming generation for taking such immense interest in science."

Dr. Narottam Sahoo gave the vote of thanks to all the invited guests and participants. In the end, Dr. Payal Pandit pointed out that they have Tora Das, the youngest child scientist as a participant who was just 10 years old! It was the most joyous highlight and everyone gave her a standing ovation. The inauguration ceremony was concluded with the passionate recitation of National Anthem. Truly, these child scientists with their enthusiasm and bright minds are the real "भारत भाग्य विधाता!"



NCSC kicks off with Student March and Flag Hoisting



It was a colorful morning today as the day began with student's march past from SAL Education Campus to Science city dressed in their regional and traditional dresses representing their state and culture. The march past started with students showcasing various traditional attires demonstrating their state culture and tradition. National Cadet Corps (NCC) volunteered in the March of National Children's Science Congress and gave a commendable ignition to the march-past.



State wise March-past:

- ANDHRA PRADESH
- ARUNACHAL PRADESH
- ASSAM
- BIHAR
- CHANDIGARH
- DADRA & NAGAR HAVELI
- DAMAN & DIU
- DELHI
- GOA
- HARYANA
- HIMACHAL PRADESH
- JAMMU
- JHARKHAND
- KARNATAKA
- KASHMIR
- KENDRIYA VIDYALAYA SANGATHAN
- KERALA
- LADAKH
- LAKSHADWEEP
- MADHYA PRADESH
- MAHARASHTRA
- MANIPUR
- MEGHALAYA
- MIZORAM
- NAGALAND
- NAVODAYA VIDYALAYA SAMITI
- ODISHA
- PUDUCHERRY
- PUNJAB
- RAJASTHAN
- TAMIL NADU
- TELANGANA
- TRIPURA
- UTTAR PRADESH
- WEST BENGAL
- GUJARAT

Science Exhibition at NCSC



Child Scientists of New India

Dr Anil Kumar Gupta is an Indian Scholar in the area of grassroots innovation. Upon finishing his bachelor's degree in Agriculture, he went on to complete his Masters in Science (Biochemical Genetics) in 1974. He earned a Ph.D in Management in 1986.



Dr Gupta is the founder of the Honey Bee Network. He retired as a full-time professor at Indian Institute of Management, Ahmedabad in 2017, where he served for about 36 years. He is also a fellow of World Academy of Art and Science. He has also developed courses for students at IIM, Ahmedabad. One of his most popular courses is Shodh Yatra.

Dr Gupta was awarded the Padma Shri in 2004 for his contributions to management education. His other awards include Science-in-Society Award, Asian Innovation Award Gold and Pew Conservation Scholar Award.

On 27th Jan'23, Dr Gupta had session on Children and Creativity where he shared many things on science applications. Some of his remarkable talks was on experiment where he said that Home is Lab itself. Without any equipment also we can perform experiment from things which are available at Home. He also talk about how today it's ok to be poor by finance, but children's should be rich by mind. He even told childer's to not believe in any Superstition and to keep faith in science. He also told us that we should keep a scientific thinking as mentioned in our constitution.



GLIMPSES OF TECHNICAL SESSION

Presentations of various child scientists were organized at SAL Institute of Technology and Engineering Research as a part of 30th National Children's Science Congress. The theme of this technical session was to know your ecosystem; fostering health, nutrition and wellbeing; social and cultural practices for ecosystem and health; ecosystem-based approach for self-reliance; technological innovation for ecosystem and health. In all 18 Sessions were taken up parallelly and the child scientists presented their projects with full confidence and assertion. Though all the projects were innovative and remarkable, some of them were eye – catching and surpassing:

Mask Filter Face Mask

Pollution is increasing day by day and it has become a big threat to all human beings hence this mask is comfortable and scientific in comparison with other masks. Users don't feel any type of difficulty and suffocation using it. It is helpful for workers working in factories like in bleaching powder making factories, waste recycling factories, farmers spraying pesticides in farms, people who are suffering from asthma, bronchitis, sinusitis.

This face mask works with 2 DC CPU fans. The first fan is used to take in the fresh air inside the mask and second fan is used to take out released air from our body. When the air gets inside the mask with the help of fan, it goes through "ACTIVATED CARBON FILTER OF 2.5 PM" AND "HOMEMADE NEEM EXTRACT FILTER" which can filter particles from air of about 2.5 nm in diameter and bacteria or viruses present in the air. It has used Lipo battery as it supplies power and a charging module for recharging battery.



The Simple Pendulum Project

The simple pendulum project describes the concept of centre of suspension i.e the point about which a pendulum oscillates. If the pendulum is released at a given distance, it will cover the same amount of distance on the other side.

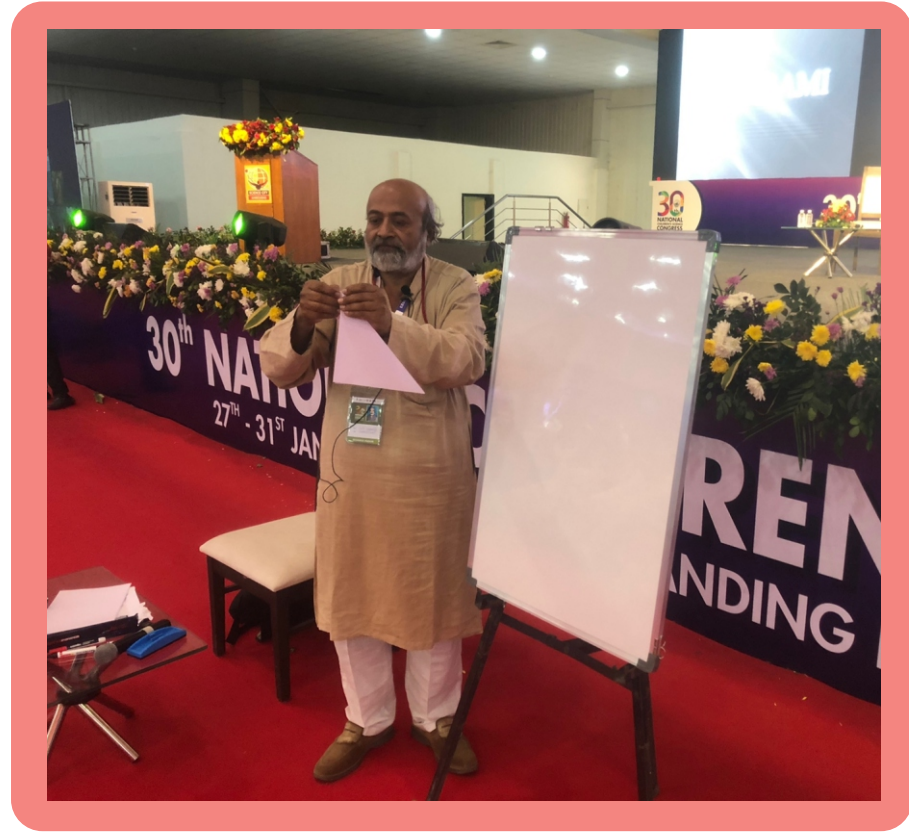
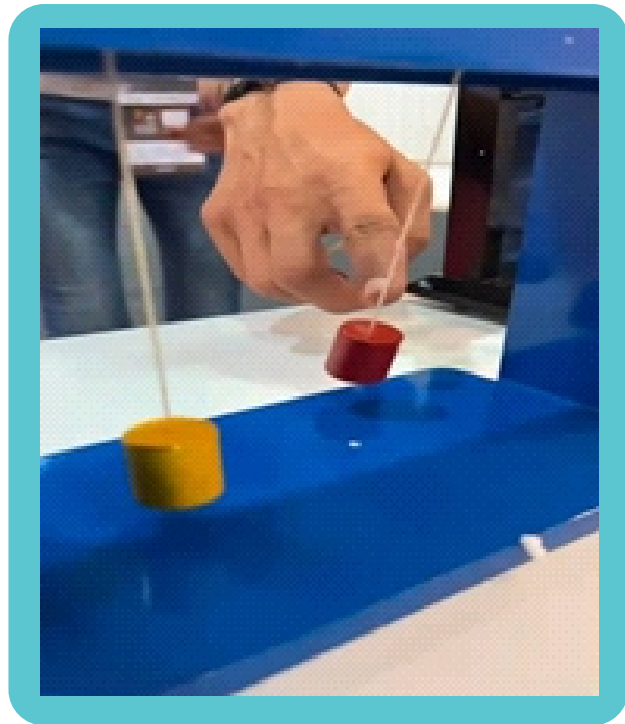


A better tomorrow begins with innovation

Innovation is the key to success in future. The theme of this technical session was to know your ecosystem; fostering health, nutrition and well being; social and cultural practices for ecosystem and health; ecosystem based approach for self reliance; technological innovation for ecosystem and health.

The beta booster appetizer promotes healthy digestive drink and its objective is to increase immunity in traditional ways and to reduce gut problems by boosting immunity.

The simple pendulum project describes the concept of centre of suspension i.e the point about which a pendulum oscillates. If the pendulum is released at a given distance, it will cover the same amount of distance on the other side.



Meet the Scientist

Dr. Nilesh M. Desai
Distinguished Scientist
Director, Space Applications Centre (SAC/ISRO), Ahmedabad

Shri Nilesh M. Desai, the President of ISRS, is Distinguished Scientist and currently the Director of Space Applications Centre (SAC), ISRO, Ahmedabad. He has held the positions of Deputy Director for SAC's Microwave Remote Sensors Area (MRSA) and SatCom & SatNav Advanced Applications Area (SSAA) as well as Associate Director for SAC. Shri Nilesh Desai is a top ranker and gold-medalist of 1986 BE (Electronics & Communication) batch of L. D. College of Engineering, Gujarat University, Ahmedabad, India. He has contributed to the design and development of ISRO's microwave radar payloads such as the Oceansat-II and Scatsat-1 scatterometers, RISAT-1 Synthetic Aperture Radar (SAR), Chandrayaan-2, and others.

Additionally, he has represented ISRO by participating in ISRO delegations at several international fora in nations like the United Kingdom, Austria, Russia, Germany, South Africa, France, Israel, Singapore, etc. Data acquisition and digital signal processing for radar and navigational signals, DSP and microprocessor architectures, VLSI digital design, FPGA/ASIC hardware design, embedded systems, and software quality assurance are some of his areas of interest and research.

Workshop on Learning Maths Origami



Shri VSS Shastry
Science Communicator

Origami, also called paper folding, to create both two-dimensional and three-dimensional subjects. The workshop functioned as a classy yet entertaining activity for creating math teaching aids, and students learned how to fold paper to create three-dimensional origami items while studying the use of form in art, creative thinking, sensory and fine-motor development, etc. The workshop was led by V S S Sastry, a math communicator who resides in Kolar, Karnataka. Over the past three decades, he has led more than 700 workshops. He is an expert origami artist who has the 2011 Limca Book of Records for Origami sculpture. To clearly and simply explain the subject of mathematics, he used origami folds. His book "Origami Fun and Mathematics" published by Vigyan Prasar has seen seven reprints and is frequently referred for mathematics lab activities. He is the author of 26 books on mathematics and science popularization. He was given the VISION award by the Govt. of Karnataka in 2011. The teachers were given the idea how they can develop their students' special reasoning skills by making a two-dimensional sheet of paper into a three-dimensional figure. The students can develop the idea of symmetry and how to manipulate simple geometric shapes like squares, rectangles, and triangles through practical activities. Teachers were trained into the ways to improve focus and concentration, thinking abilities, fractions, problem-solving, and enjoyable science in addition to 3D perception and logical reasoning with the help of these practices.



Introduction of Gujarat

When someone mentions Gujarat, vibrancy, color, culture, and folk dances are the first things that come to mind. The Gujarati people are one of the oldest populations on the continent, love to relish each auspicious day with a lot of fanfare. Gujarati folk dances are a crucial component of the local culture. Folk dances from Gujarat are a significant part of regional culture. The traditional dances and plays are vibrant, dynamic, and alive, and they accurately reflect the culture. The majority of Gujarati dance styles are centuries old, yet they have been successfully preserved over time, which makes them unique. The residents of the state are well known for their raw talent for singing and dancing. The several distinct folk dance styles are undoubtedly delightful to watch and an insight into Gujarati culture.

Praful Rawat & Group

Praful Rawat is an international folk artist, fashion choreographer and a professional actor. More than 400 films featuring him were produced in several languages, including Marathi, Gujarati, Bhojpuri, and certain languages from the south. He has been working since he was 20 years old and has more than 30 years of experience. He currently works with children and teenagers. More than 25–30 artists participated in four different performances. The moment they began to perform, the audience was in stunned silence. They were ecstatic to see them perform, and they lacked the words to express their pleasure.

Rasdo

In traditional gear, the Surendranagar squad performed Raas. Everything was dominated by their grace. They looked their best in their attire and the viewers were wowed by their performance.

Mishra Raas

Singing and dancing with flute and other instruments with dance forms like garba, garbi and raas revert to the ancient era of Krishna and is the most popular dance celebration in Gujarat. A legendary unique folk dance form also has variations with dandia or stick raas. Dandiya dance form, also known as stick dance, is one of the most popular folk dances of Gujarat. This dance form depicts a mock battle between the goddess Durga and Mahishasura, the demon king. The dancing sticks (dandiyas) are said to resemble Durgas swords. During the dandiya, dancers performed finely synchronized foot and arm motions while the dhol served as an extra percussion instrument. It seemed to be a divine performance. What a brilliant way to convey a tale !!

Fusion of all gujarati folk dance and songs

Garba

Gujarat is renowned for the famous dance style known as garba, which derives its name from the Sanskrit words garbha (womb) and deepa (dance). It is traditionally performed around the goddess Shakti or a central lamp. Participants performed energetic garba performances. When the performance was done, the audience felt the energy. Their dance performance fascinated the spectators.

Bhavai

Gujarati folk theatre known as bhavai has been performed for 700 years. Music, dance, and the inherent humour of each Bhavai Vesha are its highlights. Bhavai utilizes a number of instruments, including the harmonium, bhungal, tabla, kansijoda, and jhaanjh. The manner Bhawai was presented evoked strong emotions in the audience. It appeared as though the audience was completely engrossed in the performance.

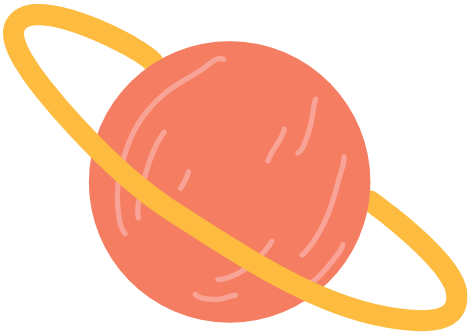
Hudo

One of Gujarat's most well-known traditional dances is the hudo. It represents the pastoral community of the Bharwad Tribes of Gujarat's folk dance style. The dance was inspired by sheep conflicts. The actions of two sheep bumping heads in this dance style are mimicked. The dancers furiously and rhythmically clap their hands. Men and women both perform the Hudo dance. The audience was as enthralled as they had never seen a finer dance performance.



THE ACTIVITY PAGE

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



DID YOU KNOW?



P a l m c o c k a t o o
(Probosciger aterrimus)
The black palm cockatoo, also known as the great black cockatoo or the goliath cockatoo is one of the biggest of the cockatoo species.

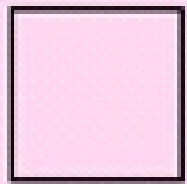
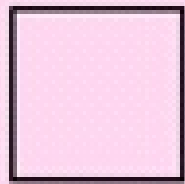
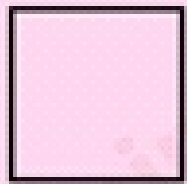
The largest cockatoo, the black palm cockatoo or goliath cockatoo, is strikingly beautiful. This species is not naturally affectionate. The black palm cockatoo is native to Australia, particularly the very tip of northern Queensland. Also, this species now lives in New Guinea and Indonesia. These birds generally inhabit the rainforest and woodlands and nest in hollow trees.


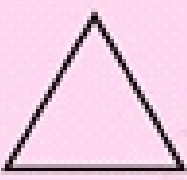
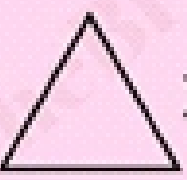
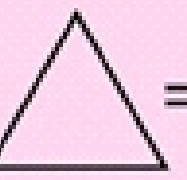
This bird's natural vocalizations have a human-like sound, including their signature "hello." Their vocal ability is well suited for learning words. They are one of the best talking cockatoos.

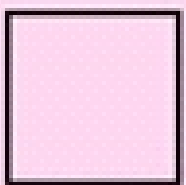
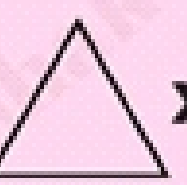
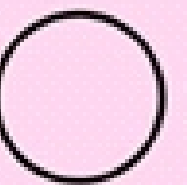
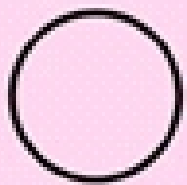
Magical Math

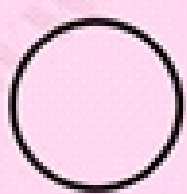

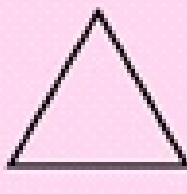
Numbers of shapes.

CAN YOU SOLVE THIS?

 x  x  = 8

 x  x  x  = 54

 x  x  x  = 6

 +  x  = ?

Answer : 2 x 2 x 2 = 8 2 x 3 x 3 x 3 = 54 2 x 3 x 3 x 3 x 3 = 81 2 x 2 x 2 = 8 1 + 2 x 3 = 7

I am I __ D __ A

Let's play Kaun Banega Chatur Child Scientist

I am River. The name "India" is originally derived from my name guess who I am

Answer: Indus River

Did you know about me? I am National ____ of India. I have 3 colors.

Answer: FLAG

What is the ratio of my width to its length?

Answer: 2:3

I performed the anthem for the first time during a Congress meeting in C __ c __ t __ .

Answer: Calcutta

Playing time is approximately ____ minute ____ seconds.

Answer: 1 Min 9 Seconds

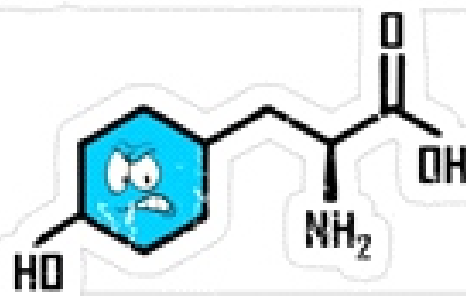
Who discover first the sea rout to India?

Answer: VASCO-D-GAMA

I am the father of national anthem. Do you know who I am?

Answer: Rabindranath Tagore

WHAT DO YOU CALL AN ACID WITH AN ATTITUDE?



A-MEAN-OH-ACID