



## NATIONAL MATHEMATICS DAY 2024

**Date: 23.12.24**

National Mathematics Day is celebrated annually on December 22nd to honor the birth anniversary of the legendary mathematician, **Srinivasa Ramanujan**, whose contributions to mathematical analysis, number theory, infinite series, and continued fractions remain unparalleled. Ramanujan's discoveries, including the Ramanujan theta function and Ramanujan prime, continue to inspire researchers globally, underscoring his lasting legacy in mathematics.

In tribute to this luminary and to foster a love for mathematics, Bal Bharati Public School, Noida, organized a series of engaging activities on December 23, 2024, for students from Classes III to XI. The event aimed to enhance mathematical skills, promote critical thinking, and bring to life the principles and contributions of Ramanujan through hands-on and experiential learning.

### **A Glimpse of the activities conducted...**

#### **Classes III**

**TOPIC: BASKETBALL BLITZ: Where Math meets the Court!**

**Time Duration: 50mins**

Students engaged enthusiastically in the Math Basketball Game, blending problem-solving skills with physical activity in a fun and competitive environment.

Divided into small teams of 4-5, students took turns solving math problems within one minute. Correct answers earned them chances to shoot baskets, gaining additional points based on the basket's value. The bonus round with double points added excitement, and motivated students to perform their best while fostering teamwork and focus.

The activity successfully reinforced math skills in an engaging manner. Students demonstrated improved problem-solving abilities, teamwork, and enthusiasm, making it a memorable and effective learning experience.



## Classes IV

**TOPIC: Perimeter Playoff- fair court analysis**

**Time Duration: 35 mins**

Students participated in this activity, the goal of which was to teach children how to calculate the perimeter of a rectangular shape using a basketball court as a real-world example. Children were introduced to the concept of perimeter. They measured the length and width of a basketball court using a measuring tape and recorded their findings. These values were then used to calculate the total perimeter.

Measuring the court's dimensions and calculating the perimeter helped students grasp the practical application of mathematical concepts, blending hands-on learning with analytical thinking.



## Classes V

**TOPIC**

**(Hopping on the Number Line)**

**Time Duration: 40min**

**Hopping on the Number Line**

***"Learning leaps ahead when fun meets numbers!"***

Students participated in an interactive activity on the playground to strengthen their understanding of arithmetic operations and intervals of 10. A large number line marked with intervals of 10 (0, 10, 20, and so on) was created on the ground. Students solved problems by hopping forward or backward along the line, physically representing addition and subtraction.

The activity made abstract concepts tangible, encouraging active learning and enhancing engagement. This hands-on approach not only reinforced mathematical concepts but also promoted teamwork and enthusiasm among the students.



## Classes VI

**TOPIC: Angle Artistry- Fun with Protractor**

**Time Duration: 60 min**

Students created colorful paper protractors, gaining a practical understanding of angles and degrees. This creative activity allowed students to connect art with mathematics, enhancing their grasp of geometric concepts while fostering a sense of accomplishment.



## Classes VII

**TOPIC: Pythagoras in Action: A Cardboard Geometry Experiment**

**Time Duration: 60 Minutes**

This hands-on activity used coloured paper shapes to visually demonstrate and prove the Pythagoras Theorem by showing that the areas of the squares on the two shorter sides of a right-angled triangle equal the area of the square on the hypotenuse. Students understood the Pythagorean Theorem conceptually and visually. This activity made the theorem's abstract principles more comprehensible and encouraged logical reasoning and spatial understanding.

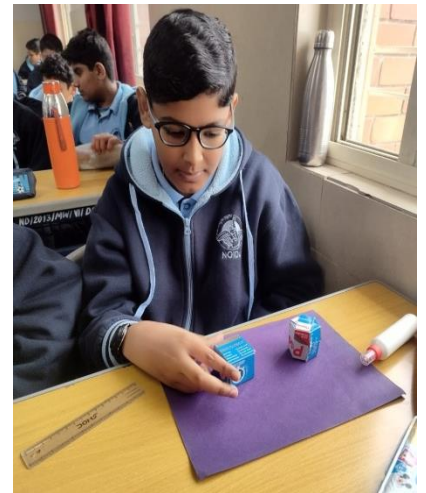


**Classes VIII**

**TOPIC: Transforming Cartons: Geometry in 3D Shapes**

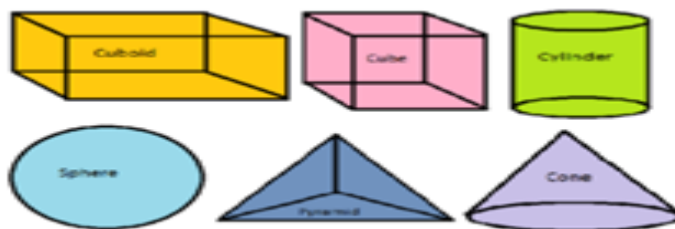
**Time Duration: 60 Minutes**

Using old toothpaste cartons and boxes with square cross-sections, students created amazing 3D shapes like cubical boxes, hexagonal boxes, and octagonal boxes by creatively folding, cutting, and assembling them. Students understood the properties of 3D geometric shapes such as cubes, hexagons, and octagons. They developed skills in measurement, cutting, and assembling to create models. The activity fostered creativity, resourcefulness, and spatial reasoning by repurposing everyday materials.



**Classes IX**

**TOPIC :MATHS MODELLING**



**Time Duration: 60 min**

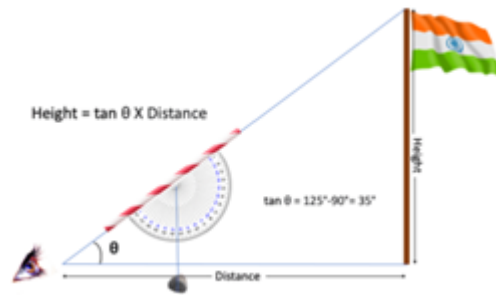
**MATHS MODELLING:** In order to highlight the importance of Mathematics in our daily lives and encourage the mathematical thinking of our students, we conducted the mathematical activity 'MATHS MODELLING' for Class IX.

Students explored the concepts of area, perimeter, volume, and surface area by measuring real-life structures such as basketball courts and cricket pitches. The hands-on exercises allowed students to apply theoretical concepts to practical situations, enhancing their mathematical thinking and problem-solving skills.



**Classes X**

**TOPIC: TRIGONOMETRY IN DAILY LIFE:**



**Time Duration: 40 Min**

**TRIGONOMETRY IN DAILY LIFE :**Students participated in an interactive activity on the playground to strengthen their understanding of Heights and Distances. Students employed clinometers (A clinometer is a tool that employs a spirit or bubble level to gauge the angles of slopes or elevations in relation to gravity) and tape measures to explore heights and distances in real-world contexts. This activity not only reinforced their understanding of trigonometry but also encouraged critical thinking and application-based learning.

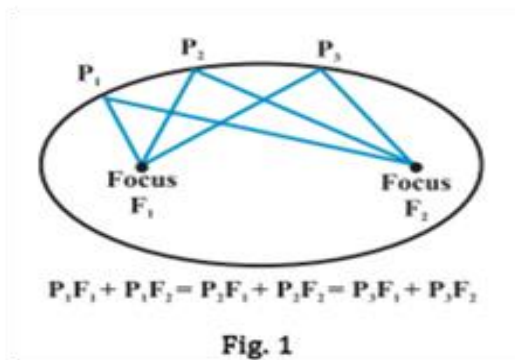


**Classes XI**

**TOPIC: Application of Coordinate Geometry in Sports/Real Life Situation:**

**Time Duration: 60 Min**

**Application of Coordinate Geometry in Sports/Real Life Situation:** Students performed Hands on activities using Tape measure, String/ rope 3, Stakes / poles, Chalk, marking powder, Hammer etc. Students learnt drawing a perfect elliptical racetrack on the ground systematically with the help of the mathematical concept of locus of point with respect to ellipse.



Upon completing this activity, students were able to understand the concepts of locus of a point belonging to Coordinate Geometry Chapter- Straight line and Conic section.



**SUMMARY:** The celebration of National Mathematics Day successfully combined hands-on learning with the joy of discovery.

Students participated enthusiastically in activities that made abstract concepts tangible, fostered teamwork, and encouraged creative thinking. By learning about the life and contributions of Srinivasa Ramanujan, they were inspired to appreciate mathematics as a dynamic and practical discipline. The event was a memorable and enriching experience for students and teachers alike, promoting a deeper engagement with mathematics and its real-world applications.

**It was a great learning experience for students as well as the teaching community.**



**Report Submitted by  
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