

Queen's Valley School Circular (III-IX and XI): 2021-22 Mathematics Month

Mathematics as an expression of the human mind reflects the active will, the contemplative reason, and the desire for aesthetic perfection. Its basic elements are logic and intuition, analysis and construction, generality and individuality.

- Richard Courant

The power of Mathematics is often to change one thing into another, to change geometry into language. Mathematics is all around us. As Shakuntala Devi said, "Without Mathematics, there's nothing you can do. Everything around you is Mathematics. Everything around you is numbers." To celebrate the beauty and vastness of Mathematics, Queen's Valley School invites all the students in classes III to IX and XI to participate in Inter Class Competitions in the month of December, 2021.

The details of the Preliminary Rounds to be conducted for the competitions organised in the Mathematics Month are given below. A circular mentioning the names of the selected students and details regarding the Final Round would be uploaded on the school website.

CLASS	Name of the Competition with SDG Goal	Preliminary Round Date	Description
III	GAME OF VERSES - Mathematical Poems	14.12.2021	EXPECTATION: The students will choose any one mathematical concept of primary level (Shapes, Fractions, Numbers, Fundamental operations on numbers etc.) and recite a poem on their selected topic along
	SDG GOAL- 4: QUALITY EDUCATION		with suitable props (if any). JUDGEMENT CRITERIA: Selection of poem Speaking skills Creativity Appropriate use of props

			 Overall Presentation MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants are required to send their video on the given email address- kritika.dhutti@queensvalleyschool.in Email Specifications Subject line: GAME OF VERSES – MATHEMATICAL POEMS Content: Participant's Name, Class, Section, Admission number. Attachment:MP4 file with name of the child as the file name. TIME: 2-3 minutes, including 20 seconds for the introduction.
IV	ROCK THE RAMP – Be a Mathematician SDG GOAL- 4: QUALITY EDUCATION	10.12.21	EXPECTATION: Students will speak a few lines about the contributions of any one Mathematician towards the great discipline of mathematics using appropriate props. JUDGEMENT CRITERIA: Content and relevance to the Theme Speaking skills (pronunciation, fluency) Confidence Overall Presentation MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants are required to send their video on the given email address- Preeti.singh@queensvalleyschool.in Email Specifications Subject line: ROCK THE RAMP- Be a Mathematician Content: Participant's Name, Class, Section, Admission number. Attachment: MP4 file with name of the child as the file name TIME: 2-3 minutes, including 20 seconds for the introduction.
V	TANGRAM - Pieces fit into the world SDG GOAL 14: LIFE BELOW	10.12.2021	EXPECTATION: The participants will create a scene on the given theme, that is, Life Below Water or Life on land (SDG Goals 14 and 15 respectively) using tangram pieces. JUDGEMENT CRITERIA:

WATER GOAL 15: LIFE ON LAND		 Overall Presentation Neatness Creativity Number of figures formed using tangram pieces MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants have to upload a single pdf of two images on MS Teams Assignment section. The pdf must have an image of the tangram itself and another image of the child holding the tangram drawing. Name of the Assignment: MATH COMPETITION_TANGRAM-Pieces fit into the world_PRELIMINARY ROUND Rename the pdf as Participant's name_Class-section_Theme. Format of the file: PDF ONLY.
VI THE MYSTIQUE OF MATH- Elocution SDG GOAL 15: LIFE ON LAND	14.12.21	EXPECTATION: The students will speak a few lines to present the relationship between Mathematics and Nature using appropriate props. JUDGEMENT CRITERIA: Ideas and concepts Overall Presentation Appropriate use of props Speaking skills Integration of Mathematical concepts MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants are required to send their video on the given email address- Kirti.Khanijo@queensvalleyschool.in Email Specifications Subject: THE MYSTIQUE OF MATH- Elocution Content: Participant's name, class and section, Admission No. Attachment: MP4 file with name of the child as the file name TIME: 2-3 minutes, including 20 seconds for the introduction.

VII	वास्तुकला में गणित- Math and Architecture SDG GOAL-9: INDUSTRY, INNOVATION AND INFRASTRUCTURE	10.12.2021	EXPECTATION: The participant will have to sketch any monument explaining the Mathematical Principle/Law/Theory used in an architectural design and share a pdf of the same. The pdf must contain two images: one of the sketch and the other of the student holding the sketch. JUDGEMENT CRITERIA: • Neatness of the sketch • Number of Mathematical Principle/Law/Theory explained • Overall Presentation MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants have to email their file entry (sketch and explanation) at charukhurana.qvs@gmail.com. Subject of the email- वास्तुकला में गणित- Math and Architecture (RENAME the file attached with your name, class and section clearly). File size: It should not exceed 25 MB Format of the file: PDF ONLY
VIII	SDG MATRIX - A magic square of SDG's SDG GOAL: ALL GOALS	14.12.2021	EXPECTATION: Students will be given 4x4 magic square to solve in their respective Math period. JUDGEMENT CRITERIA: • Accuracy • Time taken MODE OF CONDUCTION OF PRELIMINARY ROUND: Participants have to solve a 4x4 magic square accurately and in minimum time in their respective Math period. (Selected students will go for the final round where they have to solve a 4x4 matrix based on SDGs. They will be required to learn all the 16 SDGs in correct sequence)
IX	कबाड़ से जुगाड़- Miniature Math Model SDG GOAL- 12: RESPONSIBLE	10.12.2021	EXPECTATION: The participant has to make an exhibit/ model using waste materials explaining the Mathematical Principle/Law/Theory used in it. JUDGEMENT CRITERIA: Relevance to the theme Creativity

	CONSUMPTION AND PRODUCTION		 Relevance to Mathematics MODE OF CONDUCTION OF PRELIMINARY ROUND: Students have to submit their ideas with explanation written on an A4 sized sheet. The sheet should be uploaded on the given link. https://forms.office.com/r/HprQ1GV2j1 (Selected students will be asked to make the exhibit/model as per the idea submitted and present it in front of the judges in the final round.)
XI	CLIMATE MATH- PPT Presentation SDG GOAL- 13: CLIMATE ACTION	15.12.2021	EXPECTATION: The participants will make PPT on the ways in which Math can be used to reverse climate change or reduce the effects of climate change. The ppt must contain a minimum of 5 slides describing the following: Climate Change and its meaning Causes of climate change How Math helps in identifying the effects of climate change Role of Math in reversing Climate change (in general) Description of at least 2 ways of using Math in reversing climate change The ppt submitted for the prelim round need not be in detail or have lots of effects but should contain the above- mentioned information in a concise manner. (The one for the final round can have the added effects and details needed to explain the topic in front of the judges.) JUDGEMENT CRITERIA: Relevance Presentation Originality Organization of content MODE OF CONDUCTION OF PRELIMINARY ROUND: Students will make the ppt and submit it on the following link https://forms.office.com/r/GyfmUwPkN9 (The finalists will present their PPTs in front of the judges along with an oral presentation.)

The shortlisted students will participate in the final round. The instructions for the same will be communicated later through the school website.

Hoping for enthusiastic participation and support.

Department of Mathematics QVS

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- Make online accounts safe by using strong passwords.
- Do not indulge in cyber bullying and speak with elders if someone tries to bully you.
- Do not click on suspicious links or websites.