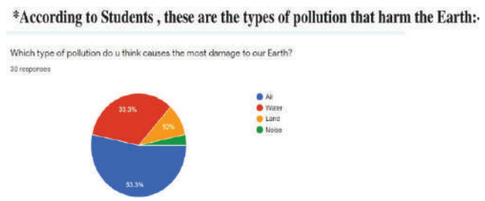
Statistics

Statistics involves collecting, analysing, and drawing inferences from data and effectively communicating and presenting the resulting conclusions. Students identify and analyse data to assign probabilities using experimental and theoretical methods. They gradually develop the ability to evaluate statistical information and develop data intuitions critically

The study of calculus provides a foundation for comprehending the physical world, particularly with respect to rates of change. It involves using functions, their derivatives, and integrals to model physical processes. Meanwhile, the study of statistics focuses on describing and analysing phenomena involving uncertainty and variation.

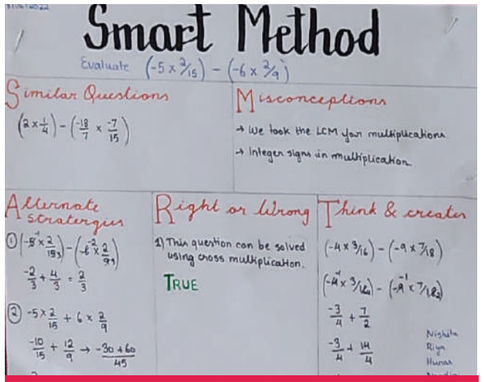


Statistical study of a real-world problem

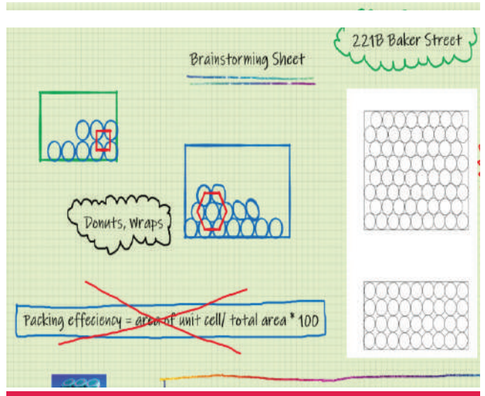
Mathematical Practices

At all levels of learning, skills such as problem-solving, reasoning, reflecting, connecting, communicating, representing, and selecting tools and computational strategies are developed. The program equips students with a mathematical mindset, problem solving abilities, skills, processes and metacognition.

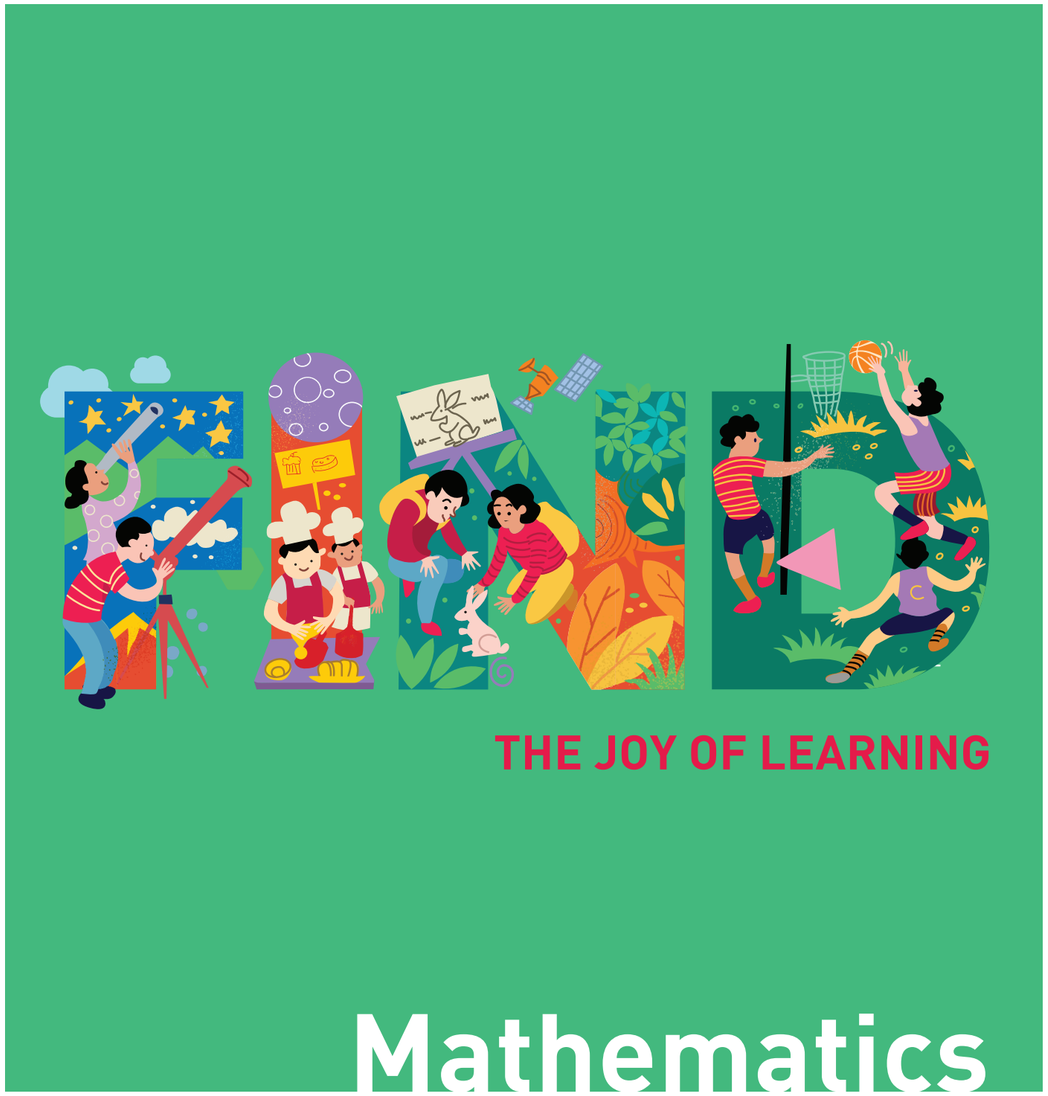
Students engage in mathematical discussion and challenges and use essential mathematical skills, knowledge and competencies to apply Math in solving real-world problems. They learn to use mathematical models to make predictions and draw conclusions and communicate their findings effectively to others. The program encourages students to work collaboratively in groups and develop interpersonal skills such as communication, teamwork, and leadership.



SMART tool



Analysing an efficient way of packing



Mathematics

080 4680 9096
ekyaschools.com

EKYA SCHOOLS

JP NAGAR ITPL BTM LAYOUT BYRATHI NICE ROAD HRBR LAYOUT

We, at Ekya, believe in a world beyond boundaries where education should continuously evolve and adapt as the world changes.

Ekya is a community of children, educators and parents where everyone learns together. At Ekya, our students find their purpose, passion and community to make a positive difference in the world.

FIND New Ways to Learn

Our innovative learning model goes beyond conventional norms. We apply interdisciplinary skills to think differently and solve real-world problems. We equip students with skills such as problem-solving, collaboration, critical thinking, reflection and global awareness.

Students engage in authentic tasks and challenges to investigate each learning area deeply and transfer their learning to the environment around them.

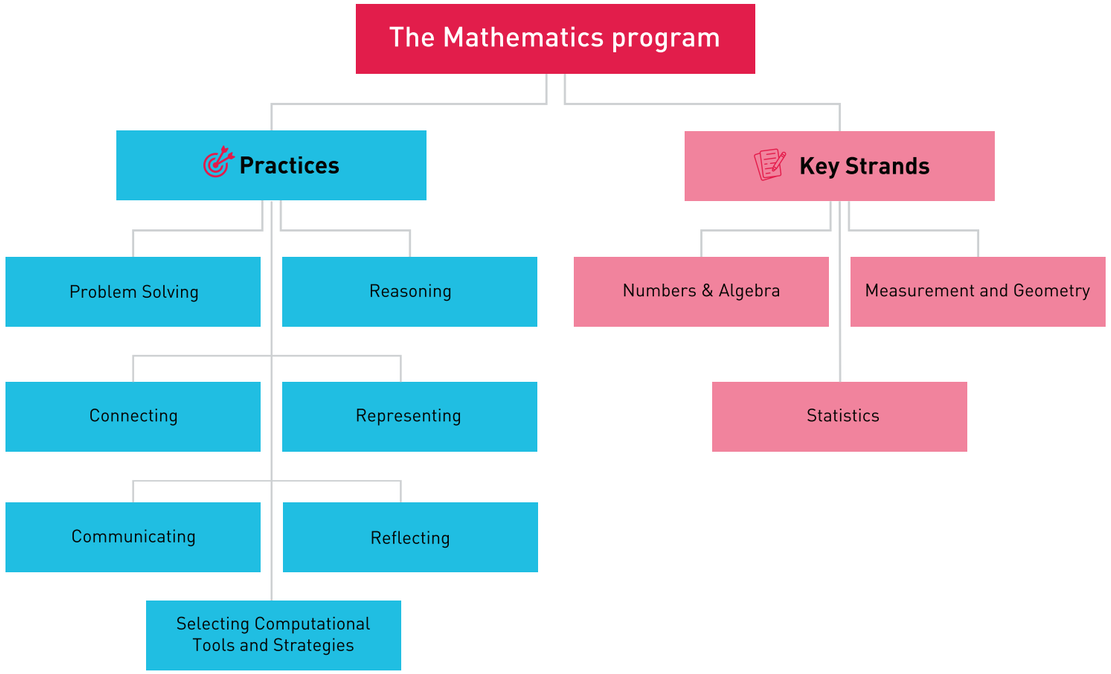
"Mathematics teaches us that every problem has a solution."

The Mathematics program at Ekya Schools promotes deep understanding through structured approaches which allows students to learn and build problem solving skills.

The purpose of the Mathematics program is to enable students to:

- Develop mathematical thinking and attitude.
- Use mathematical practices for problem-solving.
- Engage in mathematical challenges and discussions.
- Understand the relevance of and need for mathematics in the real world.

At Ekya Schools, Grades 1-6 follow the Singapore Math methodology, a highly effective teaching approach that emphasises mastery achieved through intentional sequencing of concepts. The teaching approach utilises the CPA (Concrete Picture Abstract) method, which involves learning to visualise solutions through number bonds and bar models. This process allows students to build concepts, make connections, and effectively communicate their understanding. In middle school and senior school, students are introduced to advanced mathematical concepts and develop critical thinking and problem-solving skills to excel in Math. Students also apply their Math knowledge to real-world problems and communicate their reasoning effectively.

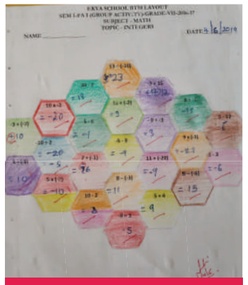


Numbers & Algebra

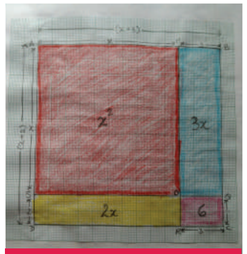
The study of numbers and Algebra, involves applying number sense and various counting and representation strategies. Students learn to recognise patterns and develop a deeper understanding of the number system, using this knowledge to describe relationships and formulate generalisations. Starting from basic counting numbers in lower grades, students gradually progress towards commercial arithmetic and algebra concepts and eventually to variables and functions in higher grades.

Students also learn to recognise equivalence, solve equations and inequalities, and apply a range of strategies for computation while understanding the connections between different mathematical operations. They apply these skills to conduct investigations, solve problems, and communicate their reasoning effectively.


Using concrete objects to understand the concept


Integer activity


Finding factors


Factorisation by splitting the middle term


Golden Ratio

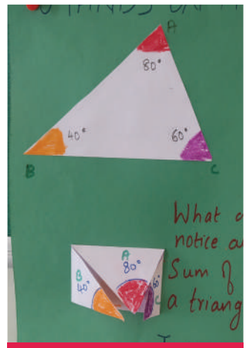
Measurement and Geometry

In learning measurement and Geometry, the program helps explore the practical applications of distances, areas, and volumes to enhance their relevance in real-world scenarios. Students gain an understanding of size, shape, relative position, and movement of both two-dimensional figures in the plane and three-dimensional objects in space

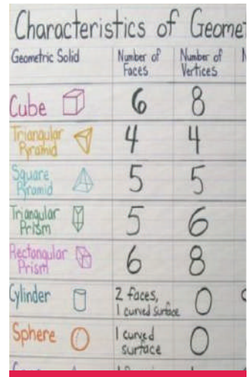
Through investigation, students learn to define, compare, and construct these figures and objects based on their properties and develop geometric arguments to support their conclusions. Additionally, they learn to make meaningful measurements of quantities using appropriate metric units.


Patterns with shapes

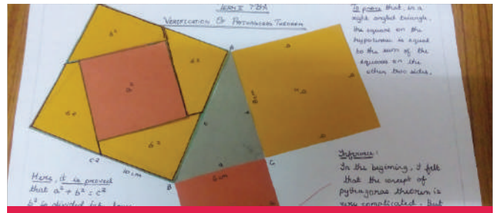

Patterns with colours



Angle Sum property of a triangle



Geometric solids


Verifying Pythagoras Theorem