GREEN VALLEY PUBLIC SCHOOL

Class-Wise Distribution of Syllabus (Session 2026–27)

Class: VIII | Subject: Mathematics | Textbooks: Part 1 & Part 2

TERM I (APRIL TO SEPTEMBER 2026)

Comprehensive Coverage of Book Part 1

Month	Ch.	Chapter Name	Topics / Sub-topics	Enrichment Activities / Projects
April	1	**Squares and Square Roots** Book Part 1	• Properties of Square Numbers & Patterns • Finding Square Roots by Prime Factorisation • Long Division Method for Square Roots • Estimating Square Roots of Non-Square Numbers	• Crossword Puzzle on Perfect Squares • Visual representation of Square numbers using dot grids
May	2	**Cubes and Cube Roots** Book Part 1	• Properties of Cube Numbers • Finding Cube Roots through Prime Factorisation • Estimation Method for Cube Roots • Patterns in consecutive odd number sums	• Building 3D Models using unit blocks/cubes • Mental Math Speed Quiz competition
July	3	**Exponents** Book Part 1	• Powers with Negative Exponents • Laws of Exponents with Integer Bases • Standard Form / Scientific Notation • Comparing very large and very small quantities	• Solar System Distance Chart (expressing large numbers in Scientific Notation) • Microscopic scale calculation worksheet
July	4	**The Story of Numbers** Book Part 1	• Historical Evolution of Number Systems • Generalised Form of Numbers (2-digit, 3-digit) • Divisibility Tests (10, 5, 2, 9, 3, 11) • Number Patterns and Sequences	• Math Logic Puzzles & Number Games • Biographical Chart on Indian Mathematicians
August	5	**Quadrilaterals** Book Part 1	• Polygons: Convex & Concave, Regular/Irregular • Angle Sum Property of Polygons • Types of Quadrilaterals (Parallelogram, Rhombus, Rectangle, Square, Trapezium, Kite) • Properties of Parallelogram diagonals & angles	• Paper Cutting and Folding activity to verify Angle Sum Property • Classification Chart of Quadrilaterals using hierarchy diagrams
August	6	**Number Play** Book Part 1	• Cryptarithms (Letters for Digits / Alphametics) • Magic Squares (3x3 and 4x4 creation) • Reversing Digits Trick & Modular properties • Mathematical Puzzles and Riddles	• Designing original 3x3 Magic Squares • Sudoku and Kakuro Challenge Competition
Sept	7	**Operations on Algebraic Expressions** Book Part 1	• Monomials, Binomials, and Polynomials • Addition & Subtraction of Algebraic Expressions	• Geometric proof of algebraic identities using grid paper • Identity Matching Card Game

Month	Ch.	Chapter Name	Topics / Sub-topics	Enrichment Activities / Projects
			• Multiplication of Expressions (Polynomial by Polynomial) • Standard Algebraic Identities: $(a+b)^2$, $(a-b)^2$, a^2-b^2	
Sept	**8**	**Proportional Reasoning (Ratio & Proportion)** Book Part 1	• Concept of Ratio and Equivalent Ratios • Direct Proportion & Constant of Variation • Inverse Proportion & Real-life Scenarios • Unitary Method & Map Scale Interpretations	• Plotting Speed vs Time graphs for Direct/Inverse variation • Creating a Scale Model Map of the School Playground

Note: The entire syllabus of Term I along with systematic revision must be completed before the Mid-Term Examinations.

TERM II (OCTOBER 2026 TO MARCH 2027)

Comprehensive Coverage of Book Part 2

Month	Ch.	Chapter Name	Topics / Sub-topics	Enrichment Activities / Projects
Oct - Nov	**1**	**Percentage and Its Applications** Book Part 2	• Recalling Percentages & Conversions • Profit, Loss, and Percentage Calculations • Discount, Marked Price, and Sales Tax / GST • Simple Interest vs Compound Interest Formulas	• Mock Bank Transaction & Fixed Deposit Interest Calculation • Preparing a Grocery Invoice showing GST calculation
Nov	**2**	**The Baudhayana–Pythagoras Theorem** Book Part 2	• Historical Context of Baudhayana Sulba Sutras • Statement & Proof of Pythagoras Theorem • Pythagorean Triplets & Identification • Applications in Right-Angled Triangles	• Visual proof of Pythagoras Theorem using area of squares cutouts • Surveying distance problem activity
Dec	**3**	**Proportional Reasoning-2** Book Part 2	• Advanced Compound Proportion Problems • Time and Work Problems • Pipes and Cisterns Applications • Time, Distance, and Relative Speed Calculations	• Practical Work Log worksheet (Calculating efficiency & time) • Train & River Stream speed numerical activity
Dec	**4**	**Exploring Some Geometric Themes** Book Part 2	• Line Symmetry and Rotational Symmetry • Tessellations and Tiling Patterns • 3D Shapes & Euler's Formula ($V - E + F = 2$) • Front, Side, and Top Views of 3D Objects	• Creating Tessellation Art Designs using cardboard tiles • Verification of Euler's Formula on regular polyhedra
Jan	**5**	**Tales by Dots and Lines** Book Part 2	• Introduction to Coordinate Geometry • Cartesian Plane: Axes, Origin, and Quadrants • Plotting Points given Coordinates (x, y)	• Plotting Coordinates on Graph Paper to draw hidden pictures • Analyzing Weekly Temperature / Rainfall Line Graphs

Month	Ch.	Chapter Name	Topics / Sub-topics	Enrichment Activities / Projects
			• Line Graphs, Bar Graphs & Data Interpretation	
Jan	**6**	**Topics in Algebra** Book Part 2	• Factorisation by Common Factors & Regrouping • Factorisation using Standard Identities • Factorisation of Quadratic Trinomials ($x^2 + bx + c$) • Division of Polynomials by Monomials & Polynomials	• Algebraic Factor Matching Dominoes Game • Peer-to-peer equation solving competition
Feb	**7**	**Area** Book Part 2	• Area of Trapezium, Rhombus, and General Quadrilateral • Area of Special Polygons by Triangulation • Surface Area of Cube, Cuboid, and Right Cylinder • Volume and Capacity Calculations	• Net Diagram Activity for 3D packaging boxes • Calculating surface area & volume of classroom objects

Note: The complete syllabus of Term II along with comprehensive revision must be finished before **31st January 2027**. Annual Examinations will be conducted in **March 2027**.