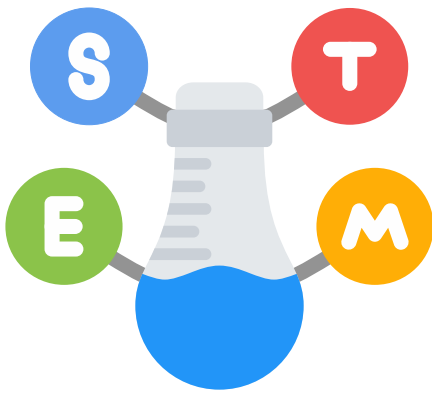


÷ SPARK

Small SPARK Big DISCOVERY

STEM Newsletter of PM SHRI KV CRPF NAGPUR



2025 - 26

NEP 2020

आर्यभट्ट
GANIT
CHALLENGE

GREEN OLYMPIAD



SATHEE

#SwachhataHiSeva2025

Dear Adol!
we believe in you.
You ARE
stronger
THAN
you think
you are



GREEN SCHOOLS
PROGRAMME



पीएम श्री केन्द्रीय विद्यालय सीआरपीएफ नागपुर

PM SHRI KV CRPF NAGPUR



Ample Opportunities

Waiting outside for new Discoveries

The monthly newsletter of the STEM Activities of The Vidyalaya



**From Curiosity to Creation —
That's STEM!**

WHAT'S INSIDE FOR YOU :

- Best Practice
- Inspiring Personality
- Stem Activities
- Competitions
- LETS Do
- Brain Sparks



“Nurturing a culture where every spark of curiosity grows into meaningful discovery.”

Sh. Anil Gholpe, Principal

“Supporting every young mind to think deeper, dream bigger, and do better.”

Amir Husain, Vice Principal



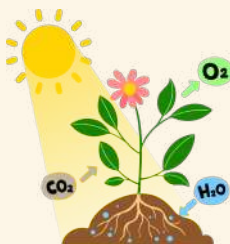
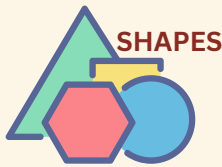
Message from Creative Desk Team

As we celebrate the second edition, let's continue to learn with curiosity and lead with purpose. The best is yet to come!



Intellectual Property Rights :

PM SHRI KV CRPF NAGPUR



"Turning every class into a spark of discovery!" 



REFRESHING MINDS, REIMAGINING LEARNING

Digital Library of STEM Videos

Learning Beyond Textbooks Engaging Substitution
Periods Inspiring Curiosity



About the Initiative

A collection of short STEM videos (5-20 min.) stored in the Interactive Panel. Used by teachers during substitution/arrangement periods.



Highlights

- Learning beyond textbooks
- Non-monotonous and refreshing
- Builds curiosity and creativity
- Productive classroom use



Sample Videos Solar System · Photosynthesis
Food Chain · ISRO Scientist K. Sivan · GK Quizzes
Good Habits · Panchatantra Kahaniyan



Impact Students learn through visuals, explore new ideas, and enjoy every moment of learning.

Scan for watching



**BEST
PRACTICE**



Engaging Young Minds 

" - a teacher's creative challenge!" 

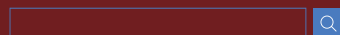




Sundar Pichai, CEO google.com

– Carrying India's Pride
beyond the Country.”

Search



*Let your dreams guide
you, and your passion
fuel you!*



☀️ **From Chennai to Silicon Valley** ☀️
– A Visionary's Path

🌿 From Chennai's streets to Global Heights,

🍰 From Tea Aromas to Books' Delights.

💻 Coding Dreams in Silent Nights,

🌟 Leaving Marks with Vision Bright.

🌍 Shaping Silicon Valley's New Way,

🏆 Building Legacy that Will Stay.

🚀 Fearless on Success's Crest,

📖 Teaching the World – How Dreams Manifest.

☀️ **Top Career Paths for
Future Tech Leaders!**

🤖 **AI & Machine Learning**

Build smart systems and shape the future!

- 💡 AI Engineer – Create intelligent apps
- 🗣️ Prompt Engineer – Talk to AI effectively
- ⚖️ AI Ethicist – Keep AI safe & fair

🔒 **Cybersecurity**

Be the digital world's protector!

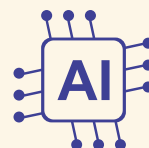
- 🛡️ Security Analyst – Stop cyberattacks
- 💻 Pen Tester – Ethical hacker keeping systems safe

☁️ **Data Science & Cloud Computing**

Data is power – and cloud is the key!

- 📊 Data Scientist – Turn data into insights
- ☁️ Cloud Engineer – Manage online infrastructure

Google guided us in learning more details about
Padama Bhushan Awardee in 2022,
Sh. SUNDAR PICHA, India's Google Man



Poetic Spark: From Heart to Paper by S. Kunal, class 12 'A'



GREEN OLYMPIAD - 2025

From Awareness to Action!

Did you know?

Goal of GREEN OLYMPIAD is to Build an

Eco-Conscious Youth Network to achieve the

Global Agenda 2030.

Green Olympiad 2025

“Eco Minds, Brighter Futures!”

50 students Registered from PM Shri KV CRPF, Nagpur

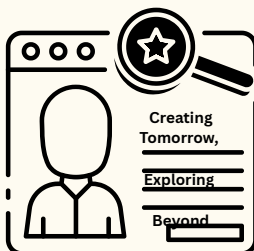
Inspiring young eco-warriors to learn, act & live sustainably!

EVENT I/C

Mrs. Khemarani Rangari,
TGT (Sci)



29 Students
Registered in
2025 for VVM
Exam.



Vidyarthi Vigyan Manthan (VVM - 2025)

A Digital Based and Largest Science Talent
Search Examination for Emerging India.

KAMP - 2025

Classes 5 to 12 willing students registered.

GUIDANCE & COUNSELING SESSION - I

From Vision
to Victory:
Career Counseling
That Counts!

“C in C, C in C”
Clarity in Choice, Confidence in Career.



EVENT I/C: Mrs. Khemarani Rangari, TGT (Sci)

Guidance & Counseling Session - I !



Topic: Effective Learning & Time Management

Venue: Kendriya Vidyalaya CRPF

Date: September 6, 2025 Time: 8:30 – 10:30 AM

Guest Lecturer: Miss Saloni Manwatkar

Classes: IX – XII

- Planning & prioritizing study hours
- Avoiding procrastination & balancing studies & leisure
- Effective learning methods: Concept-based, Short Notes, Active Recall, Regular Revision
- Interactive Q&A with students
- Principal Mr. Anil Gholpe: Career Counseling insights

Students motivated with Practical Strategies for Academic Success(2025-2026)

ADOLESCENT EDUCATION PROGRAMME (AEP)

Nurture
Growth
Ignite
Potential.

“Adolescence is the Launchpad;
Education is the Fuel.”



EVENT I/C: Mrs. Khemarani Rangari, TGT (Sci)

Workshop for Adolescent Girls



Venue: KV CRPF, NAGPUR

Guest Speaker: Dr. Minakshi Malviya

Topic: Adolescent Girls – Stress, Nutrition & Menstrual Health

- Guidance : Principal Mr. Anil S. Gholpe
- Focus on : Stress Management, Nutrition, Menstrual Awareness & Hygiene
- Interactive Session boosted confidence & healthy practices

Strong Girls, Stronger World



SWACHHATA HI SEVA - 2025 Theme 'Swachhotsav' - focusing on clean and green festivities and zero-waste community celebrations.



A Clean Space = A Happy Place



Swachhata Hi Seva - SWACHHOTSAV

Drawing & Slogan Writing Competition

Venue: PM SHRI KV CRPF, Nagpur

Categories: Junior (VI–VIII) & Senior (IX–XII)

Drawing: 40 Participants

Slogan Writing: 20 Participants

- Creative Drawings promoting cleanliness
- Inspiring Slogans for a greener, cleaner nation
- Students Pledged to keep surroundings clean

Cleanliness is Our Duty – True Spirit of Swachhata Hi Seva!

Event I/C: Mrs. Archana Mishra, TGT (AE)



Winner's Circle

Drawing (Junior)
Ku. N. Yogita, 6 'A'

Drawing (Senior)
Ku. Mayuri Jangam, 10 'A'

Slogan Writing (Senior)
Ku. Nilima Ramteke, 9 'B'

TEAM



Mrs. Rekha Verma, TGT (So. Sci)



Mr. Kishor Shengadekar, TGT (So. Sci)



Mrs. Punam Hatwar, PRT



Mr. Sunil Paratwar, PRT



Mrs. Shalini Kaushal, PRT



Mr. Ramprakash Nakhate, PRT



Mr. Kishore Pradhan, PRT



Mr. Jayesh Tiwari, PRT

Swachhata Pakhwada 2025

Celebrated from 16th–30th September 2025 at PM SHRI KV CRPF Nagpur with a series of cleanliness and awareness activities.

- 🌟 **Swachhata Shapath Day** – Pledge for a clean and green India 🇮🇳
- 🗣️ **Awareness Days** – Spreading the message of Clean India, Green India!
- 🌱 **Green School Drive** – Students planting hope and positivity
- 🏠 **Community Outreach** – Extending cleanliness beyond campus
- 🧼 **Hand Wash & Hygiene Day** – Small habits, big impact
- 👥 **Participation Days** – Cleanliness through teamwork
- 🧼 **Personal Hygiene Day** – Stay neat, stay bright, stay right
- 🏆 **Swachhata School Exhibition** – Creativity inspiring change

🌟 **Event Organized by:** Mr. Amir Husain, Vice Principal 🌟

🌟 **Event Supervised by:** Mr. Anil S. Gholpe, Principal 🌟

🗣️ **Cleanliness is Our Shared Duty — Together We Shine Brighter!** 🌍

Swachhata Awareness Days

📅 17th & 18th September 2025 • PM SHRI KV CRPF, Nagpur

- 👥 **SMC / PTA meeting**— Emphasizing cleanliness, Handwashing & Water conservation
- 🔍 **Teachers inspected**— Sanitary facilities and prepared maintenance plans
- 🧼 **WASH discussions**— Hand wash units, Toilet hygiene & Waste management
- 🧹 **Large-Scale Cleaning Drive**— with students, Staff & Local representatives
- 🏠 **Classrooms, Toilets**— cleaned, disinfected and organized
- ♻️ **Unused Materials Removed**— to maintain campus cleanliness

👤 **Incharge:** Mr. Kishor Shengadekar, TGT (So. Sci)

👤 **Co-Incharge:** Mrs. Punam Hatwar, PRT

📖 **Activity Guide:** Mr. Amir Husain, Vice Principal

👤 **Overall Supervision:** Mr. Anil S. Gholpe, Principal

🌟 **Cleanliness is Everyone's Duty** 🌟



Let's make our
PM Shri KV CRPF NAGPUR
shine...
It is
Swachhotsav Time!



Tech Wise Students, Threat Free School

SHARE SMILES
NOT OTP!



Lets Watch



Vidyalaya Cyber Safety Club Initiatives

Theme - Cyber Smart Students, Cyber Safe School

Skits on "OTP Frauds and How to Stay Safe?"

The Cyber Safety Club of PM SHRI KV CRPF Nagpur organized an engaging skit on "OTP Frauds and How to Stay Safe" on 4th September 2025.

Script Writer: Mas. Kunal (XII CS, 2025-26)

Performers: Ms. Khushi Khandagle (Narrator), Mas. Tanmay Katre, Ms. Aastha Tomar, Mas. Abdul, Mas. Swayam Shelke, Mas. Sahil Yadav, Mas. Prince Jha, Mas. Mayank, and Ms. Nidhi.

The skit highlighted how OTP frauds occur and shared **key safety tips** to stay protected online. The team's performance was both **informative** and **impactful**, spreading awareness among students about safe digital habits.

🌟 Skit I/C : - Mrs. Pooja Rawat, PGT (CS) 🌟

🙏 Special Thanks To 🙏

🌟 Sh. Amir Husain, Vice Principal – for his Constant Inspiration

🌟 Sh. Anil S. Gholpe, Principal – for his Innovative Suggestions

⚠️ "Stay Alert, Think Smart — Be Cyber-Safe!" ⚡

🌐 Stay Cyber Smart, Stay Safe! 💡

Think. Verify. Protect. — Your safety starts with awareness. 🗝️



Eco Club Activities Oct - 2025



Green Initiative

🌐 Seed Sowing & Plantation Activity 🌱



Activity I/C : Mrs. Harsha Nikose, TGT(Sci)

Students of **Class IX-B** enthusiastically participated in the "**Plantation of Little Seedlings and Saplings**" activity held on **22-Sep-2025**.

Students engaged in 🌱 **Seed Sowing**, 🌿 **Weeding**, and 🌾 **Seed Ball Throwing** in the school garden activity.

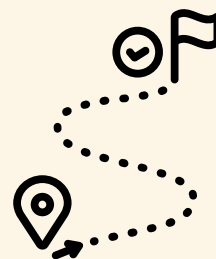
The activity promoted ❤️ **Eco-friendly Practices**, 🍌 **Team-Work**, and 🌐 **Environmental Awareness**, giving students a Hands-On Learning Experience about **Plant Growth** and **Sustainability**.

🌱 "Go Green – Grow Green" 🌿



Hackathon-2025 Bootcamp & Preliminary Round

(Testing phase via online test)



Sarmad Mahir Husain, 9 'C'



My Expression on KVS Hackathon Bootcamp and Preliminary Round

I recently took part in a 5-days bootcamp that was held under the KVS Hackathon Competition from 8th September to 12th September 2025, and honestly, it was an amazing experience.

The event pushed me to learn and explore new things — from coding and design thinking to teamwork and problem-solving. Every day came with fresh challenges, and we had to come up with innovative ideas and practical solutions.

It wasn't just about competition; it was about growth and learning in a fun, high-energy environment. By the end of it, I felt way more confident, skilled, and motivated to keep building and creating.

Heartfelt Thanks & Appreciation

🌟 Sh. Anil S. Ghople Sir, Principal — for providing all the required resources and extending wholehearted support throughout the event.

🌟 Sh. Amir Husain Sir, Vice Principal — for his constant motivation, guidance, and encouragement to the participants.

🌟 Mrs. Pooja Rawat, PGT (CS) — for creating a calm and cool learning environment in the Computer Lab.

🌟 Mr. Rajkumar Pournik, TGT (WE) — for mentoring the students and helping them overcome every challenge with patience and clarity.

🌟 "Your guidance and encouragement fueled our success!"

Mentor: POOJA RAWAT, PGT (CS)

Senior Team

01 - Tanmay, Prince, Raj, Pradyum, Sahil

02 - Swayam, Aastha, Abdul

Mentor: RAJKUMAR POURANIK, TGT (WE)

Junior Teams

01 - Sarvesh, Drishti, Gunjan, Sarmad, Shourya

02 - Arnav, Sarthk, Samarth, Kavish, Ishant



SATHEE - Your Gateway to Smarter Learning ...

🏠 SATHEE (Study and Learning Hub for Excellence in Examinations)

is a

🌐 free online initiative launched by the

🏛️ Indian Institute of Technology Kanpur (IIT Kanpur)

and the

📁 Ministry of Education

to support students preparing for competitive exams

like 📄 JEE, 📄 NEET, 📄 SSC, and more.



Ms. Asawari, Class 11 'A'

News updates from SATHEE portal ...

Classes IX & X
— Over 200
bright minds
joined in!

Class XI – 18
Enthusiastic
Learners
Registered.

Class XII – 03
Joined the
Journey!

🇮🇳 Viksit Bharat Buildathon 2025 🇮🇳

Inspiring young innovators towards a Developed India – Vision 2047

Teachers from the Science and Mathematics departments registered student teams for the national innovation challenge, guiding them to think creatively and contribute to the nation's progress.

Teacher Mentors

Mr. Rajkumar Pournik – TGT (WE) & ATAL I/C

Mrs. Pooja Rawat – PGT (Computer Science)

Mr. Ramshri Rao – PGT (Biology)

Mrs. Sarita Dole – PGT (Mathematics)

Mrs. Seema Rani – PGT (Chemistry)

Mr. Swapnil Deshpandey – PGT (Physics - Contractual)

Mrs. Harsha Nikose – TGT (Science)

Mrs. Khemarani Rangari – TGT (Science)

Mr. Vinay Shahare – TGT (Mathematics)

Mrs. Swati Vinchurkar – TGT (Mathematics)

Mrs. Rohini Vaze – TGT (Mathematics)

Viksit Bharat Buildathon-2025 Themes

 Aatmanirbhar Bharat

 Swadeshi

 Vocal for Local

 Samridh Bharat

100 Students Registered



**CURIOSITY
SPARKS
innovation!**

Guidance for Registration Process

Mr. Amir Husain – Vice Principal

Overall Supervision for Registration Process

Mr. Anil S. Gholpe – Principal

*Together
we
will
"Spark"
the
Change.*

 Guiding learners to innovate for a Brighter, Cleaner, and Stronger India by 2047 





STEM Activities in the Primary Section



The Primary Section students enthusiastically participated in a series of engaging **STEM-based learning activities** covering fascinating topics such as **Day and Night**, **The Spectrum of Light**, **Rainbow Formation**, and the **Water Cycle**.

Through observation and hands-on exploration, students learned how sunlight splits into beautiful colors using a **prism**, understood the science behind **rainbow formation**, and discovered how the **water cycle** maintains balance in nature. Gardening activities further deepened their understanding of environmental science and sustainability. 🌱



Teacher Contributors



Mrs. Swati Bhawane – Prism and Spectrum of Light Activity



Mr. Sourabh – Water Cycle Experiments



Mr. Sunil Paratwar & Mrs. Sarika Singh – Gardening and Environmental Activities



“Hands-on learning made science come alive for our young explorers!”



DAY & NIGHT
NATURE'S
BEAUTIFUL
BALANCE



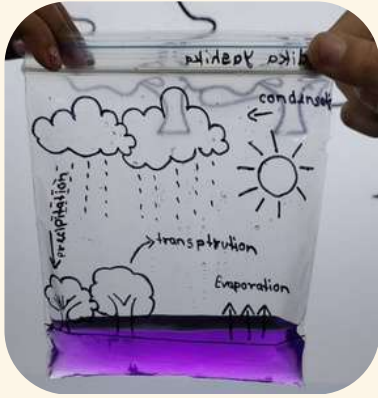
**Mrs. Swati
Bhawane, PRT**



**Earth 24-
Hour!**
WONDER



STEM Activities – PRIMARY SECTION



Mrs. Swati
Bhawane, PRT



*Nature's
Recycle System*

*Water
Cycle!*

FROM
CLOUDS TO
RIVERS

— NATURE'S
ENDLESS LOOP!



Mr. Sunil Paratwar, PRT

*Hands
on*



*MIND
AT
WORK!*



Fractions



**Science with
Spark!**



Mr. Sarika Singh, PRT



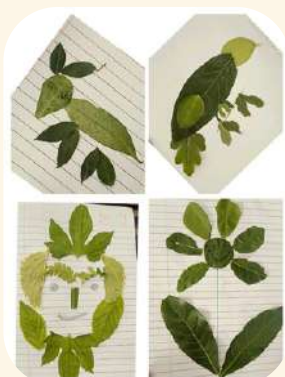
Mr. Sourabh, PRT



Gardening!



EVERY LEAF TELLS A STORY!



**Little
Gardeners,
Big
Hearts!**





LET'S DO



आओ करके देखें...

Simple experiments, big learning.

Oobleck:

{OO-Blik ऊब्लिक}

The Non-Newtonian Wonder



What's in a Name?



The name '**Oobleck**' comes from the famous **Dr. Seuss** book, **Bartmehleeew** and the **Oobleck**, where a mysterious sticky, green goo falls from the sky and causes chaos!

- When you hit it, squeeze or run across it, the cornstarch particles jam together together, causing it instantly stiffen like a solid.

- When you let it rest or move for the hand slowly, the particles can slip past each other, allowing it to flow like a liquid.

SHEAR-THICKENING WONDER



IT DEFIYS THE RULES!



For normal liquids like water, the viscosity (or thickness) only changes with temperature.

Does NOT follow Sir Isaac Newton's traditional law of viscosity. Viscosity changes when you apply stress or force.

- Lightweight, flexible materials infused with shear thickening fluids that jam together causing, instantly instantly impact from a bullet or a knife

- Fluids used in machinery or even buildings to absorb shock and reduce vibration

Real-World Applications



HOW TO MAKE OOBLECK



Materials

Oobleck Ingredients

Cornstarch

Water

Equipment

Bowl

Whisk/Spoon



Step 1

Pour Cornstarch into Bowl

Step 2

Slowly Add Water



Step 3

Mix Until Thick & Flowy

- Use a spoon or your hands to combine the the water and cornstarch.
- Mix until it's thick but can still drip slowly, like a weird liquid-solid hybrid!



Mind Behind activity:
Mr. Amir Husain,
VP

Riddle One

I travel through wires unseen and fast, I make bulbs glow when I pass.



Riddle Two

I think but have no brain, I learn from data again and again.



Riddle Three

Stretch me tight and let me go – energy stored gives a show.



Riddle Four

I'm even and prime, a rare find indeed.



Riddle Five

Curiosity is the spark I bring – ask, explore, and let ideas spring!



Brain Sparks प्रश्न मंजूषा

Test your mind,
spark your knowledge.



WHY DOES
THE SKY LOOK
BLUE?



A CLOCK STRIKES
6 IN 6 SECONDS.
HOW LONG FOR
12?



WHICH SHAPE
IS STRONGEST?



WHICH PLANT
RELEASES OXYGEN
AT NIGHT?



STEM FACTS



QR Code Fact:
A QR code can store over 7,000 characters of information.



Engineering Fact:
Suspension bridges are strong because the load spreads through cables into the towers and anchors.



Environment Fact:
Global oceans produce about 50% of Earth's oxygen.



Physics Fact:
Lightning is five times hotter than the Sun's surface.



Space Fact:
A day on Venus is longer than its year because it rotates extremely slowly.



Key Contributors



Core Idea

Mr. Amir Husain

Vice Principal, PM SHRI KV CRPF,
NAGPUR

"Inspire curiosity, nurture discipline, and empower every student to achieve excellence."

Creative Desk

MRS. POOJA RAWAT, PGT CS



Content Contributors

Heartfelt appreciation to our dedicated teachers and talented students for their creativity and valuable contributions in making this edition truly inspiring.

TGT

- Mrs. Khema Rani, TGT (Science)
- Mrs. Harsha Nikose, TGT (Science)
- Mrs. Archana Mishra, TGT (Arts)
- Mr. Raj Kumar Pournik, TGT (WE)
- Mr. Kishor P. Shengadekar, TGT (So. Science)

PRT

- Mrs. Swati Bhawane, PRT
- Mr. Sourabh, PRT
- Mr. Sunil Paratwar, PRT
- Mrs. Sarika Singh, PRT

From Students' Side

- Mas. S. Kunal, Class 'XII A'
- Ms. Asavari Tekade, Class 'XI A'
- Mas. Sarmad Husain, Class 'IX C'

"Together we create, learn, and inspire!"

Canva



ChatGPT

THE DIGITAL COMPANIONS THAT SIMPLIFIED OUR JOURNEY

पीएम श्री केन्द्रीय विद्यालय सीआरपीएफ नागपुर