Kids Galaxy, Feb 2023





BUDDING MUKTHA NAVYASRI SCIENTIST!
SCIENTIST!
SCIENTIST!
SCIENTIST!



NANHAAGYAAN FOUNDATION





400+ Counselling Sessions



550+ Workshops



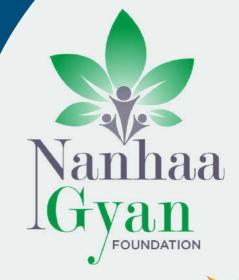
17,530+ Handwriting Analyses



29,000+ Happy People



40+ Schools Kid's Galaxy Readers







www.nanhagyan.com



Page: www.facebook.com/nanhagyan
Group: www.facebook.com/groups/568258067457704
(Nanha Gyan Healthy Minds)



www.instagram.com/nanhagyanfoundation



www.youtube.com/nanhagyanfoundation







OUR MISSION

To establish a foundation for a society where every smile is real.

OUR VISION

A harmonious society is a cumulative result of small actions by kind and compassionate people.

OUR VALUES

SIMPLICITY

Because all great things are generally simple.

• BELIEF

Sometimes people need someone else to believe in them, so that they can believe in themselves

KINDNESS & COMPASSION

Because some problems can be identified and solved by kindness and compassion.





EDITOR'S NOTE



Hello Friends.

From the time we start babbling as babies, we get associated to the languages used around us. Infact, some studies show that babies start listening to, and learning their mother's language even from within the womb!

And since we are born being familiar to it, our "mother tongue" or "mother language" plays a really important role in our development.

Research shows that children learn better if taught in their mother language, specially in the early years. They're able to communicate better, think and reason easily and share their emotions better.

It also becomes easier to learn another language. We can learn the new language keeping our mother tongue as reference!

Lastly, speaking our mother language fluently, keeps us grounded and aware of our roots. Every family has its own style of spoken language, and we must appreciate and preserve the uniqueness of our mother language!

While English is fast becoming the common language to unite our diverse backgrounds, we must not forget our native mother languages, which have their own beauty and are also our legacy!



GAYATRI BHASKER Mangalore



If you talk to a man in a language he understands,

that goes to his head.

If you talk to him in his language,

that goes to his heart.

- Nelson Mandela

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HAPPENINGS AT NANHAAGYAAN!



Tantalizing Tables with Preethi Muthiyan

This is one of our most sought-after classes! More than 100 students registered and enjoyed the session! Here's feedback from some very happy parents!



Thank you very much for your Tantalizing Tables session! It was really very interesting to learn them! It will help students take an interest in Maths! Thank you very much for your hard and honest efforts! Waiting for some more Maths sessions, wish you all the best!

Regards, Mrs. Bhujang

When it comes to Maths, kids are like "Arre bhai, bahut danger subject hai!" Hopefully, these tricks will help them speed up their calculations. Thank you so much for being an important part of our child's development!

- Amruta Chordiya

Thank you so much for making our kids grow their interest in Math and calculations. My child is very happy to know the tricks you taught about multiplication! Thank you for arranging such workshops. Waiting for more of these!

Rishav enjoyed learning the "table tricks"! He says, "Now I know how to do the tables!" So satisfied to see his confidence. Thank you for the wonderful session!

- Ashruta and Rishav

Thank you for the interesting session, it will help Kanishka take an interest in Maths. Thank you for your support and efforts!

- Mina Sanklecha

Dhruti really enjoyed the table tricks! Thank you for helping in our child's growth!

- Poonam Bhat

Relationship Graphology by Rommal Surana

Rommal is an expert graphologist and conducts both graphology workshops and analyses.

The feedback speaks for itself!

The handwriting analysis course is just amazing. Rommal teaches so beautifully. She helps us understand all the aspects completely. Anyone wanting to learn should go ahead with Rommal without any hesitation. She guides very very beautifully!!!!!! I am extremely glad I have learnt from her!!!!

Had my next graphology workshop with Rommal and it was awesome workshop. New topics were taught, the workshop was very informative helping us learn. Thank you so much!" "It was really a nice session, and I enjoyed a lot and learnt new things. In future it will be really helpful for relationship handling."

- Pratik Saraf



In other news, Nanhaagyaan Foundation Director, Rommal Surana was invited as the Chief Guest at Asha International School. She was also presented with a "Reach Out to Help" award in











Nanhaa Gyan FOUNDATION

At Nanhaagyaan Foundation, we believe in fostering a **growth mindset** in children. A growth mindset means having faith in one's abilities, and the willingness to put the effort to improve. Similarly, if we encourage a growth mindset for our country, all of us would be willing to think of ideas to make it better!

On account of Republic Day in January, we encouraged children to write a **letter to our Prime Minister**, with their dreams for our beloved country. Here are some contributions!



I have some dreams about how I want to see India in the coming future.

I would like to see a country where everyone's basic needs are met, a country that is clean and hygienic and that has advanced so much in science and technology that other countries watch us in awe.

And finally, a country that is developed, where everyone is happy, irrespective of income, religion, caste, etc. In my opinion this can be done by supporting the poor by providing free education and basic necessities, encouraging more exports of products, and by maintaining a healthy lifestyle for the citizens by keeping reasonable work timings using helpful policies for the workers.

This might seem hard but is not impossible if executed properly and efficiently. Jai Hind!

Neel, Grade 9, Trinity School



Dear Modiji,

We are proud to have you as our Prime Minister, and appreciate every effort in growth of India. Today I have a platform where I can express my feelings for my country. The India I would like to see will be a country where women are safe and walk freely on road. Also, it will be a place where there is freedom of equality and everyone can enjoy it in the true sense. It will also be a place where there is no discrimination of caste, color, gender, creed, social and economic status, and race. I also see it as a place of abundance, development and growth.

Rashmi Ajay Verma, Grade 9, Trinity School





A FRIEND IN NEED -





...is a friend indeed!

A special monthly column by our very own Mrs. Rommal Surana, a certified Parenting Coach, Child and Adolescent counselor, NLP Master Practitioner, Remedial Educator, and Graphologist! She has worked in this field for almost a decade and aims to enable parents and children build a better future together!

She will be your friend, philosopher and guide throughout your parenting journey! Send in your questions to kidsgalaxy@nanhagyan.com!

BEYOND THANK YOU

Recently, I took some gifts for my friend's daughter. On receiving the gifts, my friend coaxed her daughter, **"What should you say to Aunty?"**

Without making eye contact, her daughter mumbled, "Thank you", as she half hid behind her mother.

We all have experienced this situation many times, either as kids, or as parents.

Are we really imparting the value of gratitude? When it comes to teaching our kids good manners and social etiquette, it's easy to focus on the Thank Yous and Pleases. But forcing our kids to say thank you doesn't always teach them genuine gratitude.

How do we inculcate the value of being grateful? Instead of making your child say thank you, try asking her - **"How do you feel about that?"**

This open-ended question allows the child to express her feelings and emotions in her own words.

It also helps her understand that there are different ways to show gratitude and that saying thank you is just one way.

Once your child can identify a positive feeling, we can help her connect to how gratitude feels inside. For example, instead of "Say Thank You" we may say - "How did you feel when you got a gift from your grandmother? Does she know how you felt? Go and tell her!"

We need to help the child recognize how gratitude really feels inside.

Once, she gets it, she will say "Thank You" without being forced, because she will feel it!



Thirukkural -Arivudaimai Adhikaram

SCIENCE IN THIRUKURAL

Nanhaa Gyan

28th Feb National Science Day **UV FOUNDATION** brings to you the writings of **Thiruvalluvar**, the great Tamil saint, on science! The kural numbers are listed within the article!

Our ancient wisdom proclaims that an individual is an instance of this universe and the basic substance of all that exists is consciousness. (Kural #355).

Well, scientists are struggling to decipher where to place consciousness in their studies and are yet to get to the bottom of Higgs-Boson or God particle.

Whatever be the approach, all efforts are towards purposing knowledge for better living. The knowledge that assures quality life is contained in Thirukural which is the essence of the Vedas - be it moral science, geological science, agricultural science, medical science, home science, political science, epistemology, and it establishes their inter-relationship. Wondering how?



Geological Science: In **Vaan sirappu** (Glory of rain Chapter#20), Valluvar says that rain which sustains life of species on earth is dependent upon collective good conduct. This bears reference to Sri Krishna's words in the Gita that beings are born of food, food from rains, rains from the unseen effect of our mental, verbal and physical actions. Valluvar teaches us the attitude of reverence to nature and society, as the functioning of every human being an integral part impacts the macro cosmic body.

Agricultural Science: Uzhavu (Farming) inspires farmers to cultivate consistently without complaining about lack of resources. It gives hints on farming techniques: Manuring is praised over ploughing and after weeding- securing crops is praised over watering the fields. If one measure of soil, is tilled and dried to a quarter, good yield needs not a handful of manure. (#1038-40)

Medical Science: Let there be plenty of food and let it be well distributed. Valluvar warns that the one who overeats or eats wrong will contract diseases. The medical doctor has to take into consideration the patient's condition, intensity of the disease and season when the disease has been contracted. Also, medication will depend upon the patient, the doctor, the medicine and the caretaker. (Medicine Chapter #95)

Home Science: If one enjoys good care at home, wellness is assured. If the thoughts and actions of the person cooking the food are conducive to peace and progress, if they ensure cleanliness and delicious food, secures what is essential for the family within the means available (without greed and jealousy) and shares with others compassionately, what more can one want? (Good life partner Chap #6).

Political Science: When there is harmony in the home, there is order in the nation. What makes a nation is its plentiful food production, the exemplary learned and the noble wealthy people. A good nation is free of starvation, epidemics/ pandemics and enemies. Water resources above and below the surface like lakes and wells well fed by rains, well situated mountains and strong defense constitute a country. **Health, wealth, high yields, happiness and strong defence** - **these five adorn a nation**. All these in a country bereft of a right ruler fail. (Country Chapter #74) It is also said that monsoon fails an unjust ruler (#559).

Scientific Temper: Thiruvalluvar encourages us to use our logical thinking to ascertain what is right with objectivity, the essential faculty needed in science. He does not command us to go by what we hear from someone blindly but presents food for thought and good guidance (#423).

Where else do you find a text that connects progress and peace not only to moral values but with varied walks of science? Let us enrich ourselves by exploring Thiruvalluvar's fascinating facts and deep fundamentals presented in a candid, lucid style!





11th Feb Intl. Day of in Science

MUKTHA NAVYASR

BUDDING SCIENTIST!

P. Muktha Navyasri is a 10th grade student, from Zilla Parishad High School, Madduru, Andhra Pradesh. Her typical day starts at 5 a.m., and ends at 10 p.m. She utilizes these 16 hours, to do her schoolwork, help her mother with household work, guide her brother in his studies, learn about new innovations in the science community and of course play!

So, what's so special about this girl, you may ask?

Well, she is a promising child scientist, thanks to the unwavering support of her mentor, Mr. K.S.R. Anjaneyulu, who is also her class teacher.

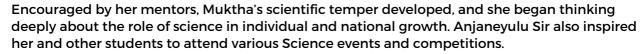
Back in 2018, a tinker training workshop held at her school, sparked off Muktha's interest in science, and then there was no looking back! The session was one of many, held by Mr. S.G.Srinivas, (currently Regional Mentor of Change, at ATAL Innovation Mission, NITI AAYOG, Govt. Of India.)

> Mr. Srinivas, an accomplished engineer and educator, has been passionately working towards inspiring the young

minds of India, to try and become the next Nobel Laureates in Science! Since the past 14 years, he has served over 1000 schools, and lakhs of students through Science Fairs and workshops! Visit his website - www.ScientificStudents.com

for lot of interesting info!

(L-R seated) Mr. Anianevulu and Mr. S.G. Srinivas with some students at ZPHS. Madduru.



One such event is the National Children's Science Congress, an annual program by National Council for Science & Technology Communication to exhibit creativity and innovation, more particularly to solve a societal problem experienced locally using methods of science by school children.

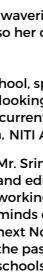
It is open to children of the age group from 10-17 years covering all backgrounds - either school going or out of school system, belonging to geographic, language and cultural regimes across the country and open to all children including children with disabilities.

The theme for the **30th National Children's Science Congress** was "Understanding Ecosystem for Health and Wellbeing".

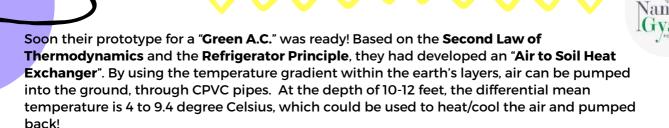
Muktha and her team partner Purandeshwari began working to identify solutions. Anjaneyulu sir helped them find the source materials, both online and offline. He explained and corrected her designs at various stages of the project.

They observed that nowadays, everyone is using ACs in the summers, and heaters in the winters. Both are very costly, incur a high electricity bill, and last only around 3 to 5 years. They determined that their project should consider these three factors -

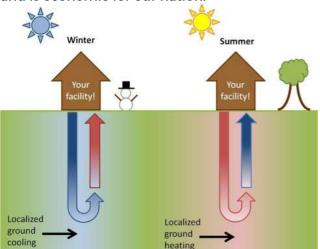
- 1. Minimizing energy crises and economic burden
- 2. Utilization of renewable energy sources
- 3. Countering climate change and aiming for better human health.







Instead of relying on non-renewable resources, which create economic crises, they designed their project to tap into renewable sources like Geothermal Energy which saves environment and is economic for our nation!





They worked hard to depict the data and results through charts, calculations, logbooks etc. Coming from a rural background, and a Telegu Medium school, Muktha worked hard on her presentation and language skills.

Being the intelligent, clever girl she is, she managed to cross these hurdles, and cleared not just the **District Level**, **State Level**, but even got selected for the **National Level Children's Science Congess event in January 2023!**

Her project was such a success that Adikeshwara College of Engineering and Technology, Guduru, have come forward to invest in it, and install the "Green A.C" in their campus within 2-3 months! Once the installation is complete, the college would be the first in implementing her idea!

"Initially I was very scared and nervous, especially during the District and State Levels. Anjaneyulu Sir and Srinivas sir guided me on how to present the project. By the time we reached the National Level, I had gained confidence and even interacted with the other students present there.

When I grow up, I want to become a responsible and ethical scientist who can contribute to our country with my innovations!" - Muktha Navyasri

Mukta and her mentors are the true testament of this equation -

Student + Parents + Teacher + Mentor = Success!

Thanks to this wonderful combination of Parents' support, Mentors' guidance, good opportunities and Muktha's intelligence and hard work, she has been able to come from a Local to a National Level! She aims to encourage other children to take part in the Science Congress, and start thinking – What can I do? How do I design? How do I find a solution?

ATAL Innovation Mission, and NCSC are great platforms for India's children to progress from budding scientists to international eminent scientists! We wish Muktha continued success in the new journeys she will embark upon!

CHETAN SOLANKI - SOLAR GANDHI



Behind the humble, pleasant exterior, **Professor Chetan Singh Solanki** from IIT-B is a **Solar Warrior** inside.

He is the founder of the **Energy Swaraj Foundation** and is currently on a 11-year yatra across India, with the aim of creating **Energy Literacy** in over 100 crore people and encourage over 1 crore families to switch 100% to **Solar Energy**. He travels in a "**Solar Bus**", and has already covered 36000 km, across 17 states and interacted with around 3 lakh people!

Our Editor, **Gayatri Bhasker**, met with Professor Solanki, in Mangalore when he had come to deliver a lecture. Let us learn some more about his cause and how we can be a part of it.









Prof. Solanki shares that **the climate change that we were talking about, is already here for us to see**. The high frequency and intensity of natural disasters like droughts, floods, forest fires, the depletion of ice on North and South poles, increasing water levels in the ocean, increasing diseases, are all the effects of climate change.

Earth's climate has changed only due to one factor - the use of Energy. Ever since the Industrial Revolution, we have been heavily relying on Coal, Crude Oil and Gas for our energy needs. India spends around 12 Lakh Crore rupees importing these resources and our dependence on any other country for our energy needs is not sustainable.

Moreover, all three resources are made of carbon. When we burn them, carbon dioxide is released in the atmosphere along with energy. This carbon dioxide is a greenhouse gas and can exist in our atmosphere for 300 years! CO2 concentration in the air has jumped from 288 ppm (parts per million) to 420 ppm through the years!

When we say humans have caused climate change, we are shirking our responsibility towards it. Let us own this problem, and vow - "I caused it, I am responsible for it, and I will correct it."

As Gandhiji said, 'There is enough in nature only for the need and not for the greed.' So, let us follow the A-M-G approach recommended by the Energy Swaraj Foundation, and contribute in our own way. Remember that it's a small but powerful contribution!

AVOID

the use of energy by 1/3

Turn off fridges, geysers, ACs! Stop Ironing your clothes!

MINIMIZE

the use of energy by 1/3

Use energy efficient appliances!

GENERATE

only the remaining 1/3 energy locally using renewable sources.



Let us join Prof. Solanki, on his mission, and become Energy Literate! Mr, S.G. Srinivas, who mentored Muktha, has also joined hands with him, so that more and more people could be educated towards saving electricity, money and our planet! Scan this code, and register yourself or your organization, and undertake the short, free Energy Literacy Training!



Productivity Ballon Gode Productivity



Are you struggling to get things done? Just looking at the pile of homework makes you want to go to sleep? Does the to-do list seem ever growing? Are you overwhelmed, bored, or simply tired?

Here's Productivity Bingo, which helps you take steps to improve your productivity, one circle at a time! Follow these suggestions and get more out of your life!

Minimise Your Distractions! Start with a Small Goal!

Remind yourself of the importance of your task!

Make a realistic plan for your task! Choose a reward for yourself to enjoy after getting the job done!

Spot your
"Productivity
Bursts" and
work at those
times!

Take reasonably spaced breaks!

Get a good night's sleep!

Exercise to keep yourself fresh and active!

ONCE UPON IN OUR MINDS... NOW IN OUR HEARTS!





Ridhhaan Jaiin

Dear Readers, we had introduced you to **Ridhhaan Jaiin**, one of India's youngest authors, in our June 2022 edition

Ridhhaan has now established **Ridhzworld Publishing** to encourage his friends and fellow authors to showcase their ideas! From that simple idea and pure intention, was born the **Ridhzworld Story Writing Contest!** The competition, organized in association with **Nanhaagyaan Foundation**, was open for two age groups - 5 to 8 year and 9 to 12 years.

This international competition focused on - improving communication and writing skills, creative thinking and kindness. Ridhhaan and his family firmly believe that helping others, even with simple encouragement, connects people and builds relationships!

Creative Writing Partners - **Kubic Online Edutech**, shared informative videos to introduce children to story writing. **Makeway Marketing** were the social media and design partners. **Ms. Sumita Bajpai**, from Kubic Online Edutech, formed and led the judging panel comprised of **Ms. Ankita Manna**, Learning and Instructional Designer, **Ms. Divya Nair**, Asst. Professor and IQAC Coordinator and **Ms. Priyanka Joshi**, Copywriter and Professional blogger. The competition met with an overwhelming response, with entries coming in from India, UAE, Malaysia and Singapore!

And now, we get to introduce the winners! Together, their winning stories will be shared with the world in an anthology aptly titled - 'Once Upon in Our Minds', due to be released in March-April. The imaginative stories and their endearing authors will be

in our hearts soon!

"Reading helps me get mindful thoughts and I learn from the moral of the stories. Most of the stories carry morals through human or animal characters. I have also done the same in my story!

This competition, gave me vision to think about a story and write in my own words along with the name of the characters!"

Namit Jagirdar, Grade 2, Sanjivani International School, Navi Mumbai





"I like to read and write stories because they tell me about new characters and every story gives us something to learn. My parents tell me religious stories, their childhood stories when I go to sleep...All this helped me in writing this story!

I like this competition as I will get a chance to read stories of my friends and in the same way my story will also fly to kids who are very far from me! I may not know them or even see them, but my story will reach them and make them happy the way I get happy reading others' stories!"

Saanchi Singh, Grade - Sr. K.G., Pathshala School, Pune



"I like reading because I get excited to know what will happen in the story! I have read many books and stories. I had once read a story about a ship and a treasure. That inspired me to write this story!

I want to be an author of many stories! This competition is a great start for me!"

Aabha Ghuli, Grade 3, Global Indian International School, Hadapsar

Aabha Ghuli

"My parents have always encouraged me and have inculcated the reading habit in me. This has helped me build my vocabulary, open my imagination and create little stories in my mind. Also, my cousin, Vaimitra published her first book when she was 8. She is a huge inspiration to me as well.

In this competition, I liked that I was able to use a real-life experience of my visit to the Pune University grounds and use it creatively as a background to my story. I am also very excited that my attempt at writing this story has won me a reward with my story getting published in an anthology!"

Anshika Iyer, Grade 4, Sanjivani International School, Kharghar



Gyan

Anshika lyer



"I love reading because we can imagine people, situations and places that need not match reality! We can also go to places that we haven't gone yet! I love writing for the same reason, with the addition that I get to decide what characters to have, how they speak, what they do, where they live and even decide the ending!

For the competition, I thought of a thrilling detective story where the girls get to use their cool gadgets to solve a mystery!

I'm glad that I got an opportunity that I had never come across before. I used to make up lot of stories since childhood, but rarely put them to paper. Through this competition I got a chance to write something, and being selected as one of winners was an awesome surprise!"

Aadhya Garg, Grade 5, Podar International School, Mangalore



"I feel reading develops our brains and gives us the ability to understand life in a much better way. There is a lot of room for grammar and language development through it. When you read a lot, you learn new words all the time. I love to write because it allows my mind to go to anyplace it wants, with no restrictions. Writing, I've found, is a way to express myself in different ways.

I love that competitions like this reinforce the idea that gripping stories can be made from everyday incidents. A little magic and imagination, humour and suspense can turn even a normal trip to the shops into a story that everyone will want to read! Competitions also encourage discipline in our young writers and illustrators!"

Shiza Fathima, Grade 6, Abu Dhabi Indian School, UAE

"Reading & writing have always been a big part of my life and the two help me unwind after a long day! They are truly my favorite things to do no matter where I am. Writing this story was extremely therapeutic for me as I quite literally wrote what I was thinking at the moment! Not only was this process exhilarating but by the end of my story I felt as if I had actually "popped out of a chrysalis" myself! Writing my story gave me a worldly perspective and changed the way I thought of different things drastically.

It is due to this story writing competition that I have finally overcome a very tedious and long 'writer's block' and to be completely honest, this competition made me re-realize my love for writing and why it is so important to me!"

Shreelekha Shinde, Grade 7, Wisdom World School, Hadapsar, Pune



Shreelekha Shinde



"Reading helps in increasing my vocabulary. It helps me imagine the scenario the way I want. Writing helps me organize my thoughts. Reading many books helped me understand and implement the rise and falls in a story.

This competition was on an international basis and students from other countries also participated so it was fun to think hard of something to impress the judges and use the best of our imagination!"

Jinal Shah, Age 12, Vibgyor High School, Pune

SPECIAL THANKS!



PARTICIPATING SCHOOLS

Billabong High International School (across India)

Trinity International School (Pune & Satara)

The Head Over Heels Learning Centre (Pune)

The Icon Public School (Ahmednagar)

Suyog Sunderji Wisdom School (Pune)

Smt. Surajba Vidhya Mandir (Mumbai)

Chate School (Aurangabad)

Ramniwas Bajaj English High School (Mumbai)

Mainadevi Bajaj International School (Mumbai)

Kudilal Govindram Seksaria English School (Mumbai)

Global Indian International School (Pune)

Path-Shaala (Pune)

Finch International Preschool (Pune)

Olympia National School (Pune)

Sanjivani International School (Navi Mumbai)

D.I.C.'s English Medium School (Pune)



ASSOCIATED COMMUNITIES

Kitabe Club (India)
Taare Zameen Par (India)

ASSOCIATED INFLUENCERS

Anjali Sharma @reading_for_sanity
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Jawahar Nidamboor @jawahar578

AlliReads Magazine @allireads_kidz

Kajol Garg @kajol___garg

Samriddhi @samriddhi_reads

Thank You all!
For Your
Support
and Encouraging
Children to
Participate!



2nd Feb World Wetlands Day

Welland Wonders!

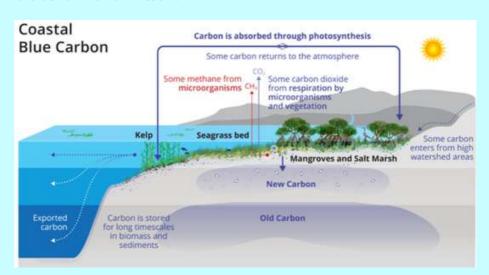


A wetland is an area of land whose soil is saturated with water either permanently or

seasonally.



- >>> Wetlands are found on every continent except Antartica. One of the world's largest natural wetlands is the **Pantanal**, which straddles Brazil, Bolivia, and Paraguay in South America.
- They are the most biologically diverse of all ecosystems and the planet's freshwater marshes, deltas, swamps, bayous and wetlands are home to 40 percent of all the world's species and 12 percent of animal species!
- Delivia, is the largest protected wetland in the world.
- 90 percent of the ocean's fish depend on deltas, estuaries and coastal wetlands as nursery and spawning grounds, as well as sources of nutrients.
- » A Wetland is an effective natural water filter, as it creates a subsurface flow system owing to the permeability of the soil, gravel, sand, or rock below the earth's surface.
- What is Blue Carbon?
- Blue carbon is the term for carbon captured by the world's ocean and coastal ecosystems.
 Wetlands act as "carbon sinks" and can store up to fifty times more carbon as compared to rain forests!
- This means that they only cover about 3% of the earth's surface and store up to a third of the world's total carbon!
- Safeguarding and restoring wetlands, including river floodplains, marshes, peatlands, deltas and coastal ecosystems like mangroves, is essential to slow climate change and enable adaptation. When they are disturbed or drained, they can release surprisingly large amounts of carbon dioxide back into the atmosphere. But protected or restored, they can become an important tool for offsetting carbon dioxide emissions!
- A Wetland is a whole other world in itself!

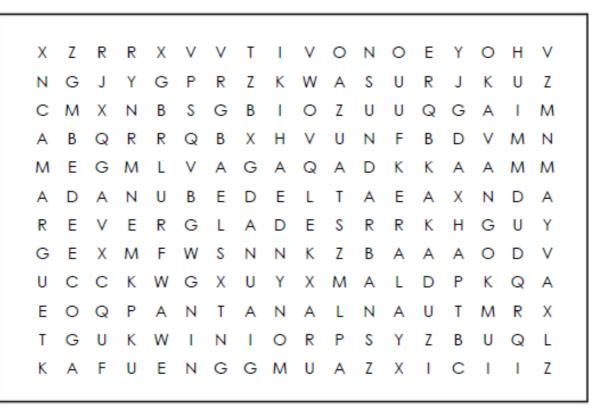


credits : climate.gov

Wetland Wonders!



Here's a puzzle for you to look for some wetland wonders! You can find them vertically, horizontally or diagonally!



1. PANTANAL

2. CAMARGUE

3. WASUR NATIONAL PARK

4. KAKADU WETLANDS

5. KERALA BACKWATERS

6. OKAVANGO

7. KAFUE

(BRAZIL, BOLIVIA AND PARAGUAY)

(FRANCE)

(INDONESIA)

(AUSTRALIA)

(INDIA)

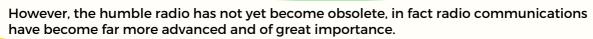
(BOTSWANA)

(ZAMBIA)



THE UNSUNGHERO OF RA

Today, communication has progressed leaps and bounds from what it was, a few decades ago. With highspeed internet, we can see or listen to any content in just a few clicks!



Two way radio communications among fire, police and army personnel, aircraft communications are important to ensure public safety. Broadcast radio (AM/FM) continues to have a very wide reach from urban to rural populations.

Radio technology is used in remotes, 5G communication, spacecraft navigations and much more. Let us pay homage to an unsung hero in the world of radio, whose invention has been a gift that keeps on giving.

Radio's invention has been credited to Guglielmo Marconi, when in 1896, he successfully sent a radio message from one point to the other. He even won a Nobel Prize for it. However, a few years back, such a demonstration had already occurred in India!

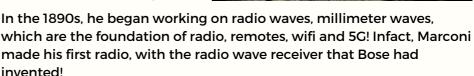
Aacharya Jagadish Chandra Bose, is considered as the 'Father of Wireless Communication".

Even when studying in English Medium schools was the fad at the time, Bose was educated in a Bengali Medium school, as his father believed -

"A child should first make his/her roots strong, and then embrace the world."

After completing his college education in Physics in London, he could have continued there, however, he returned to India to teach Physics. In those days, Indians would receive only 1/3rd the salary compared to the British!

In spite of financial challenges and minimal lab facilities, his world class inventions are still living on!



Bose believed that Science was for everyone, and his inventions should be available for all. He may have profited well had he patented the device, but his heart was only in bringing science to everyone.

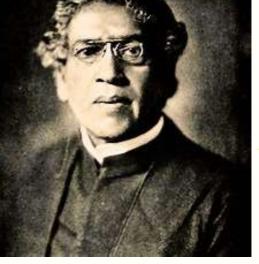
Apart from radio communication, another interesting aspect that **Bose worked on. was Plant Communication!**

He conducted several experiments to prove that Plants can also feel emotions like us, and also communicate with each other! Some of his claims have been proven true today!

Trees share information with other trees through their roots, share nutrients with smaller plants, and even pass on information warning other trees in case of insect attacks!

Even though Sir Jagadish Chandra Bose did not get his due credit for his inventions, his legacy lives on. We must never forget his contributions, rather, we should be proud that his work is what connects the world together!











WHO THOUGHT OF THAT?



We use so many things in our daily lives, but have we ever wondered, who would have come up with the initial ideas to make those things? Let's take a look at some inventors and their oft-used inventions!

LÁSZLÓ & GEORGE BÍRÓ - BALL PEN

While working as a journalist, Hungarian László Bíró noticed that the ink used in newspaper printing dried quickly, leaving the paper dry and smudge-free. He tried to use the same ink in a fountain pen, but the ink was too thick to flow freely. Along with his brother George, he developed a new pen tip which had a ball which was freely moving in its socket. As it turned, it would pick up ink from the cartridge and deposit it on paper while rolling!

JOHN SPILSBURY - JIGSAW PUZZLE

Englishman John Spilsbury was an engraver and mapmaker. In 1767, he attached a map of the world to a piece of wood and cut out each country! His puzzles were used to teach students geography!

<u> WILLIAM MORRISON AND JOHN C. WHARTON - COTTON CANDY</u>

Cotton Candy is made from finely granulated sugar that's heated and spun into slim threads, there is no cotton in it! It was invented in 1897 by William Morrison and John C. Wharton, candymakers from Nashville, Tennessee. They invented a device with tiny holes in it, that heated sugar in a spinning bowl. As the bowl spun around, the caramelized sugar was forced through the tiny holes making the irresistible feathery candy!

<u> (SIR DAVID BREWSTER - KALEIDOSCOPE</u>

Scottish scientist, Sir David Brewster, named the kaleidoscope after three Greek words - 'Kalos' meaning 'beautiful', 'eidos' meaning 'form' and 'scopos' meaning 'watcher'! It was a tube containing loose glass pieces reflected by mirrors set at different angles, creating different patterns!

GEORGES DE MESTRAL - VELCRO

One summer day in 1948, Georges went walking with his dog in the mountains. When they returned home, he saw burrs, plant seed sacs stuck to his pants. He examined them under the microscope and discovered small hooks using which the burrs used to cling to the tiny loops in the pant fabric! It led him to invent a new kind of fabric - having hooks on one side and soft loops on the other!

credits: 365 inventions and inventors











PLUSES OF PULSES!



Did you know that along with the early cereal grains, pulses were among the first crops to be cultivated as far back as 11,000 years ago?

By 1st Century AD, Black Eyed Beans/Peas had spread from their native land of West Africa to the Mediterranean, Asia and India!

Pulses are edible seeds of plants in the legume family. They grow in pods and come in a variety of shapes, sizes and colors. The United Nations Food and Agriculture Organization (FAO) recognizes 11 types of pulses: Dry Beans, Dry Broad Beans, Dry Peas, Chickpeas, Cow Peas, Pigeon Peas, Lentils, Bambara Beans, Vetches, Lupins and Pulses Nes.

Pulses are annual crops that yield between one and 12 grains or seeds. The term "pulses" is limited to crops harvested solely as **dry grains**, unlike other vegetable crops that are harvested while still green. It's important to note that green crops like **green peas** and **green beans**, crops mainly grown for oil extraction like **soybean** and **groundnuts**, and crops used only for planting, like **clover** and **alfalfa seeds are not considered pulses**.

In many cultures, pulses are considered as "Protein for the Poor". Studies have shown that people who eat at least ½ cup of pulses per day have higher intakes of fiber, protein, calcium, potassium, folate, zinc, iron, and magnesium as well as lower intakes of total and saturated fat. Pulses can help maintain a healthy body weight and reduce the risk of chronic diseases!

Growing pulses also promotes sustainable agriculture, as pulse crops help decrease greenhouse gases, increase soil health and aid in crop rotation, and use less water than other crops. Pulses utilize soil bacteria to draw nitrogen from the air. This natural process replaces the need to add nitrogen fertilizers in pulse crops, which means pulses use half the energy inputs of other crops!

Pulses can also help farmers adapt to climate change because different types of pulses can be grown in almost any farming system - wet or dry, in cold or hot regions of the world. In most developing areas, they're grown by women farmers, helping them earn an income and feed their families.

Some of the most finger-licking pulse recipes are found in our Indian cuisine! They're a great plant-based source for much needed protein! What a tasty option for good health!

Aren't those a lot of PLUSES for PULSES?



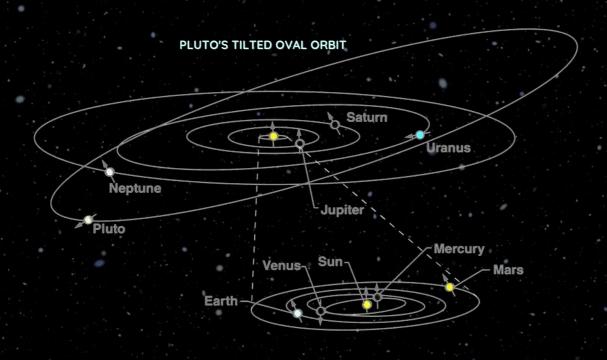
PLUTO TRIVIA!



Here are some cool facts about this wannabe planet! Poor Pluto!



- 1) Pluto has a "heart," and it drives activity on the planet! The million-square-mile nitrogen glacier heart literally forced the dwarf planet to change its spin axis! Its a process called true polar wander!
- 2) In 2006, Pluto was categorized with three other objects in the solar system that are about the same small size as Pluto: Ceres, Makemake and Eris. These objects, along with Pluto, are much smaller than the "other" planets.
- 3) Almost all the planets travel around the Sun in nearly perfect circles. But Pluto does not. It takes a quite tilted oval-shaped path with the Sun nowhere near its center!
- 4) If you lived on Pluto, you'd have to live 248 Earth years to celebrate your first birthday in Pluto-years!
- 5) At Pluto's current distance from the Sun, the temperature on its surface is about 400 degrees below zero Fahrenheit! It will get even colder as it moves farther from the Sun. From Pluto, the Sun looks like just a bright dot in the sky, the brightest star visible. The light from the Sun is as bright on Pluto as the light from the full Moon is on Earth.
- 6) If you weigh 100 pounds on Earth, you would weigh only 7 Pounds on Pluto!





LAND OF THE DAWN-LIT MOUNTAINS!



The largest of the seven sister states in Northeast India, Arunachal Pradesh celebrates its Foundation Day, on 20th February! Unscramble this little quiz to know more about our **eastern most.** beautiful state!



Arunachal Pradesh houses Asia's second largest 400-year old Buddhist monastery in this place. The monastery is also called "**Gaden Namgyal Lhatse**", which means "The Divine Paradise of Complete Victory."

NAGTWA

Arunachal Pradesh is known for its rich flora and fauna and is considered to be one of the "Biodiversity Hot Spots" in the world. It is home to as many as 610 species of this flower variety. The State flower pictured here is called "Fox-Tail......"



CIROHD



82% of Arunachal Pradesh are forests! Thousands of bird species and about 500 mammal species are found here. This national park, the largest protected area in Eastern Himalayas, is the only national park in India home to all the four significant cats - Snow Clouded Leopard, Tiger, and Leopard!

AHDNAMAP

This is one of the major ethnic groups of the Eastern Himalayas and is well known for its systematic agriculture techniques and traditional ecological knowledge. The tribe is known for their colorful culture with various festivals, intricate handloom designs, skills in cane and bamboo crafts. Here, they are pictured celebrating the Dree festival.

ANPTAAI _____



LAND OF THE MIZOS!

Mizoram also celebrates its Foundation Day, on 20th February! It is blessed with evergreen hills, dense jungles and a rich cultural heritage. Here's some more trivia for you to remember!









- 1. Which one is the highest point in Mizoram?
- a. Reiek
- c. Phawngpui
- b. Hmuifang
- d. None of these
- 2. In which dance, do men dance, holding the bamboo close to the floor?
- a. Chheihlam
- c. Chai
- b. Khuallam
- d. Cheraw
- 3. Which is the longest river in Mizoram?
- a. Chimtuipui River
- c. Tutis
- b. Tuivawl
- d. Tlawng
- 4. What is the total number of states that share their border with Mizoram?
- a. 3

c. 5

b. 4

- d. 7
- 5. Which state is west of Mizoram?
- a. Sikkim

- c. Assam
- b. Tripura
- d. None of These
- 6. What is the literal meaning of the "Khuallam Dance" of Mizoram?
- a. Dance of the Jungle c. Dance of the Hills
- b. Dance of the Guests
- d. Dance of the Tribe
- Which latitude passes through Mizoram, through the village Maubuang Lungsai?
- a. The Equator
- c. The Tropic Of Cancer
- b. The Tropic of Capricorn d. None of These
- 8. Which river originates in Burma, passes through Mizoram and goes back to Burma again?
- a. Tuirial

c. Chhimtuipui

b. Tlawng

d. Tuichang

RIYA AND HER IMAGINATION!

Last month, we had asked children to start a story with the words - 'She bent down to pick up a half-buried seashell...'.

Kashika Chowhai, from Grade 4, The Icon Public School, Ahmednagar, has shared her imaginative story with us! It appears that she just had to take a "good look" at the things she was finding!



She bent down to pick up a halfburied seashell...It turned out to be a bone! She picked up the bone and suddenly, a pack of dogs started running towards her!

She ran and ran until; she got bitten by a stray dog! Poor Riya, how she howled like a wolf and cried!

When she was taken to the doctor, she imagined the doctor to be a monster! So, she bit him hard!

She thought she should kill the monster, but actually she had pushed the doctor to the floor!

She felt terrified that she hurt him but felt relieved that he was alive! Soon, the nurse gave her an injection to prevent rabies.



Gvan

Riya kept on thinking, "Why do I keep seeing fake things like a monster and a half-buried seashell?"

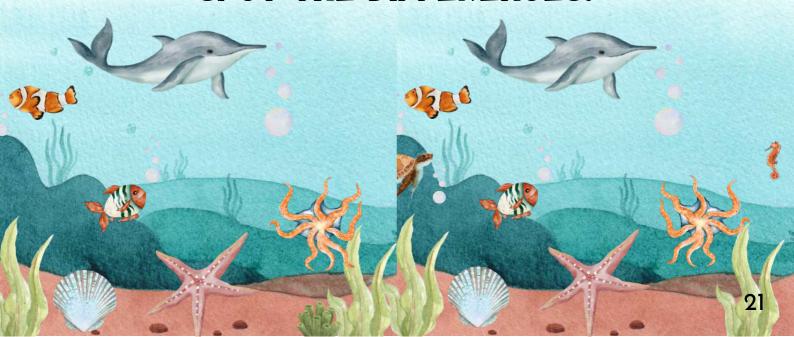


Riya decided to go for an eye checkup and found out that she would need to wear prescription glasses.

She went to the store to get one and after that, she never mistook things that would put her in trouble!



SPOT THE DIFFERENCES!



POWERED BOTTLE CAR!









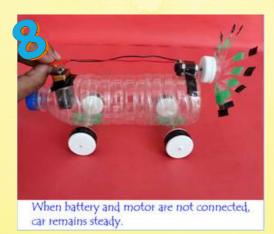


Gvan













Access this QR code for more detailed steps for making this toy!

You'll find this and many more toys and fun activities, designed by **Padmashree Arvind Gupta**, a toy inventor and scientist! He believes in creating simple toys and educational experiments using locally available materials as well as items usually thrown as trash, for children to ignite their scientific fire!

A REASON TO REASON!



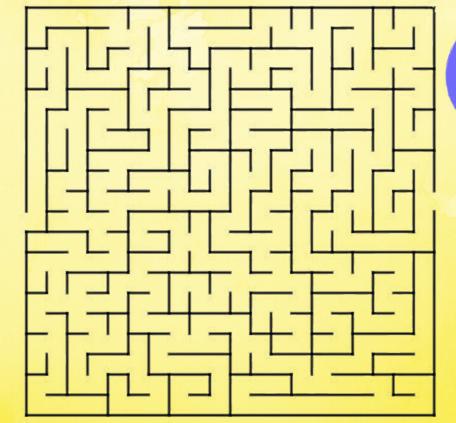
Reasoning is one of the most important steps of arriving at a conclusion. To build the right scientific temper, one needs to be curious, enquire, experiment, evaluate and then infer! Here are some brain teasers to give you a reason to reason!

Which letter is the 8th letter to the right of the letter, which is 12th from the left? If Water is called Black,
Black is called Tree,
Tree is called Blue,
Blue is called Rain,
Rain is called Pink
& Pink is called Fish
in a certain language
then what is the colour of
the Sky called in
that language?

Pointing to a photograph of a girl,
Rajan said, "She has no sister or daughter,
but her mother is the only daughter of my mother."
How is the girl in the photograph related to Rajan's mother?

Identify the ? AK, EO, IS, ? , QA, UE

AMAZE MAZE!



Help Archimedes reach his bath tub and have his Eureka moment!



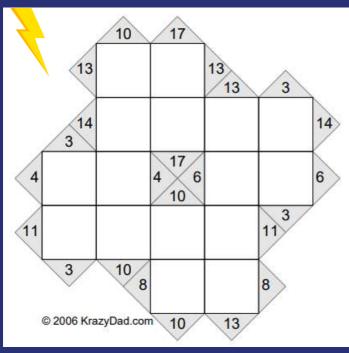


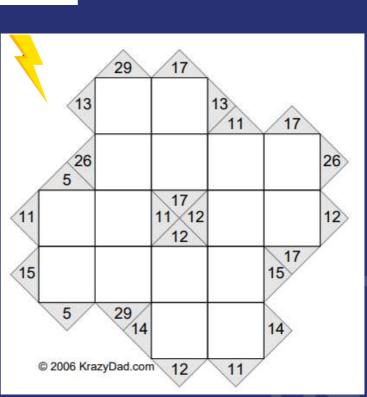


KIDS, TRY KAKURO!

Kakuro puzzles are like a cross between a crossword and a Sudoku puzzle. Instead of letters, each block contains the digits 1 through 9. The same digit will never repeat within a word. If you add the digits in a word, the sum will be the number shown in the clue. Clues are shown on the left and right sides of "across" words, and on the top and bottom sides of "down" words.

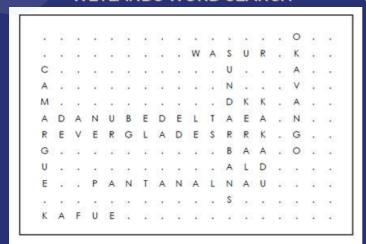
A Kakuro is made up of sets* which are analogous to words in a normal Crossword. Each set is from 2 to 9 cells in length, and each cell (or square) in the set contains a digit, from 1 to 9. The triangular clues on both sides of the set indicate the sum you get when you add the digits together. Digits may not repeat within a set. For example, if the clue on a set says 4, then it may contain 1 and 3 (in either order), but it may not contain 2 and 2. Likewise, if a set is nine cells in length, it must contain all the available digits 1 though 9 (and the clue will always be 45).





Gvan

WETLANDS WORD SEARCH



ARUNACHAL WORD SCRAMBL

1.TAWANG, 2. ORCHID 2.3. NAMDAPHA 4. APATANI

A REASON TO REASON

1. T, 2.RAIN, 3. GRAND DAUGHTER 4. MW

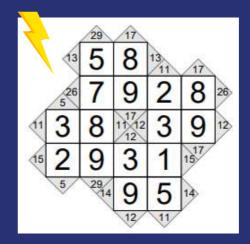
MIZORAM TRIVIA QUIZ

1. C, 2. D, 3. D, 4. A, 5. B, 6. B, 7. B, 8. C

SPOT THE DIFFERENCE

1.TURTLE, 2. OCTOPUS, 3. BUBBLES 4. GREEN CORAL 5. SEA HORSE

7	9	13	3
2	8	3	1
3	4 17 4 10	4	2
1	3	5	113
10/8	7	1	8
	1	3 4 10 6	3 ⁴ / ₁₀ 4 1 3 5



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