

ACADEMIC PLANNER 2025-26

Subject : Mathematics

Class - VIII

DATE	TOPIC	MODE OF ASSESSMENT	ASSIGNMENT /H.W.	TEACHING PEDAGODY	INTERDISCIPLINARY ASPECT	21ST CENTURY SKILLS	SDG COVERED / INTERDISCIPLINARY VALUE BASED	Learning outcomes
April 1-15th (10 days)	Bridge Course	MCQ						
16- 30th April (12 days)	Ch. 1 – Rational Numbers	Quiz, Worksheet	Thinking book	Interactive activities, real-life applications	Science:Measurement	Critical Thinking, Problem-Solving	SDG : Sustainable Development	Comprehend and apply properties of rational numbers, including closure, commutativity, associativity, and distributivity.
May 1-15th May (11 days)	Ch. 4 – Data Handling	Project, Survey Report, Countingwell	Real-life data collection	Graphical representation, Statistics tools	Science: To calculate the electricity bill of the neighbours and compare and analyze the electricity consumption by them with your own house bill.	Data Literacy, Analytical Skills	SDG: Quality Education(Worksheet 4)	Collect, organize, and represent data using bar graphs, histograms, and pie charts. Calculate measures of central tendency (mean, median, mode). Understand the basics of probability and its real-life applications.

May 16-25 May	Ch. 2 – Linear Equations	Assignment s, Oral Test	* Mini - Sudoku by solving equations	Hands-on learning, real-world problem solving		Decision Making, Logical Thinking	SDG: Responsible Consumption and Production	Solve linear equations involving variables on one side and both sides
JULY 1-15th July (12 days)	Ch. 3 Understanding quadrilaterals	Counting worksheet	Thinking book	Visual Learning, Demonstration	Art: Preparing an eco-friendly dustbin using 3 D shapes *To verify angle sum property of a Quadrilateral. *Art design and architecture * Cut different types of quadrilaterals using different colored paper and make poster on endangered species	Spatial Awareness, Creativity	SDG: Zero hunger worksheet 2	Identify different types of polygons and classify quadrilaterals based on their properties. Understand the angle sum property of polygons. Explore properties of special quadrilaterals like parallelograms, rhombuses, rectangles, and squares.
16- 31st July (14 days)	Ch 3 Understanding quadrilaterals Revision for UT 1							

August 1-15th (11 days)	Ch. 5 Squares & square roots	Countingw ell	Thinking Book	Vocabulary Cards	Stock Market: Calculating return on stock.		SDG: Good Health And Well Being	Recognize and compute squares of numbers. Determine square roots using prime factorization and division methods. Apply knowledge of squares and square roots in problem-solving contexts.
16 -31st Aug. (12 days)	Ch. 6 Cubes & cube roots	MCQ	Project: Marvels of India(Pg 204 pinnacle)	Concept map	Business: Application Based Questions Science: Cell division in organisms	Critical thinking		Calculate cubes of numbers and understand their properties. Find cube roots using estimation and factorization methods. Solve problems involving cubes and cube roots in practical situations.

September 1-15th (11 days)	Revision for Half yearly examination							
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October 1 to 15 (8 days)	Ch. 8 Algebraic expressions & Identities	Countingw ell	Thinking Book Sheets	Demonstration And Verification: To verify identities	Physics: $(a+b)^2$ appears in physics when expanding equations for motion and energy. Algorithms & Cryptography:	Collaborative learning	Life skills and values	Perform operations on algebraic expressions (addition, subtraction, multiplication). Understand and apply standard identities in algebraic manipulations. Factorize algebraic expressions using appropriate methods.
16 -31st Oct. (10 days)					.			

1-15th Nov. (11 days)				Hands-on activities, Measurement tools	Sports: To calculate the area and perimeter of basket ball court and badminton court.	Critical Thinking And Collaborative Learning		Calculate the surface area and volume of 3D shapes like cubes, cuboids, cylinders, cones, and spheres. Solve real-life problems involving areas and volumes.
16-30th Nov. (12 days)	Ch. 10 Exponents & powers	Live Worksheet	Thinking Book	Use peer teaching where students explain exponent rules to each other. Organize a classroom debate on	Science: Exponents used to represent size of small objects.	Problem Solving	Good Health And Well being	Apply laws of exponents for multiplication and division Work with negative and fractional exponents. Express large numbers in standard form and perform calculations.
	Ch. 11 – Direct and inverse proportion	Countigwe ll	Thinking Book					Identify situations representing direct and inverse proportions. Solve problems involving direct and inverse variation. Apply proportional reasoning to real-world contexts.

December(1-15th) 12 days	Ch. 12 Factorisation	Countingwell	Thinking Book				SDG Clean Water and Sanitation(Worksheet 6)	Factorize algebraic expressions using methods like common factors, grouping, and identities. Divide polynomials by monomials and binomials. Apply factorization techniques to simplify algebraic fractions
16-31st December (13 days)	Ch. 7 – Comparing	Countingwell	Thinking Book		Social Science: percentage increase in population in different years	Data Analysis, Analytical Skills		Understand and calculate percentages, profit and loss, and discount. Solve problems involving simple and compound interest. Apply the concept of ratios and proportions in various contexts.

January 15 -31st (13 days)	Ch. 13 Introduction to graphs	Written Test	Thinking Book	Hands On Learning	Art: Introduction of co-ordinate axes, plotting points to make different figures Stock Market & Financial Analysis:	Problem-Solving & Higher-Order Thinking (Application & Synthesis)		Plot and interpret linear graphs on the Cartesian plane. Understand the concept of slope and its significance. Use graphs to solve equations and analyze data trends.
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February(15)(11 days)	Revision for Annual Examiations
16-28th Feb (11 days)	Annual Examinations

TERMWISE SYLLABUS	
UNIT TEST - 1	CH -1,2,4
HALF YEARLY EXAMINATION	CH - 1,2,3,4,5,6
UNIT TEST - 2	CH - 8,9
ANNUAL EXAMINATION	All Chapters