DIRECTORATE OF EDUCATION, GNCT of Delhi
ANNUAL SYLLABUS
CLASS: VI (2026-2027)
SUBJECT: MATHEMATICS

Chapter Name	Content	Curricular Goal & Curricular Competency	Suggestive Learning Outcomes	Suggestive Activities
Chapter – 5 **Prime Time**	Common multiples and common factors, Prime numbers, Co-prime numbers for safekeeping treasure, Prime factorization, Divisibility tests, Fun with numbers	CG-1 Understands numbers and sets of numbers (Whole numbers, Fractions, Integers, and Rational numbers) looks for patterns, and appreciates relationships between numbers. C-1.1 Develops a sense for and an ability to manipulate (e.g., read, write, form, compare, estimate, and apply operations) large whole numbers of up to 10 digits and expresses them in scientific notation using exponents and powers. C-1.2 Discovers, identifies, and explores patterns in numbers and describes rules for their formation (e.g., prime numbers, powers of 3, etc.) and explain relations between different patterns. C-1.3 Explores and understands sets of numbers such as whole numbers, fractions, integers, and rational numbers, and their properties. C-1.4 Represents rational numbers in decimal form as an extension of the Indian system of numeration `past the decimal point'. C-1.5 Explores the idea of percentage and apply it in solving problems.	The learner: • finds common multiples and common factors • differentiates between prime and co-prime numbers • expresses numbers as its prime factorization • checks the divisibility of the given number by 2,4,5,8,10	• Prepare sieve of Eratosthenes • Puzzles and Riddles based on ➢ common factors and common multiples ➢ Even & odd numbers ➢ Prime & composite numbers • Calendar activity etc.
Chapter – 3 **Number Play**	Numbers can tell us things, Supercells, Patterns of numbers on the number line, Playing with digits, Pretty Palindromic patterns, The magic number of Kaprekar, Clock & calendar numbers, Mental math, Playing with number patterns, the Collatz conjecture, Simple Estimation, Games and winning strategies		The learner: • marks numbers on number line • identifies and create palindromic numbers • formulates strategies in everyday numbers	• Check if your birth year or your father/mother mobile number is a palindrome. • Find Kaprekar constant for 3-digit numbers • Magic Square activity

Chapter – 1 **Patterns in Mathematics**	Patterns in numbers, Visualising number sequences, relations among number sequences, Patterns in shapes, relation to number sequences	C-1.6 Explores and applies fractions (both as ratios and in decimal form) in daily life situations CG-3 Understands, formulates, and applies properties and theorems regarding simple geometric shapes. C-3.1 Describes, classifies, and understands relationships among different types of two and three-dimensional shapes using their defining properties/attributes.	The learner: • visualizes number sequences as square numbers, triangular numbers, cube numbers etc. • decodes the relation among number sequences • identifies patterns in shape sequences and relate it with number sequence	• Observe the patterns in triangular numbers, cube numbers and square numbers. • Look at calendar and find different patterns of numbers. • Make some alpha-numerical patterns
Chapter – 2 **Lines & Angles**	Point, Line Segment, Line, Ray, Angle, Comparing Angles, Making Rotating arms, Special types of angles, Measuring Angles, Drawing Angles, Type of angles & their measures	C-3.2 Knows properties of lines, angles, triangles, quadrilaterals, and polygons, and applies them to solve related problems. C-3.4 Draws and constructs geometric shapes such as lines, parallel lines, angles, and simple triangles, with specified properties, using compass and straightedge CG-4 Develops understanding of perimeter and area for 2D shapes and uses them to solve day-to-day life problems.	The learner: • differentiates between Point, Line Segment, Line and Ray • measures different angles and label its parts • classifies angles into acute, obtuse, reflex, straight and complete and draw them	• Examples of geometrical figures like point, ray, line, line segment from daily life. • Discussion on the topic of light of sun and candle. • Identify different type of angles in their surroundings and compare them. • Integrate the topic with Science
Chapter – 8 **Playing with Constructions**	Artwork, Squares and rectangles, Constructing Squares and rectangles, An exploration in rectangles, Exploring diagonals of rectangles and squares, Points equidistant from two given points	C-4.1 Identifies, selects, and uses units of appropriate size and type to measure and examine the relationship between perimeter and area for 2D shapes (both regular and irregular shapes). C-4.2 Discovers, understands, and uses formulas to determine the area of a triangle, parallelogram, and trapezium, and develops strategies to find the areas of more complex 2D shapes. C-4.5 Develops the notion of fractal and identifies and appreciates the appearances of fractals in nature and art in India and around the world	The learner: • interrelates square and rectangles • constructs squares, rectangles and circles using compass and protractor • forms different figures using various shapes	• Form any figure using rectangle, square and circle • Finding Circumference with the help of thread • Field exploration using Building as Learning Approach (BaLA)

- **The above content must be completed for Mid Term Examination by 5th September, 2026.**
- **Mental Maths & Maths Lab Activities**
- **Revision of syllabus for Mid Term Examination.**

MID TERM EXAMINATION

Chapter – 7 **Fractions**	Fractional units and equal shares, Fractional units as parts of a whole, Measuring using fractional units, Marking fraction lengths on number line, Mixed fractions, Equivalent fractions, Comparing fractions, Addition & Subtraction of fractions, A pinch of history	CG-5 Collects, organises, represents (graphically and in tables), and interprets data/ information from daily life experiences. C-5.1 Collects and organises data C-5.2 Selects, creates, and uses appropriate graphical representations of data, including pictographs and bar graphs CG-6 Develops mathematical thinking and the ability to logically and precisely communicate mathematical ideas.	The learner: • identifies Fractional Units of a whole & measure the whole using it • represents fractions on the number line and shade the given part as a fraction • compares, adds & subtracts fractions and solve daily life problems involving fractions • differentiates between mixed and equivalent fractions	• Divide classroom into parts and write fraction. • Paper folding activities given at the end of book • Communicate in terms of fractions like half, one-third, one-fourth etc.
Chapter –10 **The other side of zero - Integers**	Bela's building of fun, The token model, Integers in other places, Exploration with integers, A pinch of history	C-6.1 Applies both inductive and deductive logic to formulate definitions and conjectures, evaluates and produces convincing arguments/proofs to turn these definitions and conjectures into theorems or correct statements, particularly in the areas of algebra, elementary number theory, and geometry	The learner : • identify negative and positive integers in their daily life • represents integers on number line • adds and subtracts integers	• Demonstrate integers with the help of stairs • Find temperature of Delhi and Laddakh in winters and compare them • Integrate the topic with Social Science e.g. above & below sea level
Chapter – 9 **Symmetry**	Line of Symmetry, Paper folding and cutting, Rotational Symmetry, Symmetries of a circle	CG-7 Engages with puzzles and mathematical problems and develops own creative methods and strategies to solve them. C-7.1 Applies creativity to develop one's own solutions to puzzles and other problems and appreciates the work of others to develop their own solutions. C-7.2 Engages in and appreciates the artistry and aesthetics of puzzle-making, puzzle-posing, and puzzle-solving.	The learner : • defines symmetrical figures • identifies line/lines of symmetry in their surroundings • differentiates between line of symmetry and rotational symmetry • finds angle of symmetry and angle of rotation of any figure having rotational symmetry.	• Conversation on the idea of symmetry: Artists, professionals, designers of clothing or jewellery..... • Activities based on symmetry by folding and punching paper • Copy the diagram about the mirror lines. • Examples of rotational symmetry from real life
Chapter – 6 **Perimeter and Area**	Perimeter, Area, Area of a triangle	CG-8 Knows and appreciates the development of mathematical ideas over human history, and the contributions of past and modern mathematicians from India and across the world. C-8.1 Recognises important mathematical contributions of India as well as the contributions of specific Indian	The learner : • differentiates between area and perimeter • formulates the perimeter of square and rectangle • applies the concept in daily life situations involving area	• In the given grid make rectangles of different sizes but same in area. • Find area and perimeter of your geometry box and notebook • Use of graph paper to find

		mathematicians (such as Brahmagupta, Virahanka and Bhaskara).	and perimeter	the area of triangle in cm square.
Chapter – 4 **Data Handling & Presentation**	Collecting & organizing data, Pictographs, Bar Graphs, Drawing a Bar Graph, Artistic & Aesthetic considerations	CG-9 Develops basic skills and capacities of computational thinking, namely, decomposition, pattern recognition, data representation, generalization, abstraction, and algorithms, in order to solve problems where such techniques of computational thinking are effective. C-9.1 Approaches problems using programmatic thinking techniques such as iteration, symbolic representation, and logical operations and reformulates problems into series of ordered steps (algorithmic thinking). C-9.2 Identifies, analyses, and implements possible solutions to problems, with the goal of achieving the most efficient and effective combination of steps and resources and generalizes this process to a wide variety of problems	The learner : • collects and organises data • differentiates between pictograph and bar graph and draw them • represents the given information aesthetically using imagination	• Collect information about favourite colour/fruits/sweet/ games etc. of your classmates. • Prepare a table of medals won by India in different international events like commonwealth games, Olympic games, asian games etc. • Record temperature of India in different weathers.

- **The whole syllabus must be completed for Annual Examination by 30th January, 2027.**
- **Mental Maths & Maths Lab Activities**
- **Revision of whole syllabus for Annual Examination.**

ANNUAL EXAMINATION 2027

Note: The above said syllabus is for assessment purpose only. Other topics/chapters may be taught as Subject Learning Enrichment.