

Year 4IP Core Math Course Outline

Term 1	Topics
Unit 1	Algebraic Manipulation
Unit 2	Set Theory
2.1	Set language and notation
2.2	Venn diagram
Unit 3	Congruency and Similarity
3.1	Congruent triangle
3.2	Similar triangle
3.3	Area and Volume of similar figures
Unit 4	Circle Theorem
4.1	Symmetrical properties of circle
4.2	Angle properties of circle
Term 2	
Unit 5	Arc Length, Area of Sector and Radian Measure
Unit 6	Vectors in 2 dimensions
6.1	Vectors on the coordinate plane
6.2	Application of vectors in geometry
Unit 7	Linear Law
Unit 8	Statistics (I) – Frequency Distribution and Measures of Central Tendency
8.1	Frequency distribution, histogram, frequency polygon
8.2	Mean, median, mode
Term 3	
Unit 9	Statistics (II) – Cumulative Frequency Distribution and Box-and-Whisker Diagram
9.1	Cumulative frequency curve
9.2	Box and whisker diagram
Unit 10	Statistics (III) – Standard Deviation
Unit 11	Mathematics in Practical Situations
11.1	Profit and Loss / Simple Interest and Compound Interest/ Hire-Purchase
11.2	Utility Bills/ Money Exchange / Taxation
Unit 12	Graphs in Practical Situations
12.1	Tables, Charts & Graphs
12.2	Distance- Time Graphs & Speed-Time Graphs
Unit 13	Number Patterns
Unit 14	Probability