

# Ganit Saptah

## Introduction

The main goal of mathematics education in schools is to develop the inner resources of the child. It is mostly related to logical thinking. The kind of thinking one learns in mathematics is the ability to handle abstractions. Mathematics also offers a way of doing things and develops the quality of attacking all kinds of problems in a systematic manner. This makes a learner confident in handling different complex situations in her daily life.

However this can be achieved if the learners are exposed to different situations in mathematics in which they could get an opportunity to explore and analyse for themselves. For this purpose the National curriculum Framework (NCF) -2005 recommends activity based learning and teaching in mathematics. One of the modes through which this can be done apart from classroom mathematics activities is organizing different mathematics exhibitions or fairs. In such events the learners get an opportunity to express their ideas before others fearlessly. This requires working on the related mathematical concepts and then expressing them. This is done voluntarily by them.

It needs to be made a week long activity for smaller durations on each of the days so that students get enough time to interact with all and thus will get better understanding of concepts. The interactions and discussions on mathematics and issues related to its learning will deepen its understanding in the students and teachers. This will also result in better dissemination of ideas and material. The apt time to do this week long activity is around the National Mathematics Day which is celebrated in the memory of the great mathematics legend Srinivas Ramanujan, on 22<sup>nd</sup> December.

## Objectives

By organising various activities during Ganit Saptah , the students will be able to

- i) Discover the enjoyment in learning of mathematics
- ii) Create interest in learning mathematics
- iii) Connect mathematical concepts with real life situations
- iv) Involve intrinsically in all mathematical activities
- v) Appreciate the importance of learning mathematics for learning of other subjects
- vi) Popularise mathematics among learners and society
- vii) Improve mathematical skills

In order to realise the above mentioned objectives, School needs to organise various activities during different days. The following activities may be organised during Ganit Saptah.

Day	Programme/Theme	Details of Activity
Day 1	Inauguration	<p>Eminent mathematician (Experienced School Teacher/ College or University Teacher/ Writer/etc) may be invited for the Inauguration.</p> <p>Topics like “Importance of Learning Mathematics”, “Mathematics and Nature”, “Mathematics and other subjects”, “Historical Aspects of Mathematical Concepts” etc may be presented during the Inauguration.</p>
Day 2	Mathematics around Us	<p>Students may be asked to prepare small presentations/posters on this topic. They may be allowed to demonstrate with some examples of mathematics available in the nature.</p> <p>For example, Primary children may be asked to collect various objects which are related with mathematics in some way from the environment. They may be asked to prepare a brief detail about the mathematics connected with those objects</p> <p>For upper primary students, the activity of making different posters related to mathematical concepts may be given.</p> <p>Secondary and Higher Secondary students may be asked to prepare brief papers/presentations on a topic related with mathematics.</p>
Day 3	Mathematics and other subjects	<p>Panel Discussions/Debate may be organised during this day.</p> <p>Debate may be organised for Primary and Upper Primary Students on topics like <i>Numbers are essential for learning other subjects.</i></p> <p>Panel discussions may be organised for Secondary and Higher Secondary Students in topics like <i>importance of algebra/calculus, etc in other subjects.</i></p>
Day 4	Mathematics for Fun, Enjoyment, and Creativity	<p>Competitions like solving Puzzles, Sudoku, Magic Squares, Mathematics Quiz, Maths Origami making etc. may be organised.</p> <p>It would be better to organise competitions for different levels such as Primary, Upper Primary, Secondary and Higher Secondary.</p> <p>In all these activities students may be asked to explain the logic for each of their answers.</p>
Day 5	Mathematics Fair	<p>The whole day may be utilised for organisation of Mathematics Fair in which Posters, Models, Projects, Charts, etc. developed by the students may be exhibited and explained by them.</p> <p>Mathematical games may also be demonstrated and played during the fair.</p> <p>The best exhibits at different stages (Primary, Upper</p>

		<p>Primary, Secondary, and Higher Secondary) may be given awards.</p> <p>Parents and members of SMC, and Community may also be invited for the fair and Valedictory function may be organised in the evening.</p> <p>A speech on the <i>contribution of S. Ramanujan or other Indian Mathematicians including those during ancient times</i> may be organised and there may be discussion on <i>Careers in Mathematics</i>.</p> <p>Prizes for various competitions held during the week may be distributed during the valedictory function.</p>
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A big white sheet may be pasted at an appropriate place in the school premises on the very first day where students and teachers can write their thoughts about mathematics and mathematicians. During and after the Ganit Saptah teachers can use these points for discussion with the students.

Apart from students' activities, teachers also need to be engaged in discussions on Mathematics and its transaction among themselves. These discussions could be about, *how to engage students in learning mathematics, how to make students fearless in learning mathematics, how to develop a positive attitude in the students towards learning mathematics etc.*

The given schedule and the topics mentioned are tentative. The schools may plan as per their need and available conditions. The programme for each day (Day 1 to Day 4) could be of shorter duration to sustain the interest of all those who are involved in celebrating the Saptah and the regular school routine will also not be affected much.