

Mathematics 7

Time: 7 x 35 minutes per week

Course Description:

The grade 7 Mathematics course is aimed at introducing students to the wider mathematical concepts and skills for everyday life, and for continuous learning in mathematics and related disciplines. Particular emphasis is placed on laying down a strong foundation in familiarising with mathematical symbols, terms and notations, making the smooth transition from arithmetic expressions to algebraic expressions, mastering the fundamental concepts of geometry, handling statistical data and developing mathematical thinking and problem solving skills.

Resources:

Chow Wai Keung, et al, Discovering Mathematics Textbook 1 (2nd edition), Star Publishing Pte Ltd, Singapore.

Chow Wai Keung, et al, Discovering Mathematics Workbook 1 (2nd edition), Star Publishing Pte Ltd, Singapore.

Main Topics Covered:

Semester 1

- Prime Numbers, Indices, Highest Common Factors (HCF), Least Common Multiples (LCM), Square roots and Cube Roots
- Integers, Positive and Negative Numbers, Real Numbers and Rational Numbers
- Approximation and estimation
- Introduction to Algebra
- Algebraic Manipulation
- Simple Linear and Fractional Equations
- Triangle, Quadrilaterals, Interior and Exterior angles of Polygons.

Semester 2

- Ratio, rate and speed
- Percentages
- Number Patterns and Sequences
- Coordinates, Linear functions and Their Graphs
- Simple inequalities
- Perimeter and area of plane figures
- Volume and surface area of prisms and cylinders
- Statistical data handling

Assessment

Internal Assessment	Weighting (%)
<ul style="list-style-type: none"> • End of Semester Examinations (SA1 + SA2) • Continual Assessment (CA1 + CA2 + CA3 + CA4) including: <ul style="list-style-type: none"> - Topic tests - Quizzes - Class work - Homework 	20 + 50 10 + 5 + 10 + 5
	100