

Mathematics 8

Time: 7 x 35 minutes per week

Course Description:

The grade 8 Mathematics course aims to build upon the skills, knowledge and understanding of students already developed in grade 7. Particular emphasis is placed on logical reasoning and problem-solving skills. Our underlying aim is to encourage our students to be able to apply their mathematical knowledge in everyday situations and, to this end, wide and varied teaching strategies and tasks are employed. Grade 8 students are being prepared to embark on IGCSE studies in grades 9 and 10.

Resources:

Chow Wai Keung, Discovering Mathematics (2nd Edition) 2A and 2 B, Star Publishing PTE Ltd, Singapore
Chow Wai Keung, Yong Fook Meng, Discovering Mathematics (2nd Edition) 2 Workbook, Star Publishing PTE Ltd, Singapore

Main Topics Covered:

Semester 1

- Direct and Inverse Proportions
- Linear Graphs and Simultaneous Linear Equations
- Expansion and Factorisation of Quadratic Expressions
- Further Expansion and Factorisation of Algebraic Expressions
- Algebraic manipulation and formulae
- Quadratic Equations and Graphs
- Revision
- Exam Week
- Going through exam papers, followed by focusing on areas of concern of SA1 topics (

Main Topics Covered:

Semester 2

- Congruency & Similarity
- Pythagoras' theorem
- Trigonometric ratios
- Volume and surface area of Pyramids, cones and Spheres
- Probability of Single Events
- Statistical Diagrams
- Averages of Statistical Data
- Revision
- Exam Week
- Going through exam papers, followed by focusing on areas of concern of SA1 topics

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"> • Termly Tests • Quizzes (Topical) • Homework • Class Participation: Logical Reasoning and Analysing 	<p>25 + 45</p> <p>10</p> <p>10</p> <p>5</p> <p>5</p>
	100