

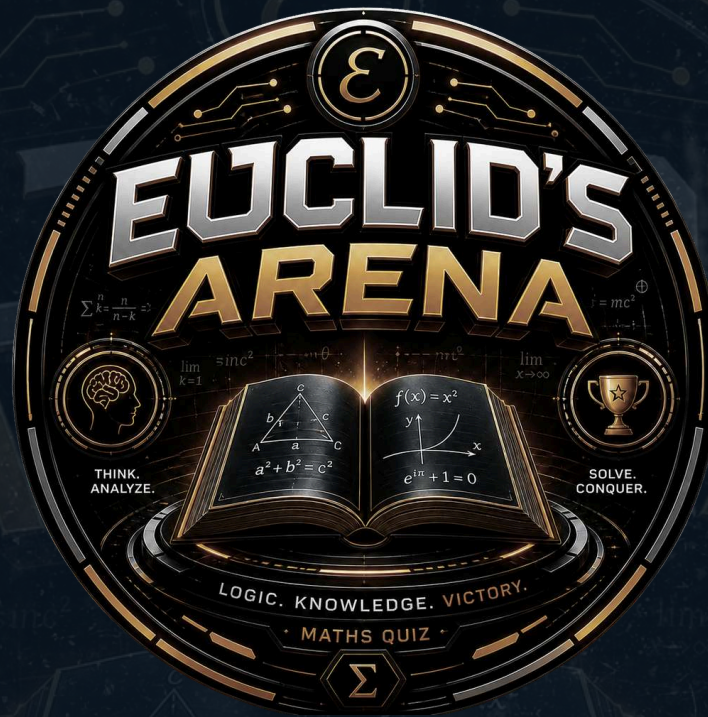


# ESTELLA 2.0

Inspiring Students, Creating Leaders



## EUCLID'S ARENA



“Mathematics is the poetry of logical ideas”

Day 1: Qualifiers

Day 2: Finals

### Categories

Young Innovators (Grades 6-8)

Youth Innovators (Grades 9-12)

**The Millennium School  
Sector 119, Noida**

**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## YOUNG INNOVATORS

### Day-1

**Round 1:** Design with Dimensions

**Round 2:** Numeracy Nexus

### Day-2

**Round 1:** Math Arcade

**Round 2:** Battle of Brains

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## DESIGN WITH DIMENSIONS

### DAY 1 ROUND 1

#### OBJECTIVE

Teams must create an original geometric design/figure on the spot. Instructions regarding this will be provided on the day of event.

#### GUIDELINES

- Each team may consist of a maximum of 4 participants
- The total time allotted for the activity is 60 minutes: 50 minutes for construction & 10 minutes for explanation.
- Only manual/ non-electronic mathematical instruments are allowed.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATERIALS ALLOWED

Compass  
Ruler/Scale  
Protractor  
Pencil  
Eraser  
Sharpener  
Colour pens/markers

## MATERIALS PROHIBITED

Pre-drawn sketches/designs  
Stencils or tracing sheets  
Printed materials  
Mobile phones or electronic gadgets

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## CONSTRUCTION REQUIREMENTS

- The design must include at least 5–6 different geometric shapes.
- Proper dimensions and measurements must be clearly shown.
- Shapes should be constructed accurately using mathematical tools.
- Participants should maintain neatness and clarity in presentation.
- The final figure should demonstrate creativity along with mathematical precision.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## JUDGEMENT CRITERIA

The decision of the judges will be final and based on:

<u>Criteria</u>	<u>Marks</u>
Accuracy of construction	10
Effective use of geometric shapes	10
Creativity and originality	10
Presentation & Neatness	10
Clarity of Explanation	10

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## NUMERACY NEXUS

### YOUNG INNOVATORS DAY 1 ROUND 2

## PROBLEM STATEMENT

This round is designed to test students' numerical ability, logical reasoning, speed and accuracy, mathematical application skills, concept clarity, puzzle-based numeracy, data interpretation

## ROUND DETAILS

- Duration: 50 Minutes
- Total Questions: 25 Questions
- Marking Scheme:
  - Correct Answer: +4 Marks
  - Incorrect Answer: -1 Mark
- Total Marks: 100 Marks

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## GUIDELINES

- Each team may consist of a maximum of 4 participants
- Calculators and electronic gadgets are prohibited.
- Any use of unfair means will lead to disqualification.
- Geometry instruments may be used only when required for specific questions.
- Final answers must be clearly marked on the answer sheet.
- Only one response per question will be considered for evaluation.
- Participants must carry their own stationery
- Questions are designed to test conceptual understanding, logical thinking, and application skills rather than rote learning.
- The decision of the judges will be final.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## TOPICS

- Algebra
- Geometry
- Mensuration
- Number System
- Logical Reasoning
- Speed, Distance and Time
- Data Handling and Probability



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATH ARCADE

### YOUNG INNOVATORS DAY 2 ROUND 1

## PROBLEM STATEMENT

Students will participate in an on-site creative challenge to design and build an innovative Math Arcade/Game Craft using sustainable, recycled, or craft materials. The activity aims to promote mathematical thinking through interactive, engaging, and fun-based learning.

## IMPORTANT INSTRUCTIONS

- The game must be original and student-created.
- Teams should ensure that the model is safe, well-structured, and easy to understand.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



- Sustainable and recycled materials are highly encouraged.
- The game should be interactive and playable.
- Judges may ask participants questions related to the mathematical concepts used.

## THEME

Participants must create a Math Arcade/Game Craft based on one or more mathematical concepts such as:

- Fractions & Percentages
- Logical reasoning
- Arithmetic operations
- Numbers
- Algebra
- Geometry
- Probability
- Measurement

**The Millennium School  
Sector 119, Noida**

**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATERIALS ALLOWED

- Cardboard
- Old newspapers
- Bottle caps
- Ice cream sticks
- Chart papers
- Shoe boxes
- Plastic containers
- Fabric scraps
- Thread/Wool
- Recycled paper
- Dice/Cards/Spinners
- Foam sheets
- Craft paper
- Paints and decorative items
- Markers and sketch pens

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## GAME REQUIREMENTS

Each team must clearly present the following:

- Game Name
- Objective of the Game
- Rules/Instructions
- Explanation of Mathematical Concepts Used
- Playable Model/Game Setup

## TIME DURATION

Total Time: 60 Minutes

Participants must complete the following within the allotted time:

- Designing the game
- Arranging materials
- Preparing the playable setup
- Explaining the mathematical concept and gameplay

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## JUDGEMENT CRITERIA

<u>Criteria</u>	<u>Points</u>
Creativity & Innovation	10
Effective Use of Materials	10
Mathematical Concept & Accuracy	10
Presentation Skills	10
Teamwork & Participation	5
Time Management	5
Total	50

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## BATTLE OF BRAINS

### YOUNG INNOVATORS DAY 2 ROUND 2

## PROBLEM STATEMENT

Battle of Brains is designed to test students' mental agility, spontaneous reasoning, problem-solving skills, mathematical accuracy, and composure under pressure. The competition focuses on quick thinking and rapid recall of mathematical concepts and facts

## SKILLS ASSESSED

- Speed & Accuracy
- Logical Thinking
- Mental Calculation Ability
- Presence of Mind
- Mathematical Reasoning
- Team Coordination

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## GUIDELINES

- Each team may consist of a maximum of 4 participants
- Total Duration of the Quiz: **Approximately 60 Minutes**
- Calculators, mobile phones, or any electronic devices are strictly prohibited.
- All calculations must be performed mentally.
- The quiz will be conducted in **elimination** and **rapid-fire** formats.
- Participants must answer within the given time limit.
- Teams are expected to maintain discipline and sportsmanship throughout the event.
- In case of any dispute, the decision of the **Quiz Master/Judging Panel** will be final and binding.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## TIME LIMITS & SCORING PATTERN

<u>Criteria</u>	<u>Details</u>
Correct Answer	+10 Points
Incorrect Answer	No Negative Marking
Quiz Format	Mental Mathematics & Rapid Response

<https://estellafest.in/>

**The Millennium School**  
**Sector 119, Noida**  
**201305**



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## IMPORTANT INSTRUCTIONS

- Participants should listen carefully to each question before answering.
- Answers once given cannot be changed.
- Rapid-fire rounds may include bonus opportunities.
- Participants must be ready for surprise mathematical puzzles and logical challenges.

THINK.  
ANALYZE.

SOLVE.  
CONQUER.

LOGIC. KNOWLEDGE. VICTORY.

MATHS QUIZ

**The Millennium School**  
**Sector 119, Noida**

**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## YOUTH INNOVATORS

### Day-1

Round 1: Mathitecture

Round 2: Numeracy Nexus

### Day-2

Round 1: Logic Lap

Round 2: Buzzer Round

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATHITECTURE

### YOUTH INNOVATORS DAY 1 ROUND 1

## PROBLEM STATEMENT

Design and create a working model that connects mathematics with real-life architectural concepts using mathematical knowledge and creativity.

## GENERAL INSTRUCTIONS

- Each team may consist of a maximum of 4 participants
- Total time allotted for the activity is 90 minutes:  
75 minutes for preparation/model construction  
15 minutes for presentation and explanation .

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



- Teams must create an original, unique, and creative model on the spot.
- Only manual mathematical instruments are allowed.
- Students must bring their own stationery and materials required for model construction.
- The model should clearly reflect the application of mathematics in architecture or real-life structures.
- Teams should be prepared to explain: Mathematical concepts used  
Real-life application  
Working/functionality of the model
- Judges may interact with participants and ask questions related to the mathematical concepts involved.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## THEME AND TOPICS

The model should visualize mathematical ideas such as:

- Calculus
- 3D Geometry
- Symmetry & Patterns
- Probability
- Measurement & Scale
- Structural Design
- Mathematical Art in Architecture

Participants must demonstrate how mathematics is used in architecture, construction, design, or engineering through an innovative and functional model.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## SUGGESTED MODEL IDEAS

Participants may explore ideas such as:

- Geometric city structures
- Suspension bridges
- Probability-based game architecture
- Fractal buildings
- Symmetry-inspired monuments
- Dome structures
- Fibonacci pattern models
- Smart traffic planning layouts
- Calculus-based curved structures
- Earthquake-resistant building models

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATERIALS ALLOWED

Students may bring and use sustainable/recycled materials or creative craft materials such as:

- Cardboard
- Old newspapers
- Bottle caps
- Ice cream sticks
- Chart papers
- Shoe boxes
- Plastic containers
- Fabric scraps
- Thread/Wool
- Recycled paper
- Dice/Cards/Spinners
- Paints and decorative items
- Foam sheets
- Craft paper

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## MATERIALS NOT ALLOWED

- Pre-drawn sketches/designs
- Stencils or tracing sheets
- Printed materials
- Mobile phones or electronic gadgets

## IMPORTANT NOTE

The focus of the event is not only on artistic presentation but also on:

- Mathematical accuracy
- Practical application
- Structural understanding
- Innovation and teamwork

Teams are encouraged to think creatively and present mathematics as a powerful tool in architecture and design.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## JUDGEMENT CRITERIA

<u>Criteria</u>	<u>Points</u>
Concept & Mathematical Understanding	10
Creativity & Innovation	10
Functionality / Working of Model	15
Presentation & Explanation Skills	5
Time Management	10
Total	50

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## NUMERACY NEXUS

### YOUTH INNOVATORS DAY 1 ROUND 2

## PROBLEM STATEMENT

This round is designed to test students' numerical ability, logical reasoning, speed and accuracy, mathematical application skills, concept clarity, puzzle-based numeracy, data interpretation

## GUIDELINES

- Each team may consist of a maximum of 4 participants
- Calculators, mobile phones and electronic gadgets are strictly prohibited.
- Any use of unfair means will lead to immediate disqualification.
- Geometry instruments may be used only if required for specific questions.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



- Only one response per question will be considered for evaluation.
- Participants must carry their own stationery items.
- Questions will focus on conceptual understanding, logical thinking, and application-based learning rather than rote memorization.
- Participants are advised to manage their time effectively during the examination

## IMPORTANT NOTE

- Read each question carefully before answering.
- Negative marking will be applicable for incorrect responses.
- The decision of the judges/examiners will be final and binding.

**The Millennium School  
Sector 119, Noida**

**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## TOPICS COVERED

Questions may be based on the following areas:

- Algebra
- Geometry
- Trigonometry
- Number System
- Logical Reasoning
- Speed, Distance & Time
- Combinatorics
- Statistics
- Probability
- Set Theory
- Calculus

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## ROUND DETAILS (MCQ.)

<u>Particulars</u>	<u>Details</u>
Duration	50 Minutes
Total Questions	25 Questions
Marks for Correct Answer	+4 Marks
Negative Marking	-1 Mark for Incorrect Answer
Maximum Marks	100

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## LOGIC LAP

### YOUTH INNOVATORS DAY 2 ROUND 1

## PROBLEM STATEMENT

A fast-paced team event where participants solve mathematical problems in a relay format. Each team member completes a part of the challenge and passes it to the next participant, testing speed, accuracy, teamwork, and mental agility.

## GENERAL RULES

- Each team may consist of a maximum of 4 participants
- The competition will be conducted in relay format.
- Only one participant from a team may attempt a question at a time.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



- The next participant may begin only after the previous member completes the task and passes the response sheet/question card.
- Teams must solve the questions sequentially.
- Use of calculators, mobile phones, smart devices or any unfair means is strictly prohibited.
- Rough work must be done only on sheets provided by the organizers.
- Participants must maintain discipline and follow the instructions of the coordinators/judges at all times.
- Any team violating the rules may face penalty marks or disqualification.
- The decision of the judges will be final and binding.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## COMPETITION FORMAT

Questions may include:

- Arithmetic
- Logical Reasoning
- Algebra
- Geometry
- Puzzles and Rapid Calculations

Each correct answer allows the team to proceed to the next stage/question.

The team completing the relay accurately in the shortest time will have an advantage.

## MATERIALS ALLOWED

- Pen/Pencil
- Geometry Tools (if specified)
- Sheets will be provided by the organizers.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## JUDGEMENT CRITERIA

<u>Criteria</u>	<u>Marks</u>
Accuracy of Answers	20
Speed and Time Management	20
Completion of Maximum Tasks	10
Total	50

## TIE-BREAKER RULE

- In case of a tie, the team with higher accuracy will be preferred.
- If still tied, the team with lesser completion time will be declared the winner.
- Judges may conduct a rapid-fire tie-breaker round if required.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## BUZZER ROUND YOUTH INNOVATORS DAY 2 ROUND 2

### PROBLEM STATEMENT

This round is designed to test students' mental agility, spontaneous reasoning, problem-solving ability, mathematical accuracy, and composure under pressure. The competition emphasizes quick thinking, rapid calculations, and immediate recall of mathematical concepts and facts.

### QUIZ FORMAT

- The round will be conducted in buzzer format.
- The quiz will include:
  - Rapid-fire mathematical questions
  - Logical reasoning problems
  - Mental calculation challenges
  - Concept-based mathematics questions

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## GENERAL RULES

- Teams must press the buzzer before answering.
- The team that buzzes first gets the opportunity to answer.
- Answers must be given immediately after being recognized by the quiz master.
- Negative marks will also be there
- Use of calculators, mobile phones, smart watches, or any electronic devices is strictly prohibited.
- All calculations must be performed mentally.
- The quiz will be conducted in **elimination** and **rapid-fire** formats.
- Participants are expected to maintain discipline and sportsmanship throughout the competition.
- Unfair means or misconduct may lead to disqualification.
- In case of any dispute, the decision of the quiz master/judging panel will be final and binding.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## SCORING PATTERN

- Correct Answer: +10 marks
- Incorrect Answer: -5 marks
- No passing of questions will be allowed.

## DURATION

**Approximately 60 minutes**

## SKILLS ASSESSED

- Mental Mathematics
- Logical Thinking
- Speed & Accuracy
- Analytical Ability
- Presence of Mind
- Team Coordination

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## DECLARATION

The organizing team has made all efforts to make sure no changes are needed. However, modifications, clarifications, or adjustments may be made due to unforeseen circumstances.

Participants are expected to extend full cooperation to the organizers and abide by all instructions communicated .

Any form of disorderly conduct, use of unfair means, or intentional attempts to hamper the decorum and smooth conduct of the event shall result in immediate disqualification.

**Teacher In-Charge:** Mr. Vishvas Singh (95994 95032)

**Student In-Charge:** Shreyansh Singh (93898 99229)

**The Millennium School  
Sector 119, Noida  
201305**

<https://estellafest.in/>